

PARLIAMENT OF NEW SOUTH WALES



STAYSAFE Committee

PROGRESS IN IMPROVING THE SAFETY OF RAILWAY LEVEL CROSSINGS

New South Wales Parliamentary Library cataloguing-in-publication data:

New South Wales. Parliament. Legislative Assembly. STAYSAFE Committee

Progress in improving the safety of railway level crossings. STAYSAFE Committee, Parliament NSW Legislative Assembly. [Sydney, NSW]: STAYSAFE Committee, 2006, 62 p.; 30cm

Chair: Paul Gibson MP, Chairman
December 2006

ISBN 0 7313 5137 1

1. STAYSAFE—New South Wales
2. Progress in improving the safety of railway level crossings.

I Title.

II Series: New South Wales. Parliament. Legislative Assembly. STAYSAFE Committee; STAYSAFE 81; Report 24/53

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Terms of Reference

The STAYSAFE Committee

The general terms of reference of the STAYSAFE Committee are as follows:

- (1) As an ongoing task, the Committee is to-
 - (a) monitor, investigate and report on the road safety situation in New South Wales; and
 - (b) review and report on counter measures aimed at reducing deaths, injuries, and the social and economic costs to the community arising from road accidents.

Without restricting the generality of the foregoing, the following are to be given urgent consideration -

- (i) countermeasures aimed at traffic accidents associated with alcohol and other drugs.
- (ii) traffic law enforcement measures and their effectiveness.
- (iii) a review of human factors affecting traffic accidents, especially those relating to driver and rider licensing requirements and standards.
- (iv) the social and economic impact of deaths and serious debilitating injuries resulting from traffic accidents.
- (v) heavy vehicle safety.

CHAIRMAN'S FOREWORD

In 2004, the STAYSAFE Committee handed down its findings and recommendations of an inquiry into the safety of railway level crossings.

In mid-2006, the STAYSAFE Committee commenced an inquiry to review the response to the findings and recommendations arising from its STAYSAFE 56 report into the safety of railway level crossings in New South Wales. The terms of reference for the inquiry into railway level crossings provided for a review of:

- the status of railway level crossings in New South Wales;
- factors contributing to crashes at railway level crossings;
- countermeasures which may increase the safety of railway level crossings;
- motorist behaviour and education regarding the use of railway level crossings;
- and any other related matters.

The report by the STAYSAFE Committee was very well received, and it was acknowledged as a definitive work outlining the issues associated with railway level crossings, that is, intersections where a road and a railway line cross at the same level.

A recommendation made by the STAYSAFE Committee in the STAYSAFE 56 (2004) report was:

RECOMMENDATION 69:

The Rail Infrastructure Corporation, the Roads and Traffic Authority, local councils, and other agencies, be subject to a further review in 2006 by the STAYSAFE Committee regarding the response to the findings and recommendations of the inquiry into the safety of railway level crossings in New South Wales.

In November 2006, the STAYSAFE Committee requested that representatives of the government's Level Crossing Strategy Council attend a public hearing and testify regarding the safety of railway level crossings.

This report provides the written responses received from the Level Crossing Strategy Council, as well as the testimony of government and rail industry representatives before the STAYSAFE Committee on Monday 13 November 2006.

Without making a further recommendation, the STAYSAFE Committee expresses its view that a further review by the Committee regarding the response to the findings and recommendations of the inquiry into the safety of railway level crossings in New South Wales should be conducted at the end of 2008, if not earlier. The Committee does not make a recommendation in this regard as the current Committee's role ceases upon the prorogation (or dissolution) of the 53rd Parliament prior to the general State election in March 2007.

Acknowledgments

As ever, I am very grateful for the care and consideration that the members of the STAYSAFE Committee bring to their deliberations on road safety matters affecting New South Wales.

I wish to acknowledge, in particular, the ongoing work by Mr Daryl Maguire MP, Opposition Whip and Member for Wagga Wagga, who first brought his concerns to STAYSAFE following several deaths at railway level crossings in the Wagga Wagga area prior to his joining the Committee in 2003.

Finally, on behalf of the Members of the STAYSAFE Committee, I wish to thank my Committee Manager, Mr Ian Faulks, for his continuing work in examining the safety of railway level crossings. I thank also Mr Jim Jefferis, Senior Committee Officer, Ms Elayne Jay, Senior Committee Officer, Ms Annette Phelps, Committee Officer, and Ms Millie Yeoh, Assistant Committee Officer, for their administrative assistance.

Chapter One—

TESTIMONY OF GOVERNMENT AND INDUSTRY REPRESENTATIVES REGARDING THE SAFETY OF RAILWAY LEVEL CROSSINGS

IAN JAMES GLASSON, Director General, Ministry of Transport, Level 21, 227 Elizabeth Street, Sydney, and

VINCENT JOHN GRAHAM, Chief Executive Officer, RailCorp, Level 6, 18 Lee Street, Sydney, and

MICHAEL BRUCE BUSHBY, Director—Network Planning, Road Maintenance and Traffic Management, Roads and Traffic Authority, 260 Elizabeth Street, Sydney, sworn and examined:

Mr GIBSON MP (CHAIRMAN): I declare the meeting open.

The first witnesses this morning are Mr Jim Glasson, the chairman of the New South Wales Level Crossing Strategy Council [LCSC], Mr Vince Graham from RailCorp, and Mr Michael Bushby from the Roads and Traffic Authority. I welcome the witnesses. We look forward to the evidence that they will give. I also welcome Mr Bob Piconi, who is from the Roads and Traffic Authority, in attendance today.

Gentlemen, I am advised that you have been issued with a copy of the STAYSAFE Committee's terms of reference and a copy of the Legislative Assembly Standing Orders 332, 333 and 334 which relate to the examination of witnesses. Is that correct?

Mr GLASSON: Yes.

Mr GIBSON MP (CHAIRMAN): Of course, for any evidence that is given today, you are covered by privilege. Do you have any documents that you would like to table at this stage?

Mr GLASSON: No. We have provided some documents to you.

Mr GIBSON MP (CHAIRMAN): Thank you. The STAYSAFE Committee has received submissions from you regarding the safety of railway level crossings in New South Wales. I direct that these submissions form part of your evidence.

I will ask the first question so that we get straight into questions. Mr Glasson, would you outline and discuss the situations regarding level crossings? In other words, what does the Government intend to do, say, over the next five years in relation to such things as prioritisation of crossing upgrades, closing of level crossings, and all those type of issues that relate to level crossings?

Mr GLASSON: In terms of what would be the current plan of the level crossing strategy committee, I think the first comment I want to make is that in relation to funding, you will have noted in the documents we have provided to you that the Ministry of Transport in the budget submissions for next year's budget have requested that money for the accelerated program for level crossing improvements be continued. That will be considered in the context of next year's budget. Secondly, I draw your attention to the model national rail legislation that is proposed to be introduced in New South Wales next year, as it will be across all the States in Australia. That contains specific reference to the rail regulators requiring interface agreements between the rail operator or the rail infrastructure owner and the road owner at all level crossings across the State.

When introduced and when we know the detail, that may influence how the Government oversees level crossings safety and improvement beyond that legislation because it may well be at that point that the Independent Transport Safety and Reliability Regulator will in fact be the government agency with clear statutory accountability for all level crossing interfacing. At this point in time the Level Crossing Strategy Council is continuing on its program and continuing to assume it will do the work as it is currently done and as has been done for the last few years, but that could in itself change the structure of the Council or the way in which the Government monitors improvements to level crossings. Beyond that I think that we would continue to work through the Level Crossing Strategy Council on co-ordination between those parties with responsibility for level crossing management. We will continue to put money towards public information campaigns. You will have noted that that has been done that since 2002 in relation to campaigns targeting driver awareness.

RailCorp did a pilot on pedestrian safety awareness in the Illawarra some months ago and is intending to repeat that in the Hunter next year. Certainly the results in the Illawarra, both pre and post that campaign, indicated that the public could recognise the campaign and the awareness issues around pedestrian crossings on rail tracks. Beyond that I think we will continue to work on the development of the level crossing assessment model as the risk-management tool that has now been adopted effectively by all the Australian States. We will continue to work on improving that and we will work on any national standards and issues that need to be referred to the Standing Committee on Transport and the Australian Transport Council.

Mr GIBSON MP (CHAIRMAN): Just for our edification, you say that there is funding commitment for the next year. What about after that or in two, three, four, five or six years time?

Mr GLASSON: We have put forward a proposal that the accelerated program for the past four years be replicated in the following four years.

Mr GIBSON MP (CHAIRMAN): That has not been accepted as yet, or what?

Mr GLASSON: That is part of next year's budget process so we have simply put a recommendation through.

Mr GIBSON MP (CHAIRMAN): What about funding in relation to local councils, and what have you, and their commitment?

Mr GLASSON: At the moment there is no specific funding, as I understand it, for local councils from the State Government. However, where crossings that are owned and maintained by local councils are identified in the priority list under the level crossing assessment model, clearly they will receive the funding out of our accelerated program.

Mr GIBSON MP (CHAIRMAN): Mr Bushby, do you have anything to add to that in relation to funding from local councils?

Mr BUSHBY: In terms of their funding of the level crossings, no: I think Jim has probably addressed it. Obviously the Government does provide funds for councils in relation to the management of their regional roads. They are able to apply those funds to the areas where they see the greatest needs. There is nothing to stop them from putting it into level crossing funds. I think Mr Glasson's comments in relation to provisional funding are appropriate.

Mr GIBSON MP (CHAIRMAN): Is there any funding there, for argument's sake, for planning for the future from any body, from your organisation or from councils?

Mr GLASSON: At this stage we have commenced the corridor starting from Cootamundra to Albury and I think, depending on the outcome of that, certainly we would be putting money towards those corridor studies on a whole-of-corridor basis.

Mr GIBSON MP (CHAIRMAN): I must say at this stage that our own Casey Jones, the honourable member for Wagga Wagga, came up only last night along that line to have a look for himself.

Mr DARYL MAGUIRE (STAYS SAFE): I did.

Mr BARTLETT MP (STAYS SAFE): When we did this study back in 2004, I think we went to Parkes. Parkes local council had a capital works budget of \$500,000 over and above everything else they did. They had a capital works budget of \$500,000 but that was not for railway crossings, and they had something like 90 crossings. There was just no way with the cost at that stage—I think we were quoting \$250,000 per crossing upgrade—

Mr GIBSON MP (CHAIRMAN): It was \$300,000.

Mr BARTLETT MP (STAYS SAFE): There was no way that those country councils, especially under the drought conditions they are facing now, could come up with the wherewithal for their share of the crossing money.

Mr GRAHAM: Chairman, I think it is relevant that the STAYS SAFE Committee's recommendations in this regard reflected on the difficulties that local councils have in supporting their contribution to this program. I think a specific recommendation of this Committee was that any previous practice of deferring level crossing upgrades because of a shortage of local government funds should be discontinued. That recommendation has been fully implemented. I think it is important that the STAYS SAFE Committee understand that the level crossing assessment model that is applied across the State is the tool on a risk basis to give priority to upgrading of level crossings across the State. Each level crossing is dealt with in priority order.

In the event that a local government area is unable to fund any contribution, it does not mean that that still is not the priority that is implemented. It simply means that the amount of money in total that might have been available, should council have been able to contribute, is less than what it would have been. Therefore you are simply not getting as far down the list in that year as a result of that funding shortfall. But importantly the prioritisation of the level crossing is not bypassed because of any lack of local government funding—quite to the contrary. The risk-based approach, using the level crossing assessment model, sets the priority, and the available funding from all sources is used to address that.

Mr BARTLETT MP (STAYS SAFE): My feeling would have been that any council at worst would be lucky to fund even a year because of their budget restrictions. Did you actually negotiate the priorities with councils? Did they know that you have provision? Being an old grey mayor when I had some hair, if RailCorp or whoever it was had come along and said, "We will pay for the lot", well, you are going to duck, are you not? RailCorp will end up paying for the lot. Is that not so?

Mr GRAHAM: I think that is probably the inevitability in most circumstances today. The financial position of regional councils in particular is recognised to be difficult.

Mr BARTLETT MP (STAYS SAFE): Yes.

Mr GRAHAM: That should not, however be an issue in bypassing the priority that comes from the risk-based assessment tool. That was the recommendation of this Committee, and that is what has been fully implemented.

Mr MAGUIRE MP (STAYS SAFE): Could it not be said also that your priority is to get that corridor enclosed so that you can lift the speed of trains and move freight more efficiently? Therefore, expending the money that councils are unable to contribute actually brings more quickly to you the results that you are trying to achieve.

Mr GRAHAM: No, not quite. There has been no decision to give the corridor strategy a higher priority than the individual level crossings that are prioritised under the risk-based level crossing assessment model but certainly a body of work has been done, particularly in that Cootamundra to Albury corridor, to look at all aspects associated with that corridor. That is a corridor where XPT trains are capable of doing 160 km/h. We restrict them to 120 km/h. We do that, not because that makes a substantial difference to the safety of motor vehicles on level crossings—because the reality is that, at 120 km/h or 100 km/h, if there is a fairly direct hit on a motor vehicle at a level crossing the most likely implication is that the occupants of the car will be seriously, if not fatally, injured.

The decision to cap the operating speed at 120 km/h is one that reflects the potential impact a level crossing accident has to derail a train. Clearly an XPT train derailing, where there are 300 passengers on board, raises consequential issues that are very high. Anecdotal evidence both here and overseas would suggest that above 120 km/h the probability of a derailed train causing injuries to passengers on board gets proportionately higher.

That is because, going back to basic physics, the energy that needs to be dissipated once a train is derailed is proportional not to its speed but to the square of its speed. So the energy to be dissipated by a train doing 160 km/h is in the order of twice that associated with a train doing 120 km/h. It is our intention to continue that restriction until we can see, on a risk basis, an opportunity to lift that speed. Indeed, there might be circumstances where that speed could be reduced, but I think at the moment we would consider that we probably have that issue reasonably balanced.

