Draft Railway Crossing Safety Strategy

RAA feedback on the Draft Railway Crossing Safety Strategy

September 2016

RAA

EXECUTIVE SUMMARY

RAA is the State's peak motoring body, representing the views and interests of over 660,000 South Australian motorists. As such, RAA is the principal advocate for road users on a broad range of mobility-related issues, in particular road infrastructure and road safety.

RAA supports the development of a Railway Crossing Safety Strategy, with clear reference to improving safety, reducing collisions and near miss incidents. RAA has long advocated for grade separation at key Adelaide rail crossings and supports the introduction of an Infrastructure Safety Improvement Program.

Generally the motoring public comply with the Australian Road Rules and treatments as are applied to railway crossings. Recent RAA member attitudinal research highlighted the need to ensure pedestrians and cyclists are made aware of their compliance with treatments designed enhance their safety.

RAA's member attitudinal research also highlighted issues with freight trains and their impact on peak hour traffic congestion reaffirming RAA's position to look at grade separation of existing railway crossings in the medium term.

RECOMMENDATION

RAA supports the development of a Railway Crossing Safety Strategy that incorporates:

- Assessments of all South Australian railway crossings, with a developed hierarchy of works established;
- Establishment and appropriate funding for the implementation of a Rail Infrastructure Safety Improvement Program;
- Grade separation at key Adelaide railway crossings to enhance road safety and reduce traffic congestion;
- Expanded education programs and promotion of the Australian Road Rules, that incorporate motorists, pedestrians and cyclists;
- Enhanced CCTV and enforcement activity at railway pedestrian crossings; and
- Introduction of carriage and freight trailer lighting for easier night time identification of train length and end.

Additionally RAA encourages a review of the possible benefits of implementing a model similar to Victoria for regional crossings.

DISCUSSION

The total number of incidents (collisions and near misses) at railway crossings is undeniably too high. While every effort can be made to address infrastructure and education concerns, inattention and impatience by motorists and pedestrians places both themselves and the train's operators at risk.

To understand community views on railway crossing safety, over 600 RAA Member Panellists provided their insights on a number of issues related to safety at railway crossings. Respondents generally showed their understanding of the Australian Road Rules and adhered to railway crossing signs and signals. Key themes that emerged included:

- The need for greater education about railway crossing safety;
- Removal of level crossings where possible;
- Better synchronising of boom gates and signals;
- Freight train scheduling to operate outside periods of peak hour traffic;
- Road condition of railway crossings;
- Increased policing of pedestrian behaviour at railway crossings;
- Improved signage; and

- Greater visibility of train carriages and freight wagons.

RAA supports a robust, planned infrastructure improvement program to ensure all railway crossings are consistent and comply with a minimum standard.

Background/Overview

RAA supports the principles outlined in the draft strategy document, however, RAA believes that each railway crossing must be considered based upon its role in the wider rail network and potential risks to motorists, pedestrians and the train.

RAA Member attitudinal research reveals motorists are very mindful of the difficult role a train driver has when confronted with risky behaviour by motorists. Yet there also appears to be a number of impatience road users and pedestrians that display a lack of common sense to contribute to the high level of incidents and near misses recorded by train operators.

Freight train scheduling has been raised as a possible opportunity to reduce some of the traffic congestion and angst with motorist travelling in peak hour. One suggestion included looking at removing freight trains in the morning peak hour period (7.30am to 9.00am). RAA acknowledges that such a change could negatively impact businesses that rely on the scheduling for freight trains however, such a change would have a positive effect traffic movements. This highlights the importance of striking a balance of scheduling freight trains and their impact on commuters.

The establishment of a Rail Crossing Working Group is supported by RAA to develop a specific action plan to improve safety across the railway network.

Key Themes

Key themes identified throughout the Draft Railway Crossing Safety Strategy include, grade separation, infrastructure safety improvements and railway station/crossing closures.

<u>Grade Separation</u>

Grade separation is the most effective way of eliminating risky behaviour at railway crossings, however it is also the most costly treatment. RAA has called for grade separation at key Adelaide rail crossings to enhance road safety and reduce traffic congestion including at Oaklands Park.

Level crossings on major metropolitan road routes should be replaced with grade separated infrastructure where:

- A risk analysis indicates the potential for crashes is high:
- The economic and social costs to a community would be high in the event of an incident resulting in a closure of the level crossing. A satisfactory reduction in risk cannot be achieved through conventional methods; or
- Where traffic is unreasonably delayed.

RAA Members identified the need for grade separation along freight routes causing increased waiting times, and in some circumstances the train actually stopping across a number of crossings causing angst and bad behaviour in motorists.

