

VICTORIA

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Victorian  
Auditor-General

# Audit summary of Management of Safety Risks at Level Crossings

Tabled in Parliament  
24 March 2010

# Audit summary

## Background

The audit examined the rate of progress in improving safety and reducing accidents at level crossings by assessing the management of these risks and the effectiveness of the treatments to address them.

Most level crossing collisions happen because pedestrians or drivers are unaware of an approaching train, misjudge its arrival at the crossing, choose to ignore warning signals, or deliberately avoid the barriers designed to protect them.

Physically separating or closing roads and footpaths that cross railway tracks would solve the problem. However, the costs of doing this and the impact on the mobility of the people affected, mean these solutions will be the exception rather than the rule.

Managing safety risks is a shared responsibility between the rail and road organisations that manage, government agencies that oversee and regulate, and the people who use, level crossings.

The Minister for Public Transport released the 10-year *Towards Zero* strategy in November 2009. Its objective is to reduce deaths and injuries and ultimately to achieve the goal that no lives are lost through accidents at level crossings.

Between 2000–01 and 2008–09 level crossing accidents caused 73 deaths, an average of eight per year. While this is minimal compared with the road toll of about 300 deaths annually, these events are catastrophic for the people affected.

There is also a risk of a level crossing collision where many people are killed and seriously injured. This happened when a goods vehicle hit a passenger train in June 2007 at Kerang in regional Victoria, killing 11 people and seriously injuring 12. The damage, beyond loss of life, can amount to millions of dollars.

## Conclusion

The rate of progress in improving safety and reducing accidents has been satisfactory. There are, however, elements of the risk management framework and its application that can be improved.

## Findings

### Risk management framework

The Victorian Railway Crossing Safety Steering Committee and the use of an evidence-based approach to assess and prioritise risks are important parts of the risk-management framework. These have set the scene for better management of level crossing safety.

There is, however, room to strengthen the framework's effectiveness by:

- improving how the committee is informed of the views of the rail managers, who run train services and maintain the infrastructure, about their risks and priorities
- assembling information that will allow the committee to effectively manage and monitor the delivery of the *Towards Zero* strategy
- improving the understanding of what causes level crossing collisions.

### Measuring and improving the safety outcomes

The decline in level crossing collisions over the past 10 years suggests that the department's actions have improved level crossing safety when it is recognised that risk of conflict between road traffic and trains has risen with increased volumes.

The department needs to improve how it measures and reports on the cost-effectiveness of the committee's programs. The department does not have an accurate grasp of the cost-effectiveness of the treatments it deploys. Whilst it mostly understands the costs, it has not adequately evaluated the benefits. The department has acted to improve in this area by commissioning research and starting to apply the recommendations about how it evaluates treatments.

The department has not adequately assessed treatments before their deployment, or once deployed, evaluated them. This means it has only a partial understanding of the realised benefits.

There is a clear inconsistency in the way VicTrack and V/Line calculate what they charge the department for level crossing upgrades. The department needs to understand the differences to gain assurance about the cost-efficiency of the upgrades it funds.

The information the department publishes is not sufficient to understand how its plans and programs are progressing and how successful they have been in delivering on the department's objectives.

## Recommendations

| Number | Recommendation   | Page |
|--------|--|------|
|        | The Department of Transport should:  |      |
| 1.     | Work with the rail managers to strengthen the processes it uses to inform the committee about the rail managers' views when making decisions about level crossing priorities and upgrades.   | 18   |
| 2.     | Lead the road and rail managers to develop a detailed, three-year plan that provides an adequate basis for managing and monitoring the <i>Towards Zero</i> strategy.   | 18   |
| 3.     | With Public Transport Safety Victoria's support, agree on and document the actions needed to deliver a better understanding of level crossing collisions as part of the detailed plan underpinning the <i>Towards Zero</i> strategy. | 18   |
| 4.     | Review the legislation and develop recommendations to improve the effectiveness of the level crossing closure process.   | 18   |
| 5.     | Understand why the charges for level crossing upgrades completed by different organisations have varied, with the view to improving efficiency.  | 32   |
| 6.     | Publish an analysis of the issues raised by its survey of level crossings, identifying the works required, agency responsible and an estimate of the cost.   | 32   |
| 7.     | Improve the approach to assessing risk mitigation treatments before their deployment and evaluating treatments once deployed.  | 32   |
| 8.     | Improve the way it reports on level crossing safety.   | 32   |