MR GIBSON MP (CHAIRMAN): At the same time we also made recommendations that we look at new technologies in order to bring the cost of level crossing maintenance down. Have we done much in that regard?

Mr GRAHAM: I think there are a number of technologies, including remote monitoring and health monitoring, that have been addressed. I think the reality is that taking a level crossing

from a passive level crossing to an active level crossing is an expensive capital works; indeed, it is getting more expensive because of the nature of the equipment that is involved.

Mr MAGUIRE MP (STAYS SAFE): In your submission you make a comment that the Cootamundra to Albury corridor has been chosen as the initial corridor for investigation. When was the investigation begun? I note that you have said other corridors are being considered and will be progressively developed. What other corridors are you considering and how far have you progressed on the Albury to Cootamundra corridor?

Mr GRAHAM: I think you will note in the submissions that there are community consultations under way with local government. Clearly the attraction of the Cootamundra to Albury corridor is the potential to increase the speed because it is a section of track where we can do 160 km/h, were it not for level crossings. At the moment there are other track-related matters that are constraining the speed through there, particularly in the summer months. No doubt in your conversations yesterday you would have received some input on this.

Mr MAGUIRE MP (STAYS SAFE): It was very informative, yes.

Mr GRAHAM: The other corridor that has some potential in that regard is the Parkes to Broken Hill corridor. The density of level crossings, both public and private, on that section of track is significantly less. Of course, with the Explorer train we have the capability of doing 140 km/h on that very long stretch from Parkes through to Broken Hill.

Broadly in relation to the other corridors, on the North Coast corridor, from Maitland through to Brisbane, because of the topography and the constant curvature of track, there are in reality very few sections where one is able to exceed 100 km/h. So it certainly would not be a priority. The priority is really allocated to where the speed of the train could be enhanced if it were ultimately a closed corridor.

Mr MAGUIRE MP (STAYS SAFE): Can you tell the Committee when it is expected that the upgrading of the rail line between Albury and Cootamundra with new concrete sleepers will be completed? In my travels I have noted that an enormous amount of work has been occurring. I must say, I pay credit to your drivers. I do not know how they sit in the front of some of those trains, because the ride in the driver's cabin was just appalling. Today my back is suffering badly. When do you expect that the concrete sleeper upgrade will be completed?

Mr GRAHAM: That track, of course, is an Australian Rail Track Corporation corridor. The New South Wales Government has leased it to the Commonwealth for a period of 60 years. I think all credit must go to the Australian Rail Track Corporation for the very substantial investment that is now under way. They have let contracts for two million concrete sleepers to be installed on that Melbourne to Brisbane corridor, and I think the progressive commitment is to ensuring that Melbourne to Brisbane is a completely concreted corridor. It is a similar approach to the one that we adopt within the RailCorp territory. While these are long-term programs, within RailCorp territory we have now completed 60 per cent of our network in concrete sleepers.

The advantage that concrete sleepers bring is that they are far more stable in periods of hot weather. Traditionally, once the ambient air temperature reaches 38 degrees centigrade on timber-sleepered tracks, speed restrictions are imposed in order to protect the safety of the track in the event of misalignment through heat. Last year the Australian Rail Track Corporation, because of their concerns on the main southern corridor, reduced that ambient temperature from 38 to 32 degrees, and that will apply through the course of this summer. Because of that restriction, from the end of this month we will introduce the summer timetable on the southern corridor to ensure that we can operate a reliable service for our

customers, albeit somewhat slower for the Sydney-Melbourne and Melbourne-Sydney daylight services. Of course, the overnight services are not affected.

Mr MAGUIRE MP (STAYSAFE): Earlier you referred to fatigue in the rail head. Some of those rail lines have been down for a number of years. Can you tell the Committee how long the rail heads have been in place?

Mr GRAHAM: No, I could not tell you in precise terms, but I can speak in detail about the control measures that are put in place by both ourselves and the Australian Rail Track Corporation. Again I would reinforce that the interstate corridors generally are Australian Rail Track Corporation territory, but the safety management system is to run an ultrasonic rail floor detection car across the rails to identify any emerging defects within the head of the rails. That technology is reasonably well advanced and has proved to be very effective in predicting the development of any rail head defects.

Generally the wear and tear on rail, as opposed to heat-related misalignment, is proportional to the traffic, but particularly heavy freight loads have far more impact on the generation of rail defects than any other factor. But the technology available today for rail grinding the head of the rail has proved to extend that life by multiples, not just by percentages.

The Hon. Rick COLLESS MLC (STAYSAFE): May I follow up on the issue of the impact of heat on sleepers. I find that surprising. How does it work? What does a timber sleeper not do that a concrete sleeper does when it is hot?

Mr GRAHAM: A concrete sleeper has mass. Fundamentally, it is very significantly heavier. In this day and age, of course, the rail itself is continuously welded. Out in the west of the State you can have hundreds of kilometres of continuously welded rail without a joint. As air temperature heats and rail heats, you can imagine that the compressive stresses are building up.

The Hon. Rick COLLESS MLC (STAYSAFE): As it stretches the sleeper?

Mr GRAHAM: No. The rail is anchored to the sleepers, and track stability depends on the ability of the sleeper and the ballast to maintain its position. Concrete sleepers, because of their mass, are significantly more stable than timber sleepers. Indeed, the ambient temperature at which you would put heat-related restrictions on concrete sleepers is about 42 degrees, as opposed to the 32 degrees currently—

The Hon. Rick COLLESS MLC (STAYSAFE): What actually happens to the line? Does it get waves in it?

Mr GRAHAM: The most common mode of failure from misalignment is that you will have a horizontal kick in the rail.

The Hon. Rick COLLESS MLC (STAYSAFE): It would still maintain its parallel alignment?

Mr GRAHAM: It still maintains its gauge, but it introduces short sections of very tight curvature, and obviously at speed, or indeed under heavy freight loads, you can get that kick.

Mr GIBSON MP (CHAIRMAN): What about in cold weather?

Mr GRAHAM: The reverse occurs. If a track is not properly adjusted, you are more likely to get broken rails, as that compressive force in summer changes to a tension in winter.

Mr BARTLETT MP (STAYSAFE): Why do you not have some clickety-clack sections?

Mr GRAHAM: Because the potential for broken rail at the fish-plated joint, because of that constant clickety-clack—and down on the rail that clickety-clack is represented by a hammer blow on that joint by every wheel that goes over it—has the potential to generate at the joint a transverse crack. If that end section of the rail drops out, the consequences are obvious. So continuously welded rail, an area that was developed in Australia, is now applied internationally.

Mr MAGUIRE MP (STAYSAFE): They use our technology elsewhere?

Mr GRAHAM: They do.

Mr MAGUIRE MP (STAYSAFE): America is adopting it?

Mr GRAHAM: That is correct, and the United Kingdom. This technology has been developed over the last 30 or 40 years. I think some of the better work on it was probably done in the Parkes-Broken Hill section.

Mr GIBSON MP (CHAIRMAN): The honourable member for Albury, Greg Aplin, has brought to our attention that residents living near the Five Masters overbridge crossing have great fears. Can you tell us why the people down there should be concerned about this new bridge?

Mr GLASSON: I am not aware of the detail, but I can take the question on notice.

Mr BARTLETT MP (STAYSAFE): When the Committee heard evidence on this inquiry back in 2004 we spoke to Rail Infrastructure Corporation representatives. Since then we have spoken to representatives from RailCorp and the ARTC. Mr Glasson, what powers does your committee have in terms of enforcement? Is it simply by consensus that you get everyone to agree?

Mr GLASSON: It is.

Mr BARTLETT MP (STAYSAFE): If you do have a problem and someone does not come to the party, what happens then?

Mr GLASSON: It is by consensus and consultation. We have no statutory powers.

The Hon. George SOURIS MP (STAYSAFE): Will the new legislation that you referred to a moment ago change that?

Mr GLASSON: I expect that it will. I was appointed to my job in February this year. That is an issue that has been in my mind this year as the chair. The discussion we have had at the council is that we will wait and see what the detail of the legislation is next year, prior to making any recommendation to the Government about changes. It could well be that that legislation introduces a statutory basis for the control of all level crossings in New South Wales.

The Hon. George SOURIS MP (STAYSAFE): Is that being negotiated through the ministerial council?

Mr GLASSON: That has been agreed upon at the Australian Transport Council by State and Federal Ministers. The draft national model legislation has been agreed upon, and the States have now committed to introduce it during 2007.

The Hon. George SOURIS MP (STAYSAFE): Each State will have a level crossing strategy council, with the authority—?

Mr GLASSON: No. Each State will have rail legislation which requires some form of interfacing agreements between rail infrastructure owners and road owners, and it will be up to individual States to determine how they would best oversight that. In New South Wales we have the Independent Transport Safety and Reliability Regulator, who would have carriage of this safety legislation in New South Wales. It could well be, for example, that the Government at that time determines to perhaps reconstitute this council under the chairmanship of its—

Mr BARTLETT MP (STAYSAFE): Firstly, have there been examples where there has been a lack of consensus?

Mr GLASSON: In my period of office since February this year, I am not aware of any examples where there has been a lack of consensus. I cannot speak about previous to that. If you look at the program of works over the last two or three years, I do not believe there has been an instance where one of the parties has refused to come to the party on something that has been identified for inclusion.

The Hon. George SOURIS MP (STAYSAFE): What is the process if we have, for example, a federally funded highway such as the New England Highway managed by the Roads and Traffic Authority and the relevant rail line run by the Australian Rail Track Corporation? How do you get into that action, in terms of being the lead agency? Do you broker funding arrangements?

Mr GLASSON: This is an important point. We are not the lead agency. I am the agency that chairs the council. At the end of the day, the owner of the rail infrastructure and the owner of the road have the accountability under the law to make the crossing safe, to whatever standard the risk is assessed. Therefore our role is to have an oversight, particularly in relation to the funding for the accelerated program but also as a means of ensuring that all the relevant parties, including the police and the Local Government Association, come together to discuss the issues and, if possible, understand where people have concerns and see whether it goes. But in the first instance it would be a matter for the Roads and Traffic Authority and the ARTC to understand their risks and to take appropriate action.

Mr GIBSON MP (CHAIRMAN): Does that mean that if this new legislation goes through, the Roads and Traffic Authority will lose funding control?

Mr BUSHBY: No. I think it puts an obligation on the road authority, whether it is the Roads and Traffic Authority or local government, to engage with the rail operators to look at the requirements of the individual crossings and come to agreements. Rather than lose control, it will be a case of a positive obligation to participate in that process, as I understand it.

Mr GRAHAM: I can go back over the last three years in this respect. There have been no disagreements with any of the agencies represented, for one very simple reason: A common underlying risk assessment tool here, the level crossing assessment model, produces a priority list for the allocation of the pool of funds that is available. Because you have that single risk assessment tool delivering one single prioritised list, all the access providers involved supportive of that single risk assessment model. Because of that, there are no debates about

where the something should be number four or number five, or number one or number six. There is strong support by all the agencies for that single risk assessment tool. It delivers a prioritised list of work, against which the pool of funds is allocated. The continuing agreement on the level crossing assessment model provides that certainty for the program.

The Hon. George SOURIS MP (STAYSAFE): How does the Federal Government contribute to this pool of funds? Is there a priority to ensure that its own roads reach the same level as, say, State-owned roads? How does that work?

Mr GRAHAM: Yes. I think, importantly, the level crossing assessment tool—it has been developed now as a national tool—has been accepted by all transport Ministers as a national tool. So pretty much the same methodology is now applied in every State for these State-based programs. If the Commonwealth chose to do so it could sit above all those and allocate its funding on a national prioritised basis—it may very well be that the first three priority level crossings are in one State—or it could look at a State-based process if it chose to do so. But at this point in time New South Wales does not attract any Commonwealth funding from the pool that we use to upgrade State level crossings.

The Hon. George SOURIS MP (STAYSAFE): Even if it is on a federally funded and owned highway?

Mr BUSHBY: Because of the arrangements that were put in place for AusLink, the Federal Government no longer undertakes to fully fund what were the national highways. It makes a contribution towards the funding of the national network, the AusLink network, which means a road like the New England that you spoke about would have a funding contribution towards its maintenance. But the stages would still require a contribution from the national network as well. So there is a modified set of arrangements. The Federal Government no longer has direct funding accountability for any particular roads. It certainly does not own any roads in the State.

Nationally, it makes a contribution of \$300 million to what was the national highway. It is now applied to the national network. In New South Wales that number is somewhere near \$100 million. It is up to the State to deliver the maintenance and operation of those roads using that as a contribution towards the requirements for the State. The Federal Government does not get involved in explicit works like a level crossing strategy or particular issues. It is left with the States to allocate funds across all of the risks involved, whether it is rail crossings, or geotechnical pavement deterioration, et cetera.

The Hon. Robert BROWN MLC (STAYSAFE): I apologise if my question is a bit naive but I am a new boy on this Committee. It seems to me that this is a complex process because of the number of agencies involved. From my observations you always seem to get problems when so many agencies are involved. You have a model by which you do your risk assessment and you have developed a priority. As I understand it, the Level Crossing Strategy Council [LCSC] co-ordinates all that. Who determined the priorities in the first place? When the work or recommendations have been done, who audits that work and recommendations to ensure that the standards have been met? Does the Level Crossing Strategy Council do that, does one of the agencies do that, or do all the agencies do that in co-operation? Is one party or one person responsible for that?

Mr GRAHAM: First, the prioritisation is done through a unit that sits in RailCorp. That unit has responsibility for data gathering and input with other agencies into the level crossing assessment model [LCAM]. So they pull in the data, which is at one central location. The prioritisation, which is based on that risk-assessed level crossing assessment model, is then

available to the level crossing committee. The priority audit level crossing assessment committee endorses that program of works. The agency charged with the delivery would depend on where that level crossing is.

