It is vital that Australia has a transport system that is efficient, safe, sustainable and competitive in order to be a productive nation with a good quality of life and equity for everyone.

Aim

To outline the change in direction for national transport policy on improving railway level crossing safety through the implementation of the new National Railway Level Crossing Safety Strategy (2010-2020). This document provides an overview of the:

- Objective of the strategy
- Principles and actions
- Key focus areas
- Ongoing management required to ensure success
- Tools for measuring effectiveness.

Purpose

This National Railway Level Crossing Safety Strategy (2010-2020) outlines the high-level strategic direction to significantly improve safety in railway level crossings through a nationally coordinated approach.
Background Information

There are approximately 100 incidents at Australian railway level crossings every year. On average, these incidents result in the death of 37 people annually. These incidents have catastrophic impacts on lives, both injuries and loss of life and financial costs. After investigating 87 fatal Australian level crossing incidents, the Australian Transport Safety Bureau (ATSB) identified the following key characteristics that require consideration:

- In 66% of fatal level crossing incidents, the point of impact was the front of the train
- Over 80% of fatal incidents occurred in daylight during fine weather, on a straight, dry road
- More than 50% of fatal incidents occurred at crossings with active controls in place
- Unintended road user error accounted for 46% of fatal level crossing incidents.

More recently the ATSB investigated 12 road vehicle and train level crossing incidents between 2006 and 2007, of these nine involved heavy vehicles. In total, 19 lives were lost and 60 injuries caused. The ATSB highlighted the growing trend in heavy vehicle and train collisions and the severe consequences that can arise from these incidents.

The different levels of risk, divergent institutional arrangements and control systems between the road and rail networks heighten the complexities of developing coordinated strategies to improve safety. In addition, differences in jurisdictional governance and management regimes need to be addressed in the drive for national consistency and compliance with Railway Safety Legislation.
“A safe land transport system that meets Australia's mobility, social and economic objectives with maximum safety for its users”.

Approach to Develop a New National Transport Policy

In responding to the challenge of delivering Australians a safe, sustainable and competitive transport system, the Commonwealth, State and Territory Ministers work together through the Australian Transport Council (ATC) to coordinate national transport and road safety policy issues.

The ATC has agreed to develop and implement six functional streams to progress the National Policy Framework. One of the six streams is lead by the Safety Standing Sub Committee (Safety SSC) with the key objective to progress “a safe land transport system that meets Australia's mobility, social and economic objectives with maximum safety for its users”.

The development of the National Railway Level Crossing Safety Strategy (2010-2020) is one of a number of initiatives managed by the Safety SSC to meet this objective. The Safety SSC is supported by the Rail Level Crossing Group (RLCG), National Road Safety Executive Group (NRSEG) and the Rail Safety Policy and Regulation Group (RSPRG).

The RLCG comprises senior representatives nationally from Government and Industry to develop, deploy and monitor the National Railway Level Crossing Safety Strategy (2010 – 2020). The strategy has implications for the 8 900 public railway and pedestrian level crossings and the numerous private railway level crossings nationally. Actions will be implemented by road agencies, rail authorities, local governments and rail operators.
The National Railway Level Crossing Safety Strategy

Building On Recent Achievements

The National Railway Level Crossing Safety Strategy (2010-2020) builds on the ATC's previous 2003 National Railway Level Crossing Strategy which contributed to: improvements in Australian Standards and legislation, development of a risk assessment model and a range of research trials. There have been improvements in terms of railway level crossing safety management over the last five years however, most of these have been through individual Commonwealth, jurisdictional and rail industry actions. As part of the Nation Building Program the Australian Government provided $150 million to jurisdictions for the installation of boom gates and other safety measures at over 250 high risk railway level crossings across Australia. This initiative is a significant boost to improving safety for road users, train drivers and pedestrians.

The National Railway Level Crossing Safety Strategy (2010-2020) complements the National Road Safety Strategy and adopts the Safe System view that recognises that it is not possible to prevent all incidents however aims to prevent those that result in death and serious injury. A safe system approach recognises human tolerance and fallibility and the interactions between the key components that can contribute to serious casualty outcomes including competent and compliant users, vehicles, infrastructure and speed.

This strategy also aligns with the further principles of road and rail safety and will include engineering, enforcement, education and elimination in the context of railway level crossings.

Principles

To successfully achieve the strategic objective of the National Railway Level Crossing Safety Strategy (2010-2020), the following principles will be adopted:

- A safe system approach
- A shared responsibility using a cooperative approach

Strategic Objective

“To reduce the likelihood of crashes and near misses at Australian railway level crossings”

- Engagement with industry, government, road and rail stakeholders and the community
- An evidence based approach
- Using existing information and building on research and international developments.