<u>Infrastructure Safety Improvement Program</u>

RAA supports the principle of a formalised level crossing safety program that aims to continually review and upgrade level crossings in South Australia. The program should operate on a proactive, risk based approach that uses a hierarchy of passive and active crossing controls that improve safety for motorists, cyclists and pedestrians.

Road surface has been raised by a number of members as an issue, where in some cases member's vehicle severe undulate at some railway crossings in an unsafe manner even when travelling at low speeds. While this may be an unintended speed deterrent, all motorists deserve to feel in control of their vehicle at all times.

Members have raised a number of examples where individual railway crossings could benefit from safety assessments. These will be added to RAA's *Report a Road* program for individual investigation.

Closure of Stations and Crossings

Closing metropolitan public transport railway stations and redirecting pedestrians to other locations, may be counter intuitive to developing a public transport culture in Adelaide. The recent successful lobbying of the Millswood community to reinstate the Millswood station on the Belair line is testament to the passion and community benefit of continued services.

Some regional lines are only used seasonally or when commodity prices are high. Infrequent activity on these regional lines can lead to increased risky behaviour as the lines look unused or are in a degraded state. Consideration has been raised for the development of clear signage highlighting when a line is in use.

The unfortunate state of some regional lines will eventually push additional freight onto the road network. It is important that road networks in the vicinity of any closed or infrequently used rail lines are of an appropriate standard for any freight traffic increase.

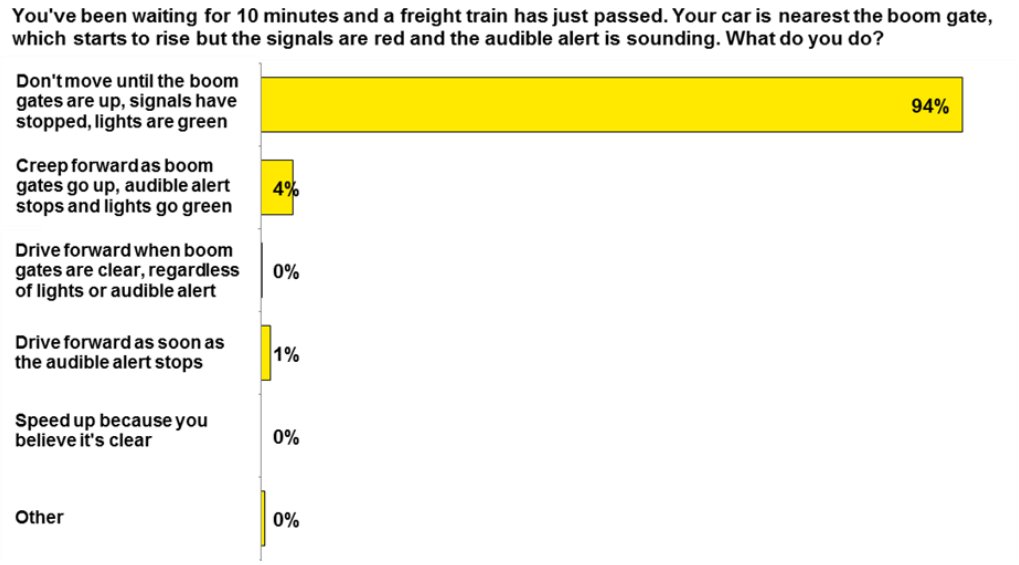
Managing Railway Crossing Safety

Driver Behaviour

Driver behaviour was the key element tested in RAA's Member Panel survey and overall members indicated they did obey the road rules and acted appropriately at railway crossings. Comments from members did indicated many had witnessed risky behaviour by either drivers or pedestrians.

Panellists were presented with various scenarios to test whether their behaviour relative to the relevant Australian Road Rules and some questions that tested their common sense. In nearly 94 per cent of cases, Members selected the appropriate actions for safe behaviour.

The photo below depicted two roads that intersect close to the crossing and no clear white lines are marked on the road. When asked, 96 per cent of respondents would stop behind the 'Keep Clear' road marking, which provoked commentary on the need for clearer signage and improved road markings.



Members who highlighted having witnessed risky behaviour commonly commented that people needed to take responsibility for their own safety and act accordingly.

Treatment Options

RAA firmly supports the Safe Systems Approach. This principle is formed on the basis that motorists, cyclists and pedestrians are fallible and road or rail infrastructure should be designed accordingly to eliminate and minimise the risk and severity of death or serious injury.