So if that is in, for example, Australian Rail Track Corporation territory, it will take responsibility for the construction. If it is in RailCorp territory, we will take responsibility for the railroad construction, and the road authority associated with that particular location would take responsibility for its component. A number of agencies might be involved in that process and that potentially could get complex. However, the reality is that because of this single prioritisation, the tool that every agency supports, the prioritisation ultimately results in a relatively simple process. There is an agreed set of priorities for the allocation of available funding.

The Hon. Robert BROWN MLC (STAYSAFE): So an operational or technical team does that assessment?

Mr GRAHAM: Yes, it does.

The Hon. George SOURIS MP (STAYSAFE): Does that involve railway factors, or do you negotiate also with the Roads and Traffic Authority?

Mr GRAHAM: No, multiple factors come into the assessment. Some of those factors will include the volume of rail traffic and the volume of road traffic as a multiple. It will include track speed, sighting distances for approaching motorists, whether the particular level crossing is perpendicular, or whether it is at an acute angle. It also takes into account the potential to queue across a level crossing. For example, if you have a T-intersection with the rail running parallel to the top of the T, you then have the potential for a car to queue at the T back onto the level crossing. Clearly, any queuing back onto a level crossing is potentially dangerous. I think more than 50 individual factors come together in that risk assessment. As I said, it is now a nationally accepted tool, importantly applied by the one technical assessment team. That is what gives a potentially complex situation its simplicity in prioritised delivery.

Mr BARTLETT MP (STAYSAFE): From memory I believe that there are about 3,500 railway crossings in New South Wales.

Mr GRAHAM: Yes, but you have included in that sum public and private. Of the 3,500 there are about 1,500 public level crossings, but you then have to add private level crossings, which include farm crossings, et cetera.

Mr BARTLETT MP (STAYSAFE): Four years or so ago we decided on the accelerated funding model. Do you have any statistics on closures, upgrades and grade separations as a result of that model?

Mr GLASSON: In the last five years about 10 a year, on average, have been closed. We can have a look at the numbers that have been upgraded.

Mr BARTLETT MP (STAYSAFE): I note that those figures are in your report.

Mr GLASSON: It is. In 2004-05 there were about 22 major upgrades.

Mr BARTLETT MP (STAYSAFE): Would that have included grade separation and major upgrades?

Mr GLASSON: No. These are lights and booms and about 40 or so relatively minor works. In 2005-06 there were 15 major works, and of the order of 60 additional minor works.

Mr GIBSON MP (CHAIRMAN): Do you have available a list of level crossings? Is there such a list or an inventory of level crossings?

Mr GLASSON: Yes, but I am not sure to what extent it goes.

Mr GRAHAM: I think of the order of 300 of the level crossings are prioritised out of the risk assessment model. It is certainly possible to provide a copy of the list of the prioritised risk assessment. However, I wish to make two points. As with any risk assessment model it is simply trying to judge the overall risk. That does not mean that we could not have a fatality at a level crossing. The factors number 50 on that list. The logic of risk assessment is to deal with the worst risk assessed first and progressively to work our way down. The information that is available on the progressive improvements that we are seeing over the years I think is demonstrative of the strategy.

The other point I make is that since the Staysafe committee released its last report, the Level Crossing Strategy Council has changed the standard to which new crossings are upgraded. Historically, there was the potential just to upgrade crossings with lights and bells rather than booms, lights and bells. The Level Crossing Strategy Council, with the acceptance of all its members, has modified that standard now to be only booms, lights and bells. So every level crossing that is upgraded will only be done to a standard of booms, lights and bells.

The logic behind that was that on the basis of national and international research the safety benefits of installing only lights and bells was significantly lower than when it was booms, lights and bells—a driver behavioural issue. But the human factors assessment would suggest that installing only lights and bells could indeed pose a challenge to motorists to get across. It is the physical barrier represented by the booms that give that added safety protection. So I think it is worth noting that that initiative has been taken to modify the standard.

Mr GIBSON MP (CHAIRMAN): In the United States of America all railway grade crossings on public roads are listed on a Federal web site. Do we have such a web site?

Mr GLASSON: We certainly do not have a whole-of-Australia web site.

Mr GIBSON MP (CHAIRMAN): Do you have one for New South Wales?

Mr GLASSON: We have a web site for the Level Crossing Strategy Council.

Mr MAGUIRE MP (STAYSAFE): Does it list the priorities?

Mr GLASSON: No. I do not think we have all those listed at this stage.

Mr GIBSON MP (CHAIRMAN): Is it possible to provide the Committee with such a list?

Mr GRAHAM: We could provide that list of 300.

Mr MAGUIRE MP (STAYSAFE): This Committee made a recommendation that a web-based accessible level crossing listing should be made available to the public.

Mr GRAHAM: In relation to it being an entire list, I think listing those that have been risk assessed and the 300 priority crossings would probably be the sensible first step.

Mr MAGUIRE MP (STAYSAFE): How many have now been risk assessed?

Mr GRAHAM: I would not even attempt to answer that question.

Mr MAGUIRE MP (STAYSAFE): Would you take that question on notice?

Mr GRAHAM: I know that the priority list is of the order of 300.

Mr MAGUIRE MP (STAYSAFE): Could you take on notice my question relating to how many have been risk assessed?

Mr GRAHAM: Yes.

Mr MAGUIRE MP (STAYSAFE): You said in your submission that 10 crossings had been closed. Why so few when there are so many crossings? Is there any difficulty in achieving those closures? What procedures do you follow when you want to initiate a closure? I ask these questions for a number of reasons. Yesterday I identified crossings that in my humble opinion were appalling. People had allowed vegetation to grow on either side of the crossing, which obscured visibility. If I had my way I would be down there with a tractor tomorrow to push out that dangerous vegetation. I understand that people are attached to those crossings for ease of access, et cetera. Do you make specific provisions for closures versus replacement with bridges, underpasses or relocation? What is the hold up in getting some of these crossings closed or relocated to safer positions?

Mr GLASSON: I think you identified the core reason, that is, that landholders and communities are fairly resistant to the closure of a crossing that provides them with some perceived benefits, whether it is time saving, or whatever. There is a procedure for closing crossings and that involves consultation with landholders and local communities. As I said, I think we have done about 10 a year for the last five years. Certainly on the corridor that is currently being assessed in the south, I think there has already been two identified for closure.

The Hon. Rick COLLESS MLC (STAYSAFE): Are they private or public crossings?

Mr GLASSON: I think some public crossings are included.

Mr MAGUIRE MP (STAYSAFE): One of the crossing closures identified means the public has to travel seven kilometres one way and nine the other on a dirt road as against crossing the railway line and accessing a highway. It means there will be more traffic travelling down dusty roads for greater distances. When the line is straight, what are the criteria for having a crossing upgraded and others closed so it becomes a major crossing rather than closure and putting people at risk driving down dusty farming and grain haulage roads?

Mr GLASSON: It would involve doing a risk assessment of all the current sites and then negotiating with landowners and the local community about which sites would best be closed.

Mr GIBSON MP (CHAIRMAN): Michael Deegan had a very active approach to closing level crossings when he was director general of the Department of Transport. Does that desire to close them persist?

Mr GLASSON: There is an understood view among the participants in the Level Crossing Strategy Council that we have an objective to close and rationalise level crossings wherever possible.

The Hon. Rick COLLESS MLC (STAYSAFE): Without necessarily providing alternative access?

Mr GLASSON: Often the crossings that are closed are on lower volume rural routes. Closures of major crossings—

Mr GIBSON MP (CHAIRMAN): Does it not fix the problem if you close them?

Mr GLASSON: It does, but you have to have to the resources available for the alternative.

Mr GIBSON MP (CHAIRMAN): If we have upgraded only 10 a year over the past five years, is there no urgency? If we did 10 five years ago, surely we should be doing 20 by now.

Mr GRAHAM: The situation at Stockinbingal over the past 12 months is reasonably representative of the issue. I think there are three level crossings in the town. The community consultation undertaken to achieve closure of one of the level crossings is symptomatic of the issues that arise. It does not matter which level crossing you want to negotiate to close, access for local residents is an issue. At times access for emergency services vehicles also becomes an issue.

Mr GIBSON MP (CHAIRMAN): That is an area I know well because I was born and bred there. There are three level crossings in Stockinbingal and it is as big as a postage stamp. Why not close two? It would take an extra three minutes to get from one side to the other no matter which one was closed.

Mr GRAHAM: The volume of media coverage about closing any of them underscores the issue.

Mr GIBSON MP (CHAIRMAN): In Stockinbingal itself?

Mr GRAHAM: Yes.

Mr GIBSON MP (CHAIRMAN): I imagine that the media coverage there would be great.

Mr GRAHAM: It was.

The Hon. Rick COLLESS MLC (STAYSAFE): That is a slightly different issue to closing a private crossing where alternative access is eight to ten kilometres down a dusty dirt road.

Mr GRAHAM: There are legal issues associated with closing private level crossings. In some cases the access could go back to the original construction of the railway 100 years ago, when the rights of access were embedded in the resumption and there is a continuing legal right.

The Hon. Rick COLLESS MLC (STAYSAFE): How do you handle that problem?

Mr GRAHAM: There are two approaches. First, in some cases parcels of land have been broken up and disposed of and the access is no longer required. In that case, it can be dealt with simply by negotiation. Secondly, where the agriculture access continues to be required,

putting in place more definitive safe working arrangements for the access of headers and so on across the crossing is part of the strategy. For a range of reasons those agriculture crossings may need to stay there. However, we must make them safer and ensure that safety protocols are applied. They may have been applied when the grandfather was running the property, but some of those things may have been lost to the generations now running the farms.

Mr MAGUIRE MP (STAYSAFE): Are you talking about advising traffic control that you are going to move a header across at 3:00 p.m. and the basic instructions about activities the farmers are carrying out?

Mr GRAHAM: That is correct.

Mr GLASSON: I would like to finish the answer about the level of commitment. The level crossing unit, which is within RailCorp, spends a lot of time and effort working with the rail infrastructure owners across the State identifying sites for closure and negotiating with local communities. There is a sense of focus and purpose about that work.

Mr GIBSON MP (CHAIRMAN): What about installation of red light cameras as has been done in Western Australia? Has there been any move to install red light cameras at railway crossings?

Mr BUSHBY: Not at this stage. Red light cameras would have to fit in with the technology of flashing rights and other things that rail use. The current legislation does not provide for that to be put in place.

The Hon. Robert BROWN MLC (STAYSAFE): I refer to the collision statistics. The reduction in the period 1995 to 2000 increases greatly in the following period, 2000-05. In other words, you have more than doubled the reduction. Is there anything in particular you would say is the reason for that increased reduction? Have you done anything different over the past five years? Are people becoming safer drivers? You are spending x million dollars a year and something seems to be having an effect. What is it?

Mr GLASSON: It is probably a combination of the works being done under the allocated funding and the public awareness campaigns that have been run every year.

The Hon. Robert BROWN MLC (STAYSAFE): So money is the key?

Mr GLASSON: I think money is part of the answer.

The Hon. Robert BROWN MLC (STAYSAFE): Therefore, if you continue to receive the funding, you would expect to continue to improve.

Mr GRAHAM: I would identify two other factors at play. This trend reflects the trend in overall reductions in fatalities on the road network.

The Hon. Robert BROWN MLC (STAYSAFE): As well?

Mr GRAHAM: Yes. You would ascribe that to a range of safety initiatives that have occurred, including better education, random alcohol testing, seatbelts and so on. The second thing I would identify is the change in operating patterns on the lower density network where there are fewer bigger trains as the preferred mode of operation for freight train operators.

The Hon. Robert BROWN MLC (STAYSAFE): Does that mean more trains overall?

Mr GRAHAM: No, it could be fewer trains at the same tonnage. If you are reducing the frequency of trains, you are reducing the probability of a train and a car arriving at the level crossing at the same time.

The Hon. Robert BROWN MLC (STAYSAFE): The other interesting thing is that the passive and active warning devices have not made much difference in the past couple of years—the statistics are running together.

Mr GRAHAM: Yes. I think the reason the passive level crossing incidents are down relates to train frequency.

The Hon. George SOURIS MP (STAYSAFE): I refer to the ARTC annual report. Reference is made to major and minor works, but there is no mention of a really major project such as building an overhead bridge and eliminating a level crossing. It would consume the entire budget, if not more.

Mr GLASSON: Those funds must come from the agencies with accountability, whether that is the road agency, the rail agency or a combination. Historically those things occur when there are major upgrade programs to sections of roads and money is set aside. Certainly in the program we have, would do not have the sort of money to be doing major grade separations.

Mr GIBSON MP (CHAIRMAN): Mr Bushby, would you like to comment?

Mr BUSHBY: I agree. A couple of grade separations have been done in recent years, but they have been done independently of the funds available within this co-ordination group. They tend to be evaluated against other road projects as being appropriate upgrades that are done from within the roads program.

Mr GLASSON: We do not report against those. We report only against the funding that we have allocated that the Level Crossing Strategy Council oversights.

Mr GIBSON MP (CHAIRMAN): Following on, we note that the announcement of the Oaks Flat to Dunmore upgrade of the Princes Highway is to be completed by 2010. You have announced that five years in advance. Are there any others for, say, Newcastle, that are in the pipeline to do in the future?

Mr BUSHBY: Are you referring to road projects?

Mr GIBSON MP (CHAIRMAN): Bridges or whatever.

Mr BUSHBY: That would be part of the Government's road program, I think we are referring to.

Mr GIBSON MP (CHAIRMAN): Would that be the only one in the pipeline?

