

INFORMATION BRIEF ON BUS VEHICLE SAFETY



The Facts About Bus Safety

Buses are the safest form of motor vehicle travel in Australia. While every serious injury or fatality that occurs on or around a bus is tragic; it is important to recognise they are relatively very few in number.

The Australian Transport Safety Bureau Report on Bus Safety in 2001 found that of the 17,840 road fatalities to have occurred between 1990 and 1998, buses were involved in less than one percent of these.

Indeed, out of the 300 bus related fatalities to have occurred during this period, 1/3 was pedestrian, 1/3 was occupants in other vehicles and 1/3 were bus occupants. This is an average of 10 bus occupant related fatalities per year. Furthermore it is important to recognise that 42 out of these 100 bus occupants were killed in Queensland, where the age of the fleet is an important issue that will not be fully understood until comprehensive research is undertaken.

With more than one billion passenger trips being made on buses every year in Australia, the odds of a passenger suffering a fatal accident are currently a remote one in 100 million.

Any debate relating to safety on school buses should also recognise a study conducted by Institute of Transport Studies at the Sydney University showing travel on a school bus is 7 times safer than in the family car, 31 times safer than walking and 228 times safer than a bike.

The Bus Industry is committed to the road safety of our passengers, our employees and to the travelling public. We are in full support of initiatives that will improve the overall safety performance of the bus industry and reduce accidents involving buses or coaches. Most Australian Government transport departments and similar international transport agencies have formed the opinion that it is only through combining improvements in rollover strength, seat and seat anchorage strength and seat belts that significant inroads can be made into reducing bus fatalities and injuries. Seatbelts will not necessarily protect passengers travelling on a bus where its chassis, internal cage or seating structure is not designed to handle a rollover or head-on collision. The reality is that the high mass of a bus protects the passengers in the event of a collision.

Current design standards for Australian buses require modern engineering techniques to ensure seats do not collapse or move away from their foundations following a collision or rollover. However the majority of buses operating on Australian roads today pre-date these requirements. The Australian bus industry considers the collapse of seats and/or body of an older vehicle during an accident poses a far greater danger to passengers than the lack of seatbelts. We recommend a national strategy led by the Federal Government and endorsed by all State Governments for upgrading bus fleets to modern design requirements. This renewal strategy should occur to a phased timeline to align the requirements of the Disability Discrimination Act, Accessible Transport Standards introduced in October 2002 and Australian Design Rules related to emissions.

The issue of seatbelts in buses is an ongoing concern to the community. The Australian bus industry supports the use of seatbelts in buses to improve the safety of travel by passengers and drivers. The Bus Industry Confederation believes that a holistic approach to addressing bus safety issues is required. This needs to take into account all the possible factors relating to bus accidents in order to deliver a set of measures to reduce the causes of accidents as well as improving the survivability of those involved in bus related accidents.

A further issue would be an undertaking of a risk assessment report on School bus Routes which would identify the risks for school children while travelling between home and school and returning (and not just on the bus) which would be developed into a set of national guidelines. We note that the majority of deaths/injuries suffered by school children travelling to school occurs outside the bus – i.e. when riding bicycles or travelling in a car, and based on this fact some thought needs to be given to addressing the circumstances where students are at the greatest amount of risk. For example, we suggest guidelines for influencing student responses at set down and pick up locations would be more likely to lead to reduced deaths and injury. In short, concerns need to be broadened to include risk assessment of all elements student travel and not just bus travel if student safety is to be tackled wholly.

In order to achieve this, the industry believes detailed research is required to be undertaken to better understand the causes of bus and coach related accidents. We believe that as part of any comprehensive research, a comparison of the relative safety of small and large buses requires investigation. This should take into account the differences in mass and size of the vehicles.

Investigation should be conducted into the benefits associated with the installation of well-padded high back seats for large buses with a capacity for 27 seats or more, which AustRoads claims could reduce fatalities by up to 20%. This should examine a more flexible regulation structure for the vehicles used for multiple purposes.

The Federal Government should, as a priority, fund a national study to extend initial research conducted by the NSW Department of Transport. The research estimated that the fitment of padding to seat tops and staunchions had the potential to save 1 serious injury and 75 minor injuries out of all the cases studied over the four year period. It was estimated that this would cost about \$7 million for the buses in NSW. For comparison, the Department estimated that fitment of lap/sash seatbelts would cost over \$200 million and had the potential to save 1 fatality, 2 serious injuries and 100 minor injuries.

Federal and State Government should continue to encourage the purchasing of low floor vehicles, which because of the modern design, are far safer than older vehicles. As an interim measure, State Governments should commit to the installation of appropriate padding in older buses that fail to meet current design specifications.

Small buses used to convey students either by normal route or designated school services with a seating capacity of 27 or less should be equipped with lap shoulder belts at all designated seating positions. Since the size and operating weights of these smaller buses are closer to those of passenger cars, seat belts would help provide better occupant protection with a comparative low cost of installation. There should be no provisions in the Australian Design Rules that make small buses with less than 27 seats exempt for any requirement for fitting seatbelts for all seating positions.

Any considerations with regard to the retro-fitting of seatbelts in large buses need to be referred to the National Transport Council's / Bus Industry developed publication *Bus Seatbelt Retrofit Guidelines* which was completed in 2006 and is available from the NTC.

Several other issues arise in relation to seatbelts on buses which relate to standee and speed limits. Official research findings have shown that the comparative risks of standing on large city buses is very low; passengers should therefore be allowed to stand on urban buses when all (other) available seats are taken and hand support rails/hand straps are in place. The BIC believes however that the Federal Government should move to legislate in co-operation with State Governments and the Bus Industry to limit the speed of buses carrying standing passengers to 80 km's per hour.

The Bus Industry Confederation is also concerned that the mandating of seatbelts on school and route service vehicles will disrupt the day-to-day operational running times of these vehicles which generally travel at slow speeds and regularly stop and start to allow passengers on and off the vehicle. A further issue of concern to the Bus Industry Confederation in relation to the mandating of seatbelts is who is responsible to ensure that seatbelts are actually used, how this might be managed and what liability or

other issues may arise where seatbelted vehicles are in operation but passengers are not willing to wear the seat belts.

We hope this information articulates the bus industry's view that the mandating of seatbelts on large buses is a problematic issue that requires involvement from state and federal governments to achieve a workable solution.

The BIC is Australia's peak industry public transport body representing the interests of 3,500 bus & coach companies employing over 30,000 people who carry 1 Billion passengers a year. The BIC established its National Secretariat in Canberra in 2001.

Ph: (02) 6247 5990 – Fax: (02) 6230 6898 – www.bic.asn.au admin@bic.asn.au