In accordance with the safe systems approach, RAA supports a number of level crossing safety initiatives selected based on risk assessments on a case by case basis. These treatments include but are not limited to:

- Active crossing controls (such as barriers) on high risk, high volume rural crossings and all metro crossings;
- Active passive controls (such as bells and lights) on all metropolitan crossings and also on rural crossings where warranted by risk factors and traffic volumes;
- Advanced active/passive warning signs on rural crossings where the sight distance is less than the viable stopping distance of a heavy vehicle. This will allow trucks to safely stop in time before the crossing itself on high speed roads;

- Active (barrier and light controls) pedestrian crossings in the metro region;
- Emergency escape bays in metro areas to allow traffic to move off the crossing if they block the crossing due to queueing traffic;
- Advanced warning signs and vehicle activated warning signs on approach to passively controlled (Stop and Give Way signed) crossings; and
- Research, development and trialling of new technologies which could improve crossing safety (such as green/red active controlled led pavement markers etc.)

Train Visibility

RAA believes that the visibility of train carriages and wagons, especially those on freight trains, should be improved. This was reiterated by comments from RAA Members in the attitudinal research suggesting carriage side illumination and/or retroreflective markings together with lighting at the end of the trains would be beneficial.

This is particularly critical for freight trains which, unlike metropolitan passenger trains, have internal carriage lights on at night improving visibly of the train length as oppose to freight trains that are largely invisible mid-length.

Identified Crossings

RAA supports a clear strategy that identifies railway crossings that fail to meet minimum standards. Such a strategy could account for the reintroduction of the Rail Crossing Safety Group, with a clear agenda to assess and prioritise safety concerns.

Metropolitan Railway Crossings

Security Cameras

Road safety cameras should be considered at locations where there are identified issues with driver and pedestrian behaviour.

Metropolitan Pedestrian Crossings

The standard of rail crossings for pedestrians across metropolitan Adelaide varies considerably, from multi-platform stations with pedestrian gates and pedestrian lights to simple lined crossing treatments. While the ideal is to ensure the highest level of safety for all pedestrians, each crossing should be assessed individually and a hierarchy of safety improvements be developed and progressively rolled out.

Signage

Through RAA's regional road assessments, we have identified inconsistencies in crossing signage and maintenance issues (eg damaged, missing signs).

RAA supports the introduction of an ongoing level crossing audit program that aims to seek and rectify deficiencies across the state. Signage should be clear and unambiguous at all times.

Sight distance assessments should be undertaken to ensure the correct use of "Stop" and "Give Way" signs. "Stop" signs should not be used in conjunction with active controls since motorists are less likely to stop if they see that the crossing is not active, leading to perceived unfair litigation.

Where crossings have become inactive, signs should clearly be erected and maintained to show the crossing is disused, or the crossing should be removed completely.

Improved Accessibility

RAA would like to see all mobility options having the principles of universal design embedded.

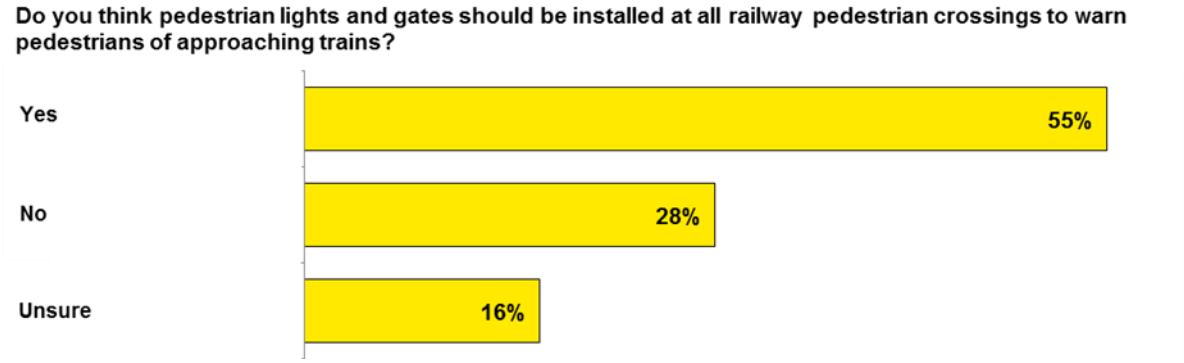
It is understood in previous discussions with the Hon. Kelly Vincent that public transport access for people with a mobility issue can be challenging. It is understood when train carriages are full during peak hour there can be little options for people with a mobility issue and must wait for the next train due to carriage space constraints.

While many stations have dedicated wheelchair points, it is important to also ensure train platforms are safely designed for wheelchairs to disembark without barriers.