Mr BUSHBY: As I said, the road program is assembled looking at the priorities for roads generally. Often when there are roads in the vicinity of rail infrastructure there must be improvements to the interaction between those two modes of transport. When work is required for the road network, there will obviously be improvements to the interaction with rail, depending on where the roadwork is done. However, it becomes a secondary effect. The

allocation of funds is for improvement to the road network, and there will be parallel work that improves the rail.

Mr GIBSON MP (CHAIRMAN): You must have a figure you are looking at five years in advance on different roadwork in which similar things are going to happen. Is there a list of those that we are looking at closing in the future?

Mr BUSHBY: I think we are coming at it from a different direction. We are planning for road improvements over time. They are subject to budget commitments. The Government commits only through the budgetary process. The focus is on the road improvements rather than on the rail. So, it would be very difficult to pull out that these were being done for rail or road.

Mr GIBSON MP (CHAIRMAN): But in this case you have announced the closure of the Shellharbour level crossing at Dunmore in the same plan.

Mr BUSHBY: It is a level of detail that I am not aware of; I would have to look at that particular example. It may well be that roadworks are being done which mean that that is no longer required. I do not know the circumstances.

The Hon. George SOURIS MP (STAYSAFE): But you must have a priority listing for the forthcoming year. I am not referring to how much will be allocated in the budget, but the priority listings must exist. I would imagine that you would have three years worth or more.

Mr GRAHAM: The level crossing assessment model has a prioritisation going forward for many years as to the level crossings and in what order they have been risk assessed. That is the 300-odd list we referred to earlier. I am more than happy to table that list.

The Hon. George SOURIS MP (STAYSAFE): It is not a question of whether it will be funded; just leave that aside. It is the priorities.

Mr BARTLETT MP (STAYSAFE): Presumably a roadwork funding project might come over the top of your priority because is a roadwork, but it incidentally gives you a grade separation. It might not be on your priority list, but it is a roadwork project that impacts on your side of the ledger.

Mr GRAHAM: Obviously, sometimes those two things coincide. One example that the Chairman is familiar with is the Garfield Road level crossing. It is light protected now, but it is one of the more densely used level crossings on the network. As part of the whole south-west growth centres development in the medium term, obviously grade separation in the vicinity of Garfield Road is an important project and one that we obviously are aware of in planning future development.

Mr GIBSON MP (CHAIRMAN): How long will it be before they get an overhead bridge there? They have been trying for 100 years!

Mr GRAHAM: Yes. I have more immediate concerns than grade separation. We are actively involved with council and the Roads and Traffic Authority because that is a location where queuing of vehicles because of right-hand turn lock back onto the level crossing is an important issue. You will notice in the 2005-06 report the considerable amount of work that has gone into an education and enforcement program at Garfield Road level crossing. We put up variable messaging screens for a three-week period, advising motorists that queuing across a level crossing is an offence, how much it is worth and how many demerit points, and that period of advice using variable messaging screens was followed by a police enforcement

program. The success of that program means that, both for Garfield Road and Pine Road level crossing at Fairfield, we will periodically undertake those education and enforcement programs as an important part of the overall risk managed safety approach to that.

Mr GIBSON MP (CHAIRMAN): One of the recommendations was that the Committee have a look at the ordinary traffic lights for level crossings, the red, amber and green. Was that recommendation given any consideration and, if not, why not?

Mr GRAHAM: I must say I think the role of public servants is sometimes to give full and frank advice on these matters. If you will forgive me, I will adopt the role of a public servant and give full and frank advice to the Committee.

The Hon. George SOURIS MP (STAYSAFE): Be fearless!

Mr GRAHAM: I am, obviously, familiar with the recommendation. But we start off by asking whether, from a human factors point of view, modifying the existing national standard of flashing red prior to booms coming down and replacing that with amber-red normal traffic light would make substantial difference. From my own perspective as a road motorist, amber lights mean something different to me than flashing red. I think the imminent danger associated with flashing red and amber, from human factors point of view, is something subtly different. However, let us assume for the moment that that was not demonstrably the case. We not only about establishing a State standard; this needs to be a national approach. With motorists who experience something in one State that is different in another State, particularly if they are residents of a border town and driving in two State jurisdictions on a regular basis, obviously there is potential there for misunderstanding if two States adopt a different approach.

Our Roads and Traffic Authority colleagues would tell us that the cost of installing a basic set of traffic lights these days is \$100,000 to \$200,000. So when I approach this from whether or not there was a human factors justification to change the standard—and my frank and fearless advice is that I am not convinced of that, but let us assume that there were human factors justification—it would inevitably mean that if we were to apply this as a national standard it would consume many, many years of available level crossing funding and it would mean that the prioritisation of works out of the level crossing assessment model would not proceed at the pace that would otherwise be the case. I think that fundamentally the Committee has the opportunity, on a risk assessment basis, to decide: Well, if there is a pool of funds, and inevitably a limited pool of funds, where is the priority allocation of that funding? I think the considered view of those who have discussed this would be that the current prioritisation based on moving level crossing protection from passive to active would offer far more safety benefits to motorists, and to rail travellers, than would a modification for lighting standard on approach to those level crossings.

The Hon. Rick COLLESS MLC (STAYSAFE): What is the cost comparison between the boom gates, lights and bells and traditional traffic lights?

Mr GRAHAM: Obviously, moving from a single flashing red light to a three-light indication would involve the replacement of all of those light standards, not just statewide but nationally. If you change the standard, it would need to be done on every currently actively protected level crossing. Those crossings that are already protected by lights, booms and bells are doing the safety job for us. Investing money in changing the lighting standard on something that has already actively protected is not, to my mind, on a risk assessment basis, the priority for the allocation of funds. The allocation priority is to move more crossings from passive to active protection.

Mr GIBSON MP (CHAIRMAN): We are talking about green for go and red to stop, not to provide an amber light to give them the start to cross. But I suppose if we used that philosophy we would never, as a government, talk about putting flashing lights in front of every school.

Mr GRAHAM: No, I think there is a subtle difference here. We are talking about circumstances that already have active protection. We simply want to change the lighting standard at those actively protected crossings. This is a judgment that needs to be based on risk assessment. The risk assessment has to be: Where is the overall greatest from the available safety benefit likely to accrue from the available pool of funds? And I make that comment and judgment on that method.

Mr GIBSON MP (CHAIRMAN): But if you made every decision on a judgement, Garfield Road would have an overhead bridge.

Mr GRAHAM: Not necessarily. The cost of building an overhead bridge at Garfield Road—and I would defer to my Roads and Traffic Authority colleague, but we do not seem to do anything of that nature under \$25 million or \$30 million.

Mr GIBSON MP (CHAIRMAN): If someone is killed at Garfield Road, the first thing we will do is install an overhead bridge.

Mr MAGUIRE MP (STAYS SAFE): You able to tell me how much per year has been spent on the advertising campaign, including billboards and radio and television, advising of the danger associated with level crossings?

Mr GLASSON: It is in these reports, but rather than go fishing for it now I will be happy to take that question on notice.

Mr MAGUIRE MP (STAYS SAFE): I flicked through the reports and noted amounts of \$50,000-odd, but I wanted an overall figure. I do not think that is the total amount because enormous billboards stating "Danger at level crossings. Stop or you will be stopped." are now located strategically around the countryside. In addition there is periodic television and newspaper advertising and I would be interested to have that figure. The second thing is that in your submission you referred to a number of items that you regard as issues for the national Standing Committee on Transport. Would the STAYS SAFE Committee be able to have a look at some of the recommendations it has been suggested will be legislated for next year? We have followed this issue very closely and would like to see the proposed recommendations from the Standing Committee on Transport so that the Committee can perhaps consider them as well.

Mr GLASSON: We can certainly give you the national model legislation for rail in draft form, as it currently exists.

Mr BUSHBY: With regard to the cost of the education campaign, while there is information in the report, I think it is appropriate to give the Committee a more detailed response.

Mr GLASSON: I suspect, also, the report is for or against moneys that have been allocated, which the Level Crossing Strategy Council is overseeing, but I presume that the rail operators, the Roads and Traffic Authority and perhaps local councils, are spending some additional money.

Mr MAGUIRE MP (STAYS SAFE): With regard to the removal and replacement of roadside and railway infrastructure—the newly installed or existing infrastructure that is now obsolete—are you making progress in that regard? When it comes to constructing new infrastructure, are stakeholders that utilise rail infrastructure involved? I have seen examples of sheds or signal boxes placed right beside level crossings that obscure the view of pedestrians and of motor vehicles as well. What have you done to try to ensure that everyone gets to give an opinion, particularly drivers? Are they involved in the process?

Mr GRAHAM: If I could comment in relation to pedestrian visibility, over the last 18 months a considerable amount of work—I might say led by New South Wales at a national level—has gone into modifying the pedestrian level crossing standard. Some of the input to that related to two fatalities in Victoria that were the result of inadequate surfaces for wheelchairs, particularly on pedestrian level crossings. The wheels of the wheelchair had been caught in grooves, boards, et cetera. We have now finalised and adopted that draft standard and the first implementation of that this standard is at Teloepa on the RailCorp network and, quite independently of the State level crossing program, RailCorp is allocating \$2 million per year for the foreseeable future to bring our pedestrian level crossings on the RailCorp network up to that new standard. That is about adequate widths and about positive locking of pedestrian gates.

The disability issue is an important component of that standard—it is a combination, however, of that standard with the positive locking of gates. From a human factors point of view, good sighting distance can be an encouragement for at risk behaviour: "I can see that train. I know where that train is and, therefore, if I do not have a positive barrier against me will take the risk." The unfortunate part of most pedestrian level crossing accidents is people making a judgment that they will get across behind or safely in front of the train that they can see, without recognising that on duplicated track it is the train that they cannot see is the problem. There was a tragic incident at Macquarie Fields on Friday night, 10 November 2006, in this very circumstance. A young man alighted from a train and, as it departed the platform, he decided to take the short cut down on to and across the tracks and up onto the other platform, having no visibility. The train on the other track was obviously blocked by the departing train. I believe this commitment to the new standard and to the positive locking of pedestrian gates is a very significant step forward in establishing a safer standard.

Mr GIBSON MP (CHAIRMAN): The new technologies, when we do move on, do we normally use Australian-made technology or seek technology from overseas, or is it a combination of both?

Mr GRAHAM: This is predominantly Australian technology.

Mr MAGUIRE MP (STAYS SAFE): Moving on from that unfortunate accident that occurred, what efforts have been undertaken to address suicides at level crossings? We had an incident not too long ago at Wagga Wagga and it would have been traumatising for the driver and for the family. What has the corporation done to try to address that aspect?

Mr GRAHAM: On the RailCorp network we probably incur between 25 and 30 fatalities a year that a subsequent coronial inquest would establish to be suicide. They are all too frequent and the obvious implication for our drivers in those circumstances is quite significant. At times those contemplating taking their own lives see jumping in front of a train a victimless, in the sense that there is not another vehicle involved. Unfortunately, there is a victim in all of these the circumstances.

And that victim is not only the train driver but it is also the emergency services workers who are obviously called to attend in these circumstances. We have undertaken a public advertising campaign—a series of ads that featured the commentary of a train driver, the commentary of a nurse who was required to attend as part of the ambulance service, and the commentary of a young police constable, as a means of informing the public that these are circumstances that do involve a range of other people. Unfortunately, those who are committing or attempting to commit suicide a lot of the time their mind is obviously in another place: the pain of living is substantially more than the perceived pain of what they intend to do. It is a broader community issue, obviously, but one that I not only feel deeply for the families but I feel deeply for the train crew.

Mr MAGUIRE MP (STAYSAFE): Uranquinty has a level crossing but there are no pedestrian facilities. I understand it was brought to the attention of the organisation some two years ago. I went and inspected that crossing recently because it actually forces children to walk onto the roadway to cross safely to get to school. I went there with our local traffic committee representative and school safety officer. How does someone in my position, or other members of Parliament sitting here, elevate that to a priority?

When I viewed this at school crossing time at nine o'clock in the morning the crossing itself I would say is absolutely dangerous and it has existed for a number of years, yet it appears no action has occurred. How do you elevate that status when we identified such a situation?

Mr GRAHAM: Uranquinty is on the defined interstate network, the access owner there is Australian Rail Track Corporation for the Commonwealth Government and it is therefore the direct accountability, in the safety sense, of the Australian Rail Track Corporation. But I think it is certainly a matter that, with the concurrence of the chairman, we would be more than happy within the level crossing strategy council to bring forward, because the Australian Rail Track Corporation are, obviously, members of that.

The Hon. Rick COLLESS MLC (STAYSAFE): A lot of towns along that section of line would be in the same position—Uranquinty, Culcairn, The Rock—they would all have similar problems.

Mr MAGUIRE MP (STAYSAFE): Uranquinty, in particular, the roadway is actually very narrow and the kids have to walk onto the road to get across to the railway line. So, it is a double whammy.

Mr GLASSON: Sure, draw it to the Australian Rail Track Corporation's attention, but write to me as the Chairman of the Level Crossing Strategy Council and also write to the Minister of Transport.

Mr GIBSON MP (CHAIRMAN): Talking about suicides, what have we done for trespassers—keeping people off the tracks? I know in Sydney we have recently got 1.5 kilometres of high fencing; what about throughout the whole network?

Mr GRAHAM: Yes, there is a very intensive program that is going on at a number of levels, both engineering solutions and education and enforcement activities. We have recently completed a comprehensive program at Jannali, which was one location where trespass was a problem. Given the nature of Jannali, you have the shopping centre and hotel on one side of the railway line and substantial accommodation blocks on the other side of the railway line. Clearly, the potential for those who wish to get across to do it unsafely across the tracks exists at that location. So, we have not only gone through and strongly fenced those areas where trespassers were getting through the fence, but in that location the danger is people come on

to one platform, jump down across the two tracks and jump up on the other platform. Obviously, that is a circumstance where fencing is not going to do the job.