Actions

To satisfy these principles and ensure the likelihood of crashes and near misses at Australian railway level crossings are reduced, the Rail Level Crossing Group (RLCG) has identified a number of opportunities that must be considered as the Strategy is implemented. These opportunities include:

- Create a nationally aligned approach to safety at railway level crossings
- Address the lack of nationally available data relating to railway level crossings
- Learn from road safety practices and apply these to railway level crossing safety management
- Apply the safe system approach in the railway level crossing environment
- Recognise the complexity of the ownership, responsibilities and management of railway level crossings thereby requiring stronger relationships between all levels of government, the road and rail industry, road and rail users and the community
- Improve community understanding of the risks and the importance of compliance
- Harness the potential of rapidly emerging new technologies applicable to railway level crossings.
Key Areas of Focus

Six key areas of focus have been identified that must be addressed if any reduction in crashes and near misses at level crossings is to be achieved.

<table>
<thead>
<tr>
<th>Key Area of Focus</th>
<th>Action to reduce crashes and near misses at level crossings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safe System</td>
<td>To adapt and apply, in a railway level crossing context, internationally recognised road safety practices based on a Safe System approach.</td>
</tr>
<tr>
<td>Governance</td>
<td>To achieve nationally consistent and coordinated arrangements across jurisdictions including sharing of good practice and to identify opportunities to work together to achieve common aims and goals.</td>
</tr>
<tr>
<td>Risk Management</td>
<td>To understand and effectively manage risk at rail level crossings to evaluate, prioritise and inform the development of counter measures and investment strategies.</td>
</tr>
<tr>
<td>Technology</td>
<td>To examine and continue trialing new engineering and technological measures that alert or guide road users as safely as possible through railway level crossings and ultimately, identify cost-effective means to reduce railway level crossing incidents.</td>
</tr>
<tr>
<td>Education and Enforcement</td>
<td>To use educational measures that generate awareness of level crossings, establish understanding of the required behaviour by road users at level crossings and ensure road users always comply with level crossing controls through ongoing enforcement.</td>
</tr>
<tr>
<td>Data Improvement and Knowledge Management</td>
<td>To capture incidents at rail level crossings in a nationally consistent manner that enables better analysis and understanding of the characteristics surrounding incidents.</td>
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Safe System

Adapt an approach to rail crossing safety that recognises human fallibility and limits to tolerance of forces on the human body.

Governance

Nationally consistent and coordinated arrangements across jurisdictions

Risk Management

Inform the development of counter measures and strategies

Technology

Identification and implementation of appropriate new technology

Education and Enforcement

Users are aware of cues and know and understand rules

Data Improvements and Knowledge Management

Provide data and information to inform decision making and guide implementation
Measuring Policy Effectiveness

The National Railway Level Crossing Safety Strategy (2010-2020) will be reviewed every three years. To achieve the Strategic Objective a rolling three year Action Plan drawing on the Principles outlined in this Strategy will be developed, updated annually and reported against regularly including:

- Outlining progress against the Action Plan and other successes
- Communicating relevant performance measures based on work done and the latest available railway level crossing safety data
- Outlining the direction and aspirations for the next reporting period.

Ongoing Management to Ensure Success

An important element in ensuring the success of this strategy will be in the identification of, and strong engagement with, all stakeholders who have an interest in achieving the objective. Given the large number of participants involved it is vital to bring together users, all levels of Government, rail operators, owners and managers and road managers. In addition ongoing investment by Commonwealth, State, Territory and Local Governments is essential.

To gauge the effectiveness of this strategy a number of measures have been identified.

<table>
<thead>
<tr>
<th>Area of Focus</th>
<th>Outcome</th>
<th>Measuring Success</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Safe System</strong></td>
<td>A system that recognises human fallibility and limits to tolerance of forces on the human body</td>
<td>♜ New policies incorporate a safe system approach.</td>
</tr>
<tr>
<td><strong>Governance</strong></td>
<td>Nationally consistent arrangements across jurisdictions</td>
<td>♜ Extent of initiatives undertaken nationally.</td>
</tr>
<tr>
<td><strong>Risk Management</strong></td>
<td>Well understood and effectively managed levels of risk.</td>
<td>♜ Risk accountabilities identified and agreed.</td>
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<tr>
<td><strong>Technology</strong></td>
<td>Effective emerging technologies are rapidly adopted</td>
<td>♜ Evidence that new technologies have been adopted.</td>
</tr>
<tr>
<td><strong>Education and Enforcement</strong></td>
<td>Improved compliance</td>
<td>♜ Increase in level of awareness by community</td>
</tr>
<tr>
<td><strong>Data Improvement and Knowledge Management</strong></td>
<td>Information to support decision making is accessible, current and shared. National standards are adopted for investigating and recording data related to rail crossing incidents.</td>
<td>♜ Data gaps in understanding risks and human fallibility are identified and reduced. ♜ Benchmark against international best practice.</td>
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</table>
For further information
The National Railway Level Crossing Safety Strategy (2010-2020) has been developed by the Rail Level Crossing Group.

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