Pedestrian Gates

Pedestrian lights and gates offer the best barrier type when warning people of approaching trains. 55 per cent of RAA Member Panellists believe they should be installed at all pedestrian crossings.

RAA recommends a planned assessment and roll out program to target crossings with high numbers of incidents or near misses, and crossings that are assessed as posing a greater than normal safety risk to pedestrians.



Rural Railway Crossings

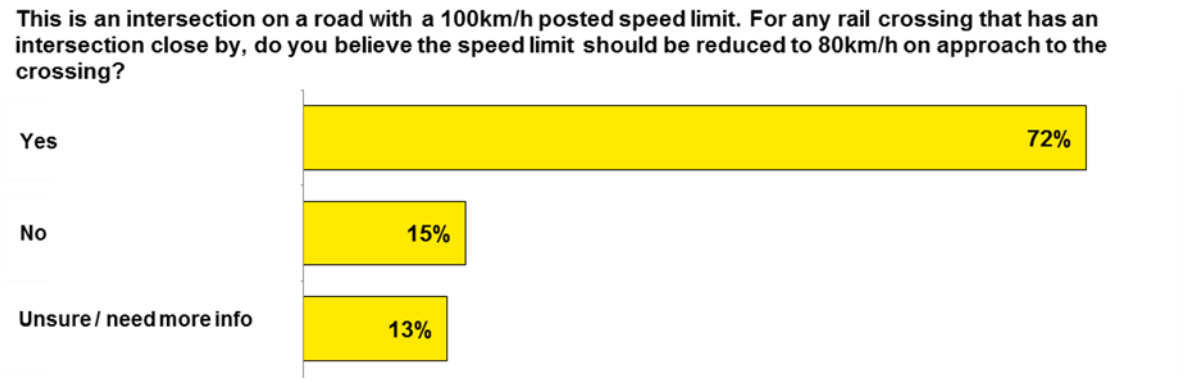
Vehicle Activated Signage

RAA supports the introduction of Vehicle Activated Signage at passively controlled crossings as well as where sight distance is limited on approach to crossings with active elements.

While vehicle activated signs are a passive measure, there may be merit and safety benefits in providing a dynamic visual warning of the crossing to alert motorists who are not fully alert or have become familiar with the route and/or usually experience low or negligible rail traffic volumes.

Reduce Speed Approach Limits

Victorian rural rail crossings have a reduced speed limit of 80km/h when approaching. The change in speed limit creates an additional awareness that a motorists is approaching a railway crossing. When RAA Member Panellists were asked their view on the speed reduction at Victorian rural rail crossings, 72 per cent supported the concept.



RAA supports the broad concept and would encourage further investigation into the Victorian model, including analysing crash and near miss data to see if there is any tangible benefit in this action.

Education and Enforcement

RAA Member Panellists consistently highlighted the difficulty of developing a strategy that improves individual safety yet doesn't over regulate. The biggest issues would be inattention and impatience whilst waiting for the train to pass.

Promotion of Road Rules

RAA has an ongoing commitment to ensuring motorists are kept up to date with Australian Road Rules and any changes or nuances that may cause confusion. RAA achieves this through a dedicated Community Education Department, promotion of road rules and driver's tests on RAA's website, articles in SA Motor and ongoing media promotion.

Promotion of Australian Road Rules should be an ongoing strategy implemented by the Department of Transport, Planning and Infrastructure and incorporated into any overarching strategy.

When asked, 94 per cent[1] of RAA Members believe driver training and education may be useful in reducing deaths and injuries on our roads.

Education on Dangers of Queuing

When asked RAA Member Panellists highlighted that in nearly every situation they would wait behind the white line at a railway crossing until the traffic had cleared on the opposite side the crossing.

Anecdotally, RAA is aware that queuing across railway crossings does occur, this may be accidental on the part of the motorist misreading possible traffic flows or light sequencing and misjudging the space available compared to their vehicle's size..

[1] RAA 2016 Member Advocacy Survey

It is peak hour and the traffic lights at the next intersection are red. You are approaching the white line and have some room to move forward, however you will be stationary on the railway line. Do you:

Improve Compliance

Improving railway crossing compliance cannot be limited to motorist compliance. RAA Members were very clear that any compliance or enforcement activity to improve railway safety must include pedestrians and cyclists.

Any compliance measures that are introduced should have an integrated education element.

Awareness of Rural Crossings

Rural railway crossings sometimes appear to be unused creating potential complacency from motorists which should be offset by installing better and clearer signage including the status of the crossing. RAA encourages the investigation and assessment of current treatments in other states, such as the Victorian's reduced speed on approach to a regional railway crossing.