They were the circumstances where the education and enforcement program, complementing the engineering works, was strongly applied. We had a number of community functions down there: a bit of a barbecue for locals; a number of discussions involving the schools and community leaders; and, having done that, we then followed that up with plain-clothed enforcement from our transit officers. We have certainly taken Jannali from being the highest site of near misses recorded by our drivers through to one that we would regard as being substantially under control. But for the remainder of our trespass program we are investing something in the order of \$2 million a year now in fencing—and that is obviously a very expensive program—and constructing bat wings on our overhead bridges because of the potential for missiles to be thrown in the face of oncoming trains. Unfortunately, in order to protect the network from these social ills it is expensive but, in the safety sense, it is fundamental.

The Hon. Rick COLLESS MLC (STAYSAFE): The level crossing at Baan Baa, which claimed a life a couple of years ago in a very bad accident, I notice in your list of minor works or preliminary works under way, \$2,000 is being spent on the Baan Baa level crossing. Is that the full extent of those works or are there further works to be done there? What has been involved in that?

Mr GRAHAM: The coronial report on the Baan Baa accident has been released. The coronial report certainly did not identify any issues associated with infrastructure at that location. The work that I think has been done at Baan Baa has mainly focused on adequacy of signage, et cetera, and I think I would need to come back as to where Baan Baa is in terms of the risk assessed priority on that. I am more than happy to provide that information to you.

The other recommendations of the Coroner as a result of Baan Baa go to the fitments of the passenger trains. With the Baan Baa level crossing accident you recall that following a collision with a motor vehicle the train derailed and turned on its side. Fortunately, we did not have serious injuries of passengers on board as a result of that. However, the Coroner did make recommendations about better securing luggage in overhead racks, providing light in paths and matters associated with transverse doors at the end of those, and those modifications are being undertaken as part of a \$10 million upgrade of our explorer rolling stock.

The Hon. George SOURIS MP (STAYSAFE): One car was written off, was it not?

Mr GRAHAM: One was and one was brought back into service. I would not be confident that both were not pulled back into service.

Mr MAGUIRE MP (STAYSAFE): Driver distraction has been suggested by the STAYSAFE Committee as an emerging issue and significant in road safety. Can you discuss efforts to deal with driver distraction associated with the placement and complexity of road signage, signals, in-vehicle devices, instrumentation and in-vehicle environs—soundproofing, air conditioning, et cetera?

Mr BUSHBY: The Roads and Traffic Authority is certainly aware of a lot of work having been done recently about driver distraction. I think this Committee has taken an interest in that area and I understand that there has been work done in Victoria with their report that has been put out down there as well. In terms of distraction in relation to the rail level crossing issues, I am not aware of any specific work that has been done there. But in terms of further

research that could be done in relation to the level crossing effects and how that applies with driver distraction, I think it is an area where further work will be done and certainly we would be wanting to look at that on a wider scale, given the interest in driver distraction at present: so, looking at it perhaps in a national context.

Mr GIBSON MP (CHAIRMAN): Talking about derailment, we note that when it has been derailed a few times the XPT comes off the track and actually keeps its stability. Is there any reason for that? After it has been derailed why has it not toppled over like other engines?

Mr GRAHAM: The XPT is a different configuration to the train that was involved in the Baan Baa level crossing accident. You are testing my memory on the detail but my recollection is that the XPT has a locomotive or a power car on either end of the train, and I think the gross mass of the XPT power car is around 76 tonnes. That is substantially heavier than an under-floor powered Explorer car. So, it is the sheer mass of the lead vehicle in the case of XPTs that potentially can give it that greater stability, and, obviously, that sheer mass of the lead vehicle in terms of crash worthiness of the lead vehicle.

Mr GLASSON: But it would also depend on the circumstances of where the accident occurs and what it hit.

The Hon. Rick COLLESS MLC (STAYSAFE): Just to follow up on individual level crossings. The second question I have about individual crossings relates to the Scone level crossing. I think it is the only level crossing that remains on the New England Highway. Why would that not be right at the top of the priority list in terms of being there for the bridge? It is not even listed.

Mr GRAHAM: Again, I think you will get an insight into that when we give you the prioritised list of level crossings. It may very well be that the priority of Scone, given the 50 factors that are rated there, does not sit at that level for all good, considered reasons. But, as I said, we will provide that list to the Committee and I am more than happy to provide more expert evidence as to the factors that might rate that level crossing at a lower priority than others.

Mr GIBSON MP (CHAIRMAN): Just back to the XPT: at Gerogery we note that when the XPT came off it was doing 160 km/h and it went for another two kilometres without toppling over, whereas the one at Baan Baa just hit the deck virtually straightaway.

Mr GRAHAM: Again, if we go internationally, the XPT is the Australian version of the British HST—high-speed train. You might recall some 12 months ago there was a fatality in the United Kingdom involving the HST where a male deliberately drove on to a level crossing in order to, obviously, take his own life, and the booms came down either side. In that circumstance the HST hit the vehicle at an estimated 160 km/h and that did result both in the toppling over of the train and, I recall, fatalities on the train.

Mr MAGUIRE MP (STAYSAFE): Mr Graham, being impressed with your drivers yesterday, do you have an award system that recognises service to the corporation? Do you have an award system that is across all the organisations—for 30 years, 40 years, 50 years—and does that apply to CountryLink drivers?

Mr GRAHAM: Yes, we have two levels: we have an age-based, that is based on years of service, and generally that kicks in at 40 years service when employees are recognised, but we have also instituted over the last two years an award system that is based on peer nomination of employees. We will have our second presentation ceremony this Friday night for those awards.

Mr MAGUIRE MP (STAYS SAFE): The question is do you recognise 30 years, 40 years, 50 years driving service and is that across-the-board, available to all drivers?

Mr GRAHAM: It is generally 40 years across-the-board and available to all employees, not just drivers. But this peer nomination system, while it is in its infancy, is obviously designed to reward not those employees that the boss thinks do a good job but the employees whose fellow workers think do a good job. I must say I continue to be enormously impressed with the quality of train crews that we have, not just on CountryLink. But CountryLink are an exceptional group of employees and over the recent six months I have had opportunity on consultative forums to sit down with representatives of drivers of the CountryLink depots and they are an extraordinarily professional group of drivers whose contribution, advice and experience is invaluable as we develop the range of safety programs.

Mr MAGUIRE MP (STAYS SAFE): I would have to agree. I was most impressed yesterday with all the staff: they were great.

Mr GRAHAM: Both drivers reported favourably on you too.

Mr BUSHBY: Mr Chairman, could I add to the response in relation to the New England Highway? The 2003-04 report of the Level Crossing Strategy Council, in the appendix, under the examples, refers to Scone.

The Hon. Rick COLLESS MLC (STAYS SAFE): That is my point. It is not the work. It might have been upgraded with some minor cosmetic changes. But that is a major problem on the New England Highway.

The Hon. George SOURIS MP (STAYS SAFE): It was an upgrade but it is almost throwing good money after—it needs a—

Mr BUSHBY: It then comes back into the level crossing assessment model assessment.

Mr GIBSON MP (CHAIRMAN): Is the report published?

Mr GLASSON: It will go on the web site.

Mr GIBSON MP (CHAIRMAN): How long has the work been completed?

The Hon. George SOURIS MP (STAYS SAFE): Two years now.

Mr GIBSON MP (CHAIRMAN): And it is still not on the web site yet?

Mr GLASSON: I think 2003-04 report of the Level Crossing Strategy Council is on the website, but I will check.

Mr GIBSON MP (CHAIRMAN): I might stand corrected on that. The STAYS SAFE Committee has looked for an independent investigation report on the fatal pedestrian crash at Adamstown, near Newcastle, or a report on the crash involving a Rural Fire Service volunteer driving a tractor at Illabo who was struck by the Sydney to Melbourne XPT. Who determines whether a crash should be investigated? Is there any protocol for this?

Mr GRAHAM: The Office of Transport Safety Investigations has the independent role of investigating significant accidents and incidents on the network. It has produced a report into

the Baan Baa level crossing accident, for example. I am not aware of the status of reports on Adamstown. I am well aware of the actions taken as a result of the pedestrian crossing accident at Adamstown and the work that has now, I think, been completed at Adamstown, including the upgrading of the level crossing itself and the CCTV.

Mr MAGUIRE MP (STAYS SAFE): Gentlemen, what is the status of the report on the most recent crash at Illabo, where a semitrailer loaded with wool tipped over onto the line and there was a collision with a train operated by private operator? I understand that lack of communication was raised as an issue.

Mr GRAHAM: Again, that is a matter best directed to the access provider, the Australian Rail Track Corporation. Immediately prior to the level crossing there is a curve in the roadway. For whatever reason, the truck overturned on approach to the level crossing, not on the level crossing. As a result of the truck overturning part of the overturned truck fouled the level crossing.

Mr MAGUIRE MP (STAYS SAFE): The debate seems to be around the communications mechanism for warning the oncoming train. I understand that trains are required to have satellite communication, digital phones, I guess. What requirements are placed upon operators, whether they are private or public, to have communications of a reasonable standard, or a good standard?

Mr GRAHAM: There is a common standard dictated by the Independent Transport Safety and Reliability Regulator. Once the incident has occurred how quickly can the truck driver or citizens who are in close proximity get that message through? Obviously, if there is already a train within minutes of approaching that level crossing there is no communication that will be effective enough, given the braking curve of those trains, to enable the driver to respond.

Mr MAGUIRE MP (STAYS SAFE): If an accident occurs at a crossing and Johnnie Average comes along how does he know who to ring these days? Is there an emergency number published somewhere at the crossing? With the complexity with which the rail system is managed, apart from ringing 000, what other means is there of getting the message through that there is an accident and danger?

Mr GRAHAM: The 000 number remains the best, most effective and simplest for the average citizen to understand in the event of all hazards or accidents. However, assuming that the crew on the train are able to do so, the on-train communication back to train control is the quickest and most effective, but that requires a train to be at the location and the crew to have the capacity to use the communications.

Mr MAGUIRE MP (STAYS SAFE): The fear I had was that it could have been an XPT that came whizzing around the corner at Illabo. Even though they have good braking capabilities, their speeds are greater. I question how you could get that message through more speedily. Ringing 000 would be the right way to do it?

Mr GRAHAM: Yes.

Mr GIBSON MP (CHAIRMAN): Thank you for your evidence today. There may be some further questions, which we will forward to you in writing after the hearing.

(The witnesses withdrew)

PHILIP LOMAS DRAKEFORD SOCHON, Deputy Chief Executive Officer, Australasian Railways Association, Level 3, 11 National Circuit, Barton, Australian Capital Territory, and

DAVID STANLEY EDWARDS, General Manager—Safety, Health, Environment and Security, Pacific National Pty Limited, Level 6, 15 Blue Street, North Sydney, sworn and examined:

Mr GIBSON MP (CHAIRMAN): I welcome the witnesses, Mr Phil Sochon of the Australasian Railways Association and Mr David Edwards of Pacific National, to the hearing. We look forward to the evidence they will give. I am advised that you have been issued with a copy of the Staysafe Committee's terms of reference and a copy of the Legislative Assembly Standing Orders 332, 333 and 334 which relate to the examination of witnesses. Is that correct?

Mr SOCHON: That is correct.

Mr EDWARDS: Yes.

Mr GIBSON MP (CHAIRMAN): Of course, you are covered by parliamentary privilege for any evidence given here today. The STAYSAFE Committee has received submissions from you regarding the safety of railway level crossings in New South Wales. Is it your wish that these submissions form part of your evidence?

Mr SOCHON: Yes.

Mr EDWARDS: Yes.

Mr GIBSON MP (CHAIRMAN): Is there anything further that you would like to table at this stage?

Mr SOCHON: Not at this stage. We will be making a presentation later on today.

Mr GIBSON MP (CHAIRMAN): I will commence by asking a general question. Could you outline and discuss the situation regarding railway level crossings in New South Wales as it is known to the Australasian Railways Association [ARA]?

Mr SOCHON: Okay. I guess the important thing for us to note is that we are an Australiawide and indeed a New Zealand focused organisation, so New South Wales forms part of our brief and as such fits into the national agenda. My commentary would be to note the great interest played by the Parliament of New South Wales in level crossings through the STAYSAFE Committee, which we welcome as an activity to focus attention and enhance safety. I would not want to comment in terms of operational details. Certainly, RailCorp's example that you heard this morning already is an example of some good initiatives in the behavioural area where we are particularly focused. New South Wales, like other States I think, can be improved in the way issues are addressed in a behavioural sense, but New South Wales is undertaking a number of useful initiatives that we welcome.

Mr GIBSON MP (CHAIRMAN): Mr Edwards, would you like to add anything to that?

Mr EDWARDS: I appreciate and welcome the opportunity to present to the Committee. From my perspective and from Pacific National's perspective, we are Australia's national operator, working through the seven jurisdictions all around Australia. I guess today we would like to introduce awareness to what we are seeing as a general deterioration of community standards

affecting a lot of these level crossing trespass, train robbery and suicide types of situations and to seek some assistance from the Government.

Mr GIBSON MP (CHAIRMAN): Great. Mr Sochon, my committee recommended that the Australasian Railways Association be represented on the Level Crossing Strategy Council. Has that happened?

Mr SOCHON: The Australasian Railways Association is not a member of that. It is nevertheless engaged, as I will point out to you later, on the national agenda in relation to influencing various issues relating to level crossing safety. It is certainly our view that the Australasian Railways Association's participation is probably better done through industry representation, which I think is effectively done through RailCorp.

Mr BARTLETT MP (STAYS SAFE): Is the Australasian Railways Association funded by the Commonwealth? How are you funded?

Mr SOCHON: I was going to go through that during my presentation, but certainly we are funded by members. Pacific National is a member.

Mr GIBSON MP (CHAIRMAN): Would you like to do your presentation now?

Mr SOCHON: That might give you food for questions.

Mr GIBSON MP (CHAIRMAN): We have a number of questions.

