
The Parliament of the Commonwealth of Australia

Level Crossing Safety

An Update to the 2004 Train Illumination Report

House of Representatives
Standing Committee on Infrastructure, Transport, Regional Development &
Local Government

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Foreword

Every year accidents at level crossings all over Australia lead to loss of life and millions of dollars of damage. The causes of these accidents are complex, and the proposed safety solutions varied, but the need to reduce their occurrence is clear.

The Committee's interest in level crossing safety is long running. In 2004, the Committee released a report entitled '*Train Illumination: Inquiry into some measures proposed to improve train visibility and reduce level crossing accidents*', which examined the connection between the illumination of trains, and collisions at level crossings.

Since tabling that report five years ago, there have been some major improvements in train illumination, but sadly the number of incidents at level crossings – often resulting in catastrophic consequences – remains high. Accidents such as the tragedy in Kerang in June 2007, in which eleven people were killed and 20 injured when a semi-trailer collided with a passenger train, reveal the frightening reality of level crossings safety.

In November 2008, the Committee resolved to update its 2004 report to re-examine level crossing safety; the measures that have been taken in the intervening years to improve it; as well as some potential new safety solutions that we could look to in the future.

The Committee heard that the causes of level crossing crashes are varied. While there is no single cause for all level crossing crashes, the most significant factor leading to level crossing collisions is the behaviour of motor vehicle drivers. It seems that, for a range of reasons, from familiarity to recklessness, and despite the risks, motorists continue to disobey road rules at level crossings. This report, therefore, is of a wider scope from that of the 2004 report and the Committee makes a number of recommendations focussing on the broader issue of level crossing safety.

At the same time, the Committee notes that the illumination of trains has been greatly improved by the 2007 introduction of Australian Standard 7531 which sets out both required and recommended conspicuity standards for locomotives and

rolling stock. The Committee recommends in this report that as a requirement of the Standard, better maintenance of the reflective strips applied to trains be mandated, and that the Standard be more strictly enforced.

In examining how best safety at level crossings should be improved, the Committee endorses the three tiered 'Education, Enforcement and Engineering' approach, and notes that improvements in all these areas are required in order to achieve safer level crossings. The Committee acknowledges the work that is being done by the States and Territories to educate motorists of the dangers at level crossings, but encourages further emphasis still, since it is apparent that the message is not always getting through.

The Committee also notes that certain States have moved to toughen penalties for infringements by motor vehicle drivers at level crossings, and the Committee has recommended that consistent penalties be set across all jurisdictions, and that speed limits at level crossings on major highways that currently have a speed limit of 100kph or more, be reduced to 80kph.

In terms of engineering, the Committee recommends further trials of passive rumble strips at a selection of level crossings around Australia, and a program to begin trialling active rumble strips at some of the most dangerous crossings.

Finally, the Committee examined technological solutions to level crossing safety. It reiterates its support of Intelligent Transport Systems, as stated in the 2004 report, and recommends that the Government support ongoing research into this important technology to speed its implementation. It also recommends that the Government, through the Australian Transport Council, encourage further research into the feasibility of a radio cut-in warning system which would warn motor vehicle drivers, as they approach a level crossing, of the presence of an on-coming train.

In the course of this update, the Committee became increasingly aware that there exists a distinct lack of aggregate data which details the causes of these – often horrific – crashes across Australia. With this in mind, the Committee recommends the establishment of a national database which collates data from all level crossing crashes and fatalities, nationwide. It also recommends the updating of the National Level Crossing Safety Strategy, to provide better national policy guidance with regards to level crossing safety.

The Committee believes that the introduction of the measures recommended will go some way to improving safety at level crossings, and reduce the unacceptable toll to human life and property which all too often occurs at these dangerous sites.

Ms Catherine King MP
Chair



Membership of the Committee

Chair Ms Catherine King MP

Deputy Chair Mr Paul Neville MP

Members Ms Jodie Campbell MP

Mr Jason Clare MP (until 15/06/09)

Mr Darren Cheeseman MP

Mr Don Randall MP (from 10/11/08)

Mrs Joanna Gash MP

Mr Brett Raguse MP

Mr John Sullivan

Hon Andrew Robb AO, MP (from
10/11/08)

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List of abbreviations

ARA	Australian Railways Association
ARCSIG	Australian Railway Crossing Strategy Implementation Group
ARRB	Australian Road Research Board
ATA	Australian Trucking Association
ATC	Australian Transport Council
ATSB	Australian Transport Safety Bureau
BITRE	Bureau of Infrastructure, Transport, and Regional Economics
COAG	Council of Australian Governments
CRC	Cooperative Research Centre for Rail Innovation
DITRDLG	Department of Infrastructure, Transport, Regional Development and Local Government
GPS	Global Positioning System
ICA	Interface Coordination Agreement
ITS	Intelligent Transport Systems
NRSC	National Road Safety Council
NTC	National Transport Council
NTP	National Transport Policy
PTC	Positive Train Control
QUT	Queensland University of Technology
RISSB	Rail Industry Safety and Standards Board

RTA	Road Traffic Authority
RTBU	Rail, Tram and Bus Union
SCOT	Standing Committee on Transport
SCOT	Standing Committee on Transport
UHF	Ultra High Frequency
VRCSSC	Victorian Railway Crossing Safety Steering Committee



List of recommendations

Recommendation 1

The Committee recommends that Australian Standard 7531 be adapted to include a mandatory requirement for on going maintenance of retro-reflective materials on locomotives, as well as stricter enforcement of the standard's requirements.

Recommendation 2

The Committee recommends that the Department of Infrastructure, Transport, Regional Development and Local Government undertake rigorous scientific research into the efficacy of auxiliary lighting on trains as a measure to improve train conspicuity. The results of the research should be made public as soon as available.

Recommendation 3

The Committee recommends that the Government, through the National Road Safety Council, set consistent penalties across Australia for motor vehicle driving offences at level crossings.

Recommendation 4

The Committee recommends that the Australian Government seek, via the Australian Transport Council, the reduction of speed limits to 80 kilometres per hour at level crossings on all major highways with a current speed limit of 100 kilometres per hour, or more.

Recommendation 5

The Committee recommends that the Government, through the Australian Transport Council, establish further trials of passive rumble strips at selected level crossings across the country.

Recommendation 6

The Committee recommends that the Australian Government, through the Australian Transport Council, initiate a programme to begin trialling active rumble strips at a selection of the most dangerous level crossings.

Recommendation 7

The Committee recommends that the Australian Government support the ongoing research into Intelligent Transport Systems to speed the implementation of this important new technology.

Recommendation 8

The Committee recommends that the Government, through the Australian Transport Council, encourage further research into the feasibility of a cut-in warning system which would warn motor vehicle drivers of on-coming trains as they approach a level crossing.

Recommendation 9

The Committee recommends that the Australian Government seek, through the Australian Transport Council, a national database which aggregates data from level crossing crashes and fatalities in all Australian States and Territories.

Recommendation 10

The Committee recommends that the Australian Government seek, through the National Road Safety Council, a revised National Railway Safety Strategy as part of the new National Transport Policy.