Mr SOCHON: I am happy to take questions along the way—whichever way you would like to play that. I have a number of slides. I will whip through some of them quickly. You should have a document in front of you that rolls you through the slides. There may be points where I turn to Mr Edwards because there are a couple of points arising from incidents involving Pacific National in there where I would want him to amplify for our benefit, because he has a better handle on the detail.

In my first slide you will see that I have used the title of Road-Rail Intersections rather than level crossing. I have been a little bit provocative in doing that but it is to bring forward the angle that this is very much a road and rail multimodal issue, which we are all very well aware of. But "level crossing" to me embraces a kind of a culture which brings it all from a rail perspective whereas I think the issue needs to be looked at from a dual modal sense. That is the simple point there.

The next slide shows that the presentation will look at a quick overview of the industry, the impact of level crossing crashes nationally, to give you a flavour of how it might impact upon New South Wales, and then I will talk about the behavioural program that we are working on that State Government agencies are initiating, and very briefly it refers to National Rail Safety Week.

The picture of Australia is simply to show that we have both Australia and New Zealand as a membership. This is a map of the rail network showing the various gauges that exists around the country. It is simply to show our coverage as an association which has that quantity of rail.

That leads to "Our members" to give you a flavour of our membership. Just whipping through them, we are talking about people from track owners, such as the Australian Rail Track Corporation [ARTC] and Westnet Rail, and two operators such as a RailCorp and Pacific National. But we also have manufacturers, maintenance, signals and research companies,

consultants, suppliers and heritage operators. We think there is one small rail company that is not a member of the Australasian Railways Association, so we are able to speak on behalf of the whole industry with some great confidence.

The next slide shows the way that the association is structured. It is member-based, to answer your question, and it represents RailCorp as a member, as it represents other government-owned railways and all the private sector railways as well. It covers New Zealand as well as Australia. Our structure is to have an executive, which is board members comprising most of the big companies as well as some representative samples. On the left is what we call our standards board which sets standards for all kinds of rail activities, some of which are now currently in the Australian standards portfolio and will eventually come across to this brief.

Mr GIBSON MP (CHAIRMAN): How many are on the national council?

Mr SOCHON: There are about 18 people on that. That is a kind of motley crew of the whole of the industry, if you like, in a way. The executive itself has eight or nine members. The standards board is on the left-hand side, and the skills and careers council just shows that we are addressing that issue in relation to the shortage of skilled people in the rail industry.

The next slide refers to passenger operators. Again you are seeing the array of all the passenger operators in all metropolitan areas, as well as those running country operations, such as GSR.

The next slide relates to freight operators. Represented here by David Edwards is Pacific National, and there is Queensland Rail; they are the two big players on the national scene, and then you have some of the smaller freight operators who are listed below them.

The next slide refers to national data. I apologise for not having New South Wales data for you here, but if you look at the coal and iron ore figures for the years 2003-04 to 2004-05 you will see an increase in tonnage being shifted. The other tonnages are just to give you an indicative order of the size of activities. The non-bulk figures are fairly low. Clearly we are much into the bulk area but we would like to get into the non-bulk area more than we are. That is clearly about the area of moving some more by rail as opposed to road.

Mr GIBSON MP (CHAIRMAN): Most of the bauxite comes from where?

Mr SOCHON: That is a good question. Apart from north Queensland, I think that is mostly moved by Queensland Rail.

Mr EDWARDS: Yes. Certainly we are not moving any bauxite.

Mr SOCHON: Okay. The next slide showing the market share of the interstate freight movements is just to give you a feeling. Those figures represent the samples. If you look at the orange line that runs north-south, that is 85 per cent plus of what is moving up and down there of the total tonnage. Again, east-west is 80 per cent plus, and that is both Perth-Melbourne and Perth-Sydney. When you get to the eastern corridor, that is when we get right down to the 20 per cents, and that is where the competition with the truck game is. Clearly that is a big factor in New South Wales. Those figures we would like to see larger, but that is a long-term activity to increase and to ship that tonnage.

Mr BARTLETT MP (STAYS SAFE): Do you know what that is as a percentage of tonnage? I know that there is a great deal going north-south.

Mr SOCHON: In rail?

Mr BARTLETT MP (STAYSAFE): In tonnage, as compared to the 19 per cent that is going to, say, Brisbane-Sydney.

Mr SOCHON: I am sorry, I am missing your point.

Mr BARTLETT MP (STAYSAFE): That is the percentage of tonnage.

Mr SOCHON: Yes.

Mr BARTLETT MP (STAYSAFE): But in real terms, what is the tonnage?

Mr SOCHON: I cannot tell you that figure.

Mr BARTLETT MP (STAYSAFE): But I would suspect that Sydney-Brisbane is higher than Darwin and Perth.

Mr SOCHON: Oh yes, in terms of the proportion of total tonnage, absolutely. You have that huge movement between the major capitals.

Mr EDWARDS: With our tonnages, within Pacific National, we are moving about 9.5 billion tonnes of freight annually but the north-south as opposed to the east-west would account for only about 37 per cent of that. It is, as Phil said, a matter that the industry generally, and particularly us, would like to get more freight off road and onto the north-south rail corridor.

Mr GIBSON MP (CHAIRMAN): Hear, hear!

Mr SOCHON: The next slide is a graphic one which David knows all too well and could speak in a great deal of detail about. I do not intend to do that but will simply reinforce what we are here for. This is a Victorian incident. It is not a New South Wales one, but it could occur anywhere around the country.

Mr EDWARDS: This incident occurred on 28 April 2006 at a place called Lismore in Victoria. It is on the main interstate corridor between Melbourne and Adelaide. It is the largest ever train collision that we as an organisation have had. We are approximately \$15 million out of pocket. It was caused through a local truck driver, as they most often turn out to be in level crossing accidents involving a car driver or a truck driver. A high percentage of them are local people, which is an incredible human factor issue.

Fog was an issue here—there is no question about that—but the interesting point here is that I note your report, which we certainly endorse, commented at one stage on the culture of people wanting to blame the train or blame the train driver. Here is one of those rare occasions where the truck ran into the train. We had three locomotives on the train. The semitrailer ran into the trailing end of the side of the second locomotive and hit it at approximately 72 km/h. The train was doing 110 km/h, its permissible speed, with about 5,000 tonnes of momentum. The truck punched the second locomotive off the line and the rest followed. The truck driver died in the accident. It took us five days to find his body. It involved 95 shipping containers, 46 wagons, and 700,000 bottles of Barossa Valley wine that were all heading for a ship for export out of Melbourne.

I am disappointed to say to the Committee today that this accident can happen in New South Wales. It can happen again at Lismore in Victoria tonight. As part of my corporate governance

division's investigation into this, I had one of our investigators on site last week down there. We attended a police debriefing, and in 45 minutes on site, 15 semitrailers drove through the stop signs at this level crossing which just recently in the last two weeks had been reopened.

Mr GIBSON MP (CHAIRMAN): That is incredible. Can you say again how many carriages were involved in that?

Mr EDWARDS: What you are seeing in that slide is 46 wagons completely destroyed and that represented about two-thirds of the train's length in total.

Mr MAGUIRE MP (STAYS SAFE): Would there be a suggestion of the driver being asleep?

Mr EDWARDS: No. I might add that this investigation is subject to an Australian Transport Safety Bureau independent investigation. That report is due out today in draft for the consideration of the interested parties. At this stage, no. Fog was a little bit of an issue but nonetheless it would go to the question of accepting normal practice in the sense of not being prepared to stop.

Mr MAGUIRE MP (STAYS SAFE): Was that crossing protected by boom gates and flashing lights?

Mr EDWARDS: No. It is passively protected by give way signs. We have lobbied the Victorian Government to not reopen that level crossing. It has reopened and it has reopened with stop signs now, not give way signs. It is passively protected. This is in a configuration locally. In that photograph, if you look at the road in the bottom of the picture, can you imagine a main regional road coming to a point several hundred metres before the main interstate corridor and splitting into two and having two level crossings within 300 metres of each other?

Mr GIBSON MP (CHAIRMAN): It is ridiculous.

Mr MAGUIRE MP (STAYS SAFE): In Victoria, I can.

Mr EDWARDS: True. The bottom one is protected by lights and bells. The one that the collision occurred at was passively protected with give way signs only. We have lobbied the Government and said, "Look, wouldn't it be sensible not to reopen the crossing in question and divert traffic on the other one?" Unfortunately, we have not had any success.

The Hon. Rick COLLESS MLC (STAYS SAFE): What time of the day did it happen?

Mr EDWARDS: At 0722 on the morning of 28 April 2006.

The Hon. Robert BROWN MLC (STAYS SAFE): It is incredible.

Mr BARTLETT MP (STAYS SAFE): Did your drivers survive?

Mr EDWARDS: Yes. Both our drivers were shaken and traumatised by the event. Our investigations indicated that basically between potential death and serious injury of our two drivers, there was a difference of 1.5 seconds in terms of—

Mr BARTLETT MP (STAYS SAFE): Hitting?

Mr EDWARDS: —In terms of who got there first, unfortunately.

Mr MAGUIRE MP (STAYSAFE): With regard to this crash, I note in your submission that the incidence of near misses at level crossings has increased dramatically from 2002-03 to 2005-06. To what do you attribute that?

Mr EDWARDS: I guess this is the main theme of the presentation I wish to make to you. Unfortunately it is not on PowerPoint. I would like to alert the committee to this issue. I have been in the rail game for 39 years, in operations and safety, and I previously presented to the Committee some years ago. In the last 12 to 18 months we are seeing—and my colleague Vince Graham, who is an esteemed friend of mine, has indicated to me that RailCorp is seeing the same sorts of trends, and I stress that these facts are for our company only, that we operate nationally around Australia—we are seeing an absolute off-the-planet increase in the number of incidents in a whole range of issues. In my presentation I have dealt with the issues that are of concern, because they all come together to paint a picture in terms of what we are calling deteriorating community standards and a lack of respect for authority.

When we were kids, may I suggest, the worst thing you could do was to put a penny on a train line. Now they are literally building obstructions to try to cause a collision and a derailment. I can give you no end of examples in relation to that. In one extreme example that occurred in Queensland, just over the New South Wales border, they set up and actually videoed the collision on this massive obstruction they built. These are older kids, but they do not even run away, until the police are called. Whether it be vandalism, trespass or near-miss, these days you can stand on any level crossing, even the actively protected ones, with lights and bells, and you will not have to be there too long to see people breach the warning signs of protection.

I am today asking for your help. We are trying to do as much as we can from an organisation's perspective, working with our industry association, to come up with new initiatives to try to improve our lot for our employees, our contractors, our customers, and for the community, but this is something we really need serious government assistance on.

Mr MAGUIRE MP (STAYSAFE): Yesterday I witnessed trespass on the high-speed corridor. The suggestion was made that when this occurs the driver would pick up his mobile phone. Have you entertained the idea of having some kind of video recording that a driver can utilise on the train so you can execute more prosecutions?

Mr EDWARDS: I welcome the question. One of our initiatives going forward for 2007—and we already have a project established to look at the implementation of this, although the costings are not available at this point in time—is to implement a two-stage process. One is in-cab voice recording for all our train crews. Contrary to popular belief, there is no in-cab voice recording, or most of the radio conversations are not recorded today, and I can explain why. The second part of that is having a camera in the front of every one of our lead locomotives. That will be linked through our computerised data loggers, and it will give us a great benefit.

It is technology that is now available just about off-the-shelf from the United States, and we are dealing with a group in America called Wabtec Corporation in developing this apparatus. That will give us a benefit in a number of ways: demonstrating track condition; signalling aspects when there are arguments over whether a driver had signal of a danger event or the signal dropped back; trespass; suicide; and level crossing accidents. You need only go to what is occurring in the United States today, where they have started to implement this technology, initially with police vehicles and now on semitrailers, or road transport. It is giving a financial return, because it stops the litigation and the argument.

Mr GIBSON MP (CHAIRMAN): We are using the technology today in police pursuits and so on anyway?

Mr EDWARDS: That is right. I would welcome the support of the Committee and a recommendation. At times when I have raised this in public forums before, you will get a little bit of kickback from our principal service union, the Rail, Tram and Bus Union, in terms of saying, "Here they go again." I can say sincerely, it is not meant in any way in that regard. We see it as an adjunct to our safety performance, and we see it as helping our drivers. I am an ex-train driver; I have driven all sorts of trains. I see this as a major advantage to assist us. When you get into a very complicated type of incident where human factor issues are being investigated, it can be of assistance to our train drivers to be able to demonstrate, "This gentleman was working professionally and operating his train in accordance with all the requirements."

Mr GIBSON MP (CHAIRMAN): The STAYSAFE Committee recommended that quite a few years ago now, so we will look at it again. The police took went through their union to get that, so perhaps we can do the same thing with the rail unions.

Mr EDWARDS: I would very much appreciate it, particularly if you could link it with the in-cab voice recording, which is turning out to be a contentious issue with the Rail, Tram and Bus Union. Again I would propose that with respect to that we would have a cyclical disk recording. It may only be of a couple of hours; it would automatically write over itself. But it will give us the next generational shift in safety behaviour, in terms of where we have crews—and some of our trains are a two-driver operation—to reconfirm safety authorities, poor signals. Even with a single-driver operation, you often have someone who might be riding in the passenger cabin or doing a track inspection, or an interface with someone who is giving them an authority to work through a section when normal working fails. If you have that voice recording, it can be a very, very powerful tool. I do not want to stop our guys from talking about the barbecue or the football on the weekend. It would only be frozen in time and used as per an investigational tool for compliance.

Mr BARTLETT MP (STAYSAFE): One of the things they were looking at with the new JFS fighter was constantly recording the last seven minutes of flight.

Mr EDWARDS: Yes.

Mr BARTLETT MP (STAYSAFE): With regard to trespass incidents, I can see the huge increase in 2005-06, to which you referred. I presume you are not simply talking about people walking on the line, but about someone going onto the line and building mounds of rocks, or whatever, to try to derail the train. I am referring to page 6.

Mr EDWARDS: In terms of trespass, no. This is a big bucket, called trespass, where our crews or supervisors are reporting that they have people illegally on the property or the permanent way. It does not correlate necessarily with building an obstruction. That is an issue that is now just normal.

Mr BARTLETT MP (STAYSAFE): I am looking at the figures for 2002-06. Is better reporting part of the growth?

Mr EDWARDS: There would have to be a contributing factor in terms of better reporting. As a condition of employment with our organisation, all incidents must be reported. So that is true. However, even allowing for the normalisation of the increased train kilometres we are doing,

and allowing for that effort, which has not just been in the last 12 or 18 months, the trend across this broad range of community issues is still alarming.

Mr SOCHON: This is another slide of the same incident, showing a close-up view. As we have heard, the impacts of level crossing incidents are multifarious across a range of areas, and obviously there are casualties to road users and train crew. The point I wanted to make about David's reporting on the incident we spoke about is that whereas before it would be "train pushes truck along track; train remains upright", now we are seeing trains falling over. So train crew injuries are now a significant issue with regard to level crossing incidents, whereas they were not before.

Mr EDWARDS: With regard to Mr Graham's comment in relation to the XPT, I totally agree with him: older-type rolling stock, and a heavier power car, as opposed to the Endeavour-type sets in the Baan Baa incident. May I comment that, again over the last few years, it was extremely rare in the rail industry for a level crossing accident to derail a locomotive or to have the train crew at any great risk—putting aside the obvious harm and tragedy to the community member. But in the last few years we have seen a massive increase in the size of road vehicles, B-doubles and other longer road trains, and the gross weight of those vehicles.

I can cite to you a number of incidents of recent time, going back over the last three or four years, where the severity to us in terms of those rail collisions has increased dramatically. Now, notwithstanding the crash protection that has to be built into the front of locomotives and so forth, you have a greater risk of getting injuries to train crew, and injuries to the passengers in the case of a passenger train. In Trawalla, in Victoria, we had a bad level crossing accident. We operate the network in Victoria; we are the RailCorp of Victoria. V/line Passenger were operating a brand new, high-speed passenger train—but it was not going at the really high speed—and three cars collided with a semitrailer. The semitrailer was overloaded for the road it was travelling on, and the driver ignored the level crossing protection. One of our drivers was killed and another one of our drivers who was travelling as a passenger had his legs amputated. A V-line Passenger employee also lost his leg, 17 people were badly injured, and one female passenger was killed. That was a tragic event down there, caused through a violation of the standing road procedures or traffic rules, and nonetheless the fact that this truck was well overloaded with granite.

The crash protection on the front of the train worked. The trouble is, as the first car derailed, the truck came round the side and deposited this massive load on the back of the trailer, and it went straight into the side wall of the first passenger car and sliced through the driver's cab. My point is that the size of the road vehicles has now brought about a change. As you would well know, Mr Chairman, there is now a difference in the consequence to us of level crossing accidents.

Mr SOCHON: The bottom line here is that level crossings are about low frequency but high impact. The nub of the issue we will come to in a moment when we talk about behavioural programs as the challenge for the road authorities is: Where do we sit level crossings in the scheme of the money you put in? My personal view is that the full assessment of level crossing crashes and so on is not yet really understood in terms of its knock-on effect. We will go to the next slide. The figures we have from government studies into the crashes, based on fatalities impacts only, are \$180,000 per crash in urban areas and \$430,000 in rural areas. They comprise data about medical care, track and train, and costs and delay. However, we think those figures could be a lot higher than that.

We will have a quick look at the analysis, again around Australia but I think it would be reasonably typical of New South Wales as well. In the nation there are 100,000 collisions

between vehicles and trains, with 8 per cent resulting in fatalities. The figure around the road toll is about 2 per cent. This is the nub of our issue. It is about wise spending of the public dollar. We are making a case that we need to spend our dollar much more effectively than we have in the past to get the maximum bang out of that 2 per cent.

It is rail's major safety issue. That is the bottom line that we are here for. An average of 37 road users, vehicle occupants and pedestrians die as a result of collisions. I have to say that the statistics are not as good as we would like to see, but that is the best we have. Fifty-one per cent occur at level crossings with boom gates. So whilst boom gates are an attractive proposition—clearly, as Mr Graham was saying earlier, they represent an enhanced level of safety from a give way or a stop—you still get collisions occurring at those boom gates.

Mr BARTLETT MP (STAYS SAFE): Are we talking about one-arm boom gates?

Mr EDWARDS: Half-boom.

Mr SOCHON: I am building a case for the behavioural angle as well. We can put the engineering controls in, but we still have to come at it from a behavioural perspective. The cost of installing active protection at the 6,000 odd passive crossings around Australia we estimate—and this is a very conservative estimate—at between \$1.2 billion and \$1.8 billion. So clearly something else needs to be done. We will not find that money overnight.

The Hon. Robert BROWN MLC (STAYS SAFE): Are these public crossings, not private?

Mr SOCHON: These are public crossings, not private. We will look now at how we have been approaching this in the past and then I will build to the future. At the top of the slide, in the blue elliptic, you will see that the national railway level crossing safety strategy has been run by the Australian Transport Council [ATC]. Under it is the group overseeing the management of that, the Australian rail crossing strategy implementation group, which still exists at the moment. It is under review to establish where it sits in the whole structure. To the left of the slide you will see the Australian level crossing assessment model, or ALCAM, which we have heard about already. It is a great instrument. There are a host of other projects, probably 25 to 30 projects, in that national area.

In the middle of the slide is what we are now calling the level crossing behavioural strategy. The Australasian Railway Association, the industry, was given responsibility for doing something about behaviour under this national plan. I will share with you now what we have done. The next slide talks about how we have previously gone about behavioural programs in each of the States. Typically, there have been State-based, often short-term politically expedient, responses to issues—understandably, but that has been the reality—and ad hoc campaigns. Level crossing is a low priority in the whole scheme. Funding has been reactive and sporadic with annual variations. So it is a reasonably ad hoc situation. Development has been isolated and States have done their own thing. The delivery has been limited to State-level activity, so everyone has been acting in their own silos.

The next slide shows behavioural strategy itself. In brief, we put together a proposal with the very good assistance of government agencies to go to the Australian Transport Council, which we did on 2 June 2006. It approved the development of behavioural strategy for a two-year program. Its goal is to reduce the number, cost and trauma of crashes between trains and any road users by the most cost-effective means. I say that because the fatalities from pedestrians are as high, if not higher, than those from vehicle occupants. The strategy—I will deal later with its oversight—aims to have education, awareness and enforcement programs developed

and delivered at a national level through partnerships of rail, industry, road safety and enforcement authorities. The word "partnerships" is a key word.

I make no apologies for saying that we have learned from the Canadians and the Americans who have worked very closely together in Operation Lifesaver but also in other programs to partner both government and industry. That successful venture in Canada has come out for its 10-year rollover. They have reduced their numbers by about half over that period. We believe that there have to be some yards in that, and that is exactly the road that we are taking.

Mr GIBSON MP (CHAIRMAN): Why do you not have a stronger goal—to eliminate all such crashes, if possible?

Mr SOCHON: That is where we are going. It is pitching in at something that might be believable. I guess our challenge has been to sell this into government. This is what we have been advocating as industry. I know that the Government might say, "You guys are not living in the real world and you are not dealing with budgets." I think that is what this is really about. It is saying, "Okay, let us set that goal." I guess we are starting on a level and our hope to is to build. So far we are having good responses from the Government. The bottom line here is that all States and Territories are co-operating in this program.

I turn now to the new arrangements. What we have is a two-year program approved by the Australian Transport Council. It has said, "Okay, run away and do this for two years and report back to us and then we will look at it again." We would hope for a five-year program at least. What we see here then is something that is medium term, just medium term, looking at two years but ideally five. It is national in its focus and it acknowledges the low priority of level crossings. We are not trying to say, "You need to spend 20 per cent on level crossings"; we are saying, "Let us use the 2 per cent better." State funding is annually consistent. We are looking at drawing on national expertise. So for the first time we have people who can talk each other. We are about to have a meeting later this week where we have just that thing—behavioural experts who can work together and work out programs co-operatively.

By doing that co-operative development we are lowering costs of development of behavioural programs. There will always be research-based priorities and activities. I deal now with the scope. As I have said, it will involve all States and Territories. It will be delivered in all jurisdictions and it will involve the Commonwealth—we are trying to tease it into this equation very carefully—and certainly all the States. The Roads and Traffic Authority is there and all the road authorities are sitting round the table. We also have two rail safety regulators sitting at the table and ourselves. One of those is the Independent Transport Safety and Reliability Regulator from New South Wales. It is playing a positive role in that. I have to say that the Roads and Traffic Authority is playing a very constructive role in this as well. So, full marks to its engagement in this process.

So it involves the road and rail industries. We are starting to talk to truckers as well and we need to take that further. We are talking to rail operators, representing David's interests, and law enforcement agencies. The next two slides show crashes that happened in Victoria. This slide shows a recent occurrence where unfortunately a person was killed, this time a rail worker. Let us move on to the next slide, to the strategy itself. Our goal is to create increased awareness about level crossing safety. There is an enforcement strand and an education strand. On the enforcement side we have engaged the Australian Traffic Policing Forum, which comprises senior traffic cops from every State. They have a representative who sits in on this group.

Our goal is to work with them to get smarter intelligence for police, again rather than necessarily trying to get more cars sitting at level crossings. So can we put cameras in place? Can we start to capture the sort of road technology that is already there? That is one angle. Turning to education, we need to create that need for a change and develop new behaviours, and then we will be doing evaluation. This slide refers to year one. Key items are a survey of road user attitudes, with drivers and pedestrians as the benchmark. What are the attitudes and understandings about level crossings around the country? Every State, and New Zealand as a matter of interest, is sitting in observing.

On the right-hand side of the slide you see an inventory. So the basic question is, "Who is doing what in each State?" So rather than reinvent wheels, let us put them on the table, see who is doing what and we may be able to use existing programs and simply reshape them. Our vision is that we would create a meaningful program targeting a specific issue that would be topped and tailed in each State. So every State will put a program in place, but it will be badged by the Roads and Traffic Authority or by New South Wales, etc..

Mr GIBSON MP (CHAIRMAN): Does that survey also include train drivers?

Mr SOCHON: At this stage it is road user focused only, very deliberately to set that benchmark level. There is no reason why we cannot do that in the future. Again, it is a very narrow focus to say, "Where are they at now?" As we start to do the behavioural programs where is the attitude of the public in the future? The other two items are workshop and exemplar projects—things that may or may not occur in the first year. So year one is preparatory, doing a survey. Year two is delivering, across left to right, a State level program which is classic billboard, multimedia, or whatever we get money for, community level programs in schools and local communities, as already occurs in road safety.

The point here is that we have not borrowed from Lifesaver where they have cranked up lots of volunteers. We felt that we have existing road safety education networks now and that we should really just plug into them. The real question is getting the attention of the road authorities to energise that.

Mr GIBSON MP (CHAIRMAN): Why would you not do that at the point of licensing car drivers?

Mr SOCHON: It could be argued that they do it now. There are level crossings issues in the handbook that road users have to study to get their licences. I question the extent to which those questions are challenged in the testing. But you are right; that would be more effective. A level crossing simulation in the simulated package might be more useful. Again it comes to that question of 2 per cent. If you are the road authority you say, "Where do I put my energy? " Two per cent does not get a guernsey. I am being harsh here, but that is a challenge for us. The final thing in year two is to try to undertake an enforcement program and evaluation. I have to stress that this is with the co-operation of the police. We have no way to twist their arms, but they are being very constructive. That is the end of year two.

We go back to the ATC in the middle of next year to say, "We have done this. Will you approve going forward for our future? "This will roll out in New South Wales the way you are seeing things happen now. Accept that it will be nationally co-ordinated and, hopefully, we will be sharing intelligence around the States. The community level programs will have similar sorts of activities and with enforcement will be looking particularly at non-compliance with road rules. Why can we not use red light cameras at rail crossings? Everyone asks that question and I think we need to explore it. Clearly, there has to be evaluation. Will there have been a

change in just one year? It is unlikely but we need at least to evaluate that as a steppingstone for the future.

The next slide is a representation of an advertisement that was shown in Queensland, just showing some more educational material. Coming to the reporting arrangements within government, I have been talking about the Australian Transport Council. What we have on the left-hand side of the slide are the State governments. The State steering committees—you were talking about one this morning—will remain. They still have a place in this. This needs to dovetail into their work. We are not trying to take over anybody's work; this is a strand of what needs to go on. Co-ordination of this will occur both under the rail group that reports to the Standing Committee on Transport [SCOT] and under the road group. The really interesting part about this is that it is dual modal.

That is the challenge from a government and an industry perspective that I think faces us all. How do we get two modes working together? Everyone is used to working in one silo, but this is about the two. The Standing Committee on Transport arrangements allow that to occur quite adequately. I have been pleasantly surprised by the response to this from road agencies as well as rail agencies. We will see how that goes. In relation to New South Wales, the level crossing behavioural co-ordination group is the national body overseeing this. As I have said before, on that sits the roads authority, the Independent Transport Safety and Reliability Regulator, and us. We have already talked about the inventory and the survey.

Finally, in summary, before we come to National Rail Safety Week, this approach represents a significant shift in the way level crossing behaviour has been approached before. We believe that the national co-operation will lead to increased efficiency and effectiveness of program delivery. It is the first partnership between government, industry and law enforcement agencies that we are aware of that may exist, and implementation of the strategy commenced in June 2006 and will run for two years, as we have been talking about.

The final slide is a terrible crash that happened in Adelaide some years ago—again a reminder of where we can go to with this in many places any day of the week.

Mr MAGUIRE MP (STAYSAFE): They upgraded that crossing, did they not?

Mr SOCHON: They have, significantly. I believe that that crossing has traffic lights.

Mr EDWARDS: That particular accident involved our operation. We were operating the Ghan there. We do not believe that enough has been done at that crossing. The same accident at that crossing can occur again today. Some measures have been put in place, but that particular accident is a classic case study for poor town planning. The whole intersection and the whole area had changed dramatically but nobody had done anything about it. People are regularly blocking the train lines back over the road.

The Hon. George SOURIS MP (STAYSAFE): Are there boom gates?

Mr EDWARDS: Yes. The boom gates came down and a bus and three or four cars were between the boom gates. You had a very wide area that was crosshatched. But people regularly just block back because of the poorly designed intersection further past it. They went and built this massive great bus interchange on one adjoining corner and they put in a new shopping centre. Four hundred metres to the north you had a beautiful underpass to go under the train line, but all the trucks and the buses in this area went straight across this level crossing.

Mr SOCHON: That is one of our worst possible scenarios. It can occur in a lot of places. Finally, talking about National Rail Safety Week, which has already occurred this year, the first year that this was conducted in Australia our initial focus was level crossing safety, and will continue to be so as we roll it out through the years. Essentially, this is what we have done in New South Wales. Each of the State agencies, or governments in this case, undertook their own programs in alignment with National Rail Safety Week.

We achieved extensive media coverage and interest in the issue and the States ran their own programs in parallel. So there was a multiplier effect. Those are the things that New South Wales did. The South Australian, Queensland, Victorian and Western Australian governments all decided to run programs in parallel. We are very pleased with that. It is first time it has been run in Australia. It was very successful and we will run it each year. This year, we will be looking at level crossings and trespass, which honourable members have heard about.

Mr GIBSON MP (CHAIRMAN): Did we run it?

Mr SOCHON: Yes. We have raised New South Wales community awareness of level crossings.

Mr BARTLETT MP (STAYSAFE): To be honest, I could not tell you I saw it.

Mr SOCHON: Yes. I refer back to the earlier slide and motorists queuing at Riverstone. There was some sort of publicity tour to win over the media. Again, we are learning from our Canadian friends. Part of the debate is about changing the view that it is the train driver's fault and focusing on the other player in the scenario. We need to challenge that. It is a deliberate long-term strategy to change the media view at a commuter breakfast. That is why you would not have heard about it. However, they were engaged and that is good.

Mr MAGUIRE MP (STAYSAFE): How much was spent on that promotion in totality, across the States?

Mr SOCHON: Absolutely minimum amounts. We reran programs that had already been developed. In Queensland there would have been media money associated with it. I cannot give the figures for South Australia, but they simply rerolled programs already in place to give it another profile. From our point of view, we got extensive media coverage at very low cost.

Mr GIBSON MP (CHAIRMAN): In the management structure, does it matter that the connection between the ATC and State governments is indirect? What do you mean by "indirect"; just that the Minister is the only one who participates?

Mr SOCHON: ATC has all the Ministers, Scott reports to them and then there is this part of Scott's brief. There is a clear focus on it and a clear calling of attention by those Ministers to this program. The final slides indicate that we will keep running the Rail Safety Week program. Again, like David, I seek your support for the continued engagement of New South Wales in the behavioural strategy and in Rail Safety Week activities as a way of promoting level crossing safety behaviour.

Mr GIBSON MP (CHAIRMAN): We can give you that, and congratulate you on the job you are doing.

Mr MAGUIRE MP (STAYSAFE): Congratulations on what you are doing. I refer to technology, because it was raised with Vince Graham, and particularly to the communication technologies you are applying in the industry between the networks and the application of modern technologies on the trains themselves. Some trains have been illuminated along the sides.

The STAYSAFE Committee has suggested strobe lighting and changing the illumination of the front of trains with different coloured paints and so on. Have you pursued those angles?

Mr SOCHON: We were very conscious of the fact train illumination standards needed to be investigated. Given our engagement in this program, we sought to get our own house in order in terms of standards arrangements. We have developed a national standard for train illumination. That goes to questions of the lighting on the front of the trains and reflectors on the sides. That is a national standard for train construction. That has been addressed and will be applied to new construction.

Mr MAGUIRE MP (STAYSAFE): What is the new standard?

Mr SOCHON: This is part of the work of the Australasian Railways Association. The standards are State based emanating out of former State Government-owned organisations. There was no national standard. We have reviewed all of those that did exist and pulled them together to be consistent with good world practice. The reflectors on the sides and the ditch lights on the front of the trains are all world practice. We have not accepted beacons. The Australian Road Research Board study did not support the benefits arising from that. The jury is still out in terms of whether that will work effectively for us.

The Hon. Rick COLLESS MLC (STAYSAFE): What do you mean by beacons?

Mr SOCHON: The proposal is for strobes or some kind of flashing lights on the front of the train or whatever.

Mr MAGUIRE MP (STAYSAFE): But that is the standard applied to emergency vehicles, such as ambulances, police and fire brigade vehicles, to enhance their visibility and to give warnings. If the same technology were included in the construction of a train, why would it not be successful or embraced?

Mr EDWARDS: There have been suggestions about strobe lights. For example, the XPT has been operating in New South Wales since 1983 and since the end of the 1980s it has been fitted with a strobe light.

Mr MAGUIRE MP (STAYSAFE): That is a pathetic attempt. I saw them yesterday; they are the size of a small indicator sitting on the roof. You have to look for them during the day. If you did not know they were there, the train would pass by without anyone seeing them.

Mr EDWARDS: I accept the point that it could always be larger. However, in the case of the XPT, the fitting of that type of strobe light did not make any difference to the number of level crossing accidents that it was involved in.

Mr MAGUIRE MP (STAYSAFE): Because it was ineffective; it was the wrong technology.

Mr EDWARDS: We are operating a fleet of 650 locomotives across Australia. There are dual beam headlights with a high and low-beam configurations. The rules require—and it is checked through data log—that the headlights be illuminated at high beam on level crossings. We also have marker lights on the locomotives. We now have new ditch lights fitted to locomotives. In addition, the locomotives have an eight-note horn that just about moves houses next to the train line let alone warn a motorist who might be approaching the level crossing. The horn must be sounded on distant approach and on the level crossing. The standard referred to is detailed down to the size, length and width of the illuminated, reflective material. It has to be on the sides of locomotives and/or vehicles to the point of how

long, how wide, how far apart and how many. All signage or logos, whether it be Queensland Rail, Pacific National or whatever, must be made of illuminated material.

We have been trialling a new initiative, but we have not gone to the industry or other operators at this stage. We are looking at putting reflective spots of paint on the wheel sets. As wheel sets come through for reconditioning, we are putting reflective paint in a staggered format around the hub of the wheels so that the rotating wheel gives added recognition to an approaching motorist when the train is going across a level crossing. However, the real issue is approaching motorists complying with the level crossing warning equipment and the protections in place, having ripple strips and so on. I note the report comments on that, and we certainly support that proposal.

Community standards are also an issue. Regardless of the visibility of either the Roads and Traffic Authority approach warning signs or the train itself, many people will deliberately try to beat the train across the crossing. That is the issue. I do not agree that fitting strobe lights to every locomotive will necessarily change a thing.

Mr GIBSON MP (CHAIRMAN): I want to play devil's advocate. I refer to the introduction of the Australasian Railways Association and the work that every committee and organisation is doing in this regard. Since 2002-03, the rate of road incidents has decreased as the number of vehicles on the road has increased; there are 2 million more cars on the roads now than in the mid-1980s and the rate of fatalities is decreasing. With rail the incident and trespass rates are going through the roof. Are we all failing?

Mr MAGUIRE MP (STAYSAFE): Or are we reporting it more?

Mr GIBSON MP (CHAIRMAN): Or is there a different way of reporting it?

Mr EDWARDS: There is an element of increased levels of reports; there is no question about that. These figures have been normalised per million train kilometres. Therefore, even though that rate has dramatically increased in the past 12 months—by 6.5 million train kilometres—it is normalised against that. In terms of the level crossing incidents, with the exception of a blip in Melbourne, the highest percentage of level crossing accidents occur in regional areas on interstate main line corridors, not in the Sydney metropolitan area. I am not sure whether road usage has increased much in regional areas. However, the attitude of the motorists at level crossings has certainly deteriorated. We have done lot of fieldwork in observations and so forth. We get reports from our drivers about near misses and people seeing the train and deliberately accelerating through. We report them to the police when our people are close enough to get the registration number, the colour of the vehicle, a name on the side of a truck or whatever.

I refer to the evidence I gave to the STAYSAFE Committee some years ago when I was working with the National Rail Corporation. I remember speaking to this point and retired Superintendent Ron Sorensen spoke after me. His words echoed in my ears. What was a problem to us with level crossing safety was not even a blip on his radar. He had such a major roads issue in terms of compliance that the number of level crossing incidents occurring was minor. Honourable members saw the photographs of the Lismore level crossing accident. Two hours after that we were hauling the Overland Express from Melbourne to Adelaide. We haul it every night. That train could have been the Overland Express. We could have been talking about 30 people being dead, not one truck driver. That is the difference; it is purely fate.

Our company is certainly advocating for increased police enforcement of the road rules as they apply to level crossings. When we report a very bad near miss, the response—if we get one—from the police is that they would love to help but they do not have the resources.

Mr GIBSON MP (CHAIRMAN): What about the speed of the train going through those intersections?

Mr EDWARDS: That varies. The maximum speed we operate at is 115 km/h. We are not operating the high-speed XPTs or Explorers in New South Wales. We operate the latest Velocity train sets on our network in Victoria and they operate to 160 km/h.

Mr GIBSON MP (CHAIRMAN): Going through the crossing?

Mr EDWARDS: Yes. However, at that speed there are no passively protected level crossings; they are all actively protected. That is the point I would like to make about the policy that my company has adopted in relation to level crossings, which is somewhat different to our industry association. We have a view in terms of putting to the STAYSAFE Committee and other similar committees, particularly in South Australia and Victoria, the way in which we believe there should be a line drawn in the sand and at least a plan to move forward.

Mr SOCHON: Might I make two comments about your point that I believe are valid? First, in relation to the program we are dealing with we are not going to see the benefits of that for at least another year as we crank up the program. Second, I think the enforcement question is really critical. I am not sure where it fits in the purview of this Committee, but education has been happening in that area and RailCorp will probably try to get a bit of enforcement going. What we see is education without enforcement. Clearly we know from the road safety world that we need to have both going hand in hand. This is a vexatious issue. If there is no sense of being detected at level crossings and being pinged, people's behaviour will reflect that.

Mr GIBSON MP (CHAIRMAN): What about from the other point of view? There are a few level crossings but we are not talking about one every five minutes. Why should a train be allowed to do 115 km/h through a level crossing?

Mr SOCHON: What speed could they travel at? There are problems on the network.

Mr GIBSON MP (CHAIRMAN): How long does it take to pull up, so, a 5,000 tonne train—or whatever they weigh—travelling at 60 km/h?

Mr EDWARDS: We are talking anything, in terms of what we are moving, from a 10,000-tonne train—one of our coal services in the Hunter Valley—down to a normal intermodal train. A smaller one would be 1.5 kilometres and a longer train at 1.8 kilometres. From Adelaide to Perth they are double-stacked containers of 5,000 or 6,000 tonne and two to three kilometres long. If indeed we were faced with having to have reduced train speed on level crossings—we are operating in Australia through approximately 1,200 level crossings—we would become totally inefficient and would not be able to run a commercial business. Our trains would just never arrive. I congratulate successive governments in New South Wales when I compare what we are faced within the Sydney metropolitan area today, and a well-organised Committee to deal with things and try to improve in the future, and Melbourne. Today in the greater Sydney metropolitan area there are something like three level crossings. In Melbourne we are dealing with in excess of 150 level crossings.

That comes down to long-term government planning and I sincerely congratulate successive New South Wales governments for that long-term planning. What we are looking for today is

that some longer-term planning commence for the defined interstate networks. We believe that on those higher speed corridors and the defined interstate networks there should not be a passively protected level crossing. They should be, as a minimum, actively protected with lights and bells—half boom gates, if possible, but we will settle for lights and bells. The other tenets of our already publicly stated policy is that in corridors away from the defined interstate network, where there is a train speed of 100 km/h or greater, there should be no passively protected level crossings but a minimum of lights and bells. Bear in mind that on most rural and country networks all of the wheat lines are very low speed. That would not put the RailCorp or the Australian Rail Track Corporation into liquidation, because the majority would not be captured by those first two points. The third point we would make in that regard is to move away from the current situation of having give way signs and change them to stop signs. Of course all of that is underpinned by the need for greater enforcement.

Mr MAGUIRE MP (STAYSAFE): Could I add to that that breakage would be a problem with trains so big, the start and stop the capability of trains and the fact that they are so long. They could actually split the trains. All of those instances where the train has to slow down and start up increase the possibility of train breakages.

Mr GIBSON MP (CHAIRMAN): If you are travelling in mountainous terrain the train is going to go a lot slower in any case. I am not talking about stopping train, but why should a train travel through an intersection at 115 km/h?

The Hon. Rick COLLESS MLC (STAYSAFE): How long would it take to slow the train from 115 km/h to, say, 60 km/h?

Mr EDWARDS: Well, it would take a time. That would depend on the grade but if we are talking level gradient, you are probably talking about setting that train up a kilometre or 1.5 kilometres out. But, of course, it compounds and that is the difficulty I have with this suggestion. It becomes a compounding issue in that you may have a grade on the other side of that crossing. We have what we call the ruling grade for a corridor and the horsepower is assigned dependent upon the ruling grade to a particular load. It is not a simple matter.

Mr GIBSON MP (CHAIRMAN): But the trucks would use that the same argument for every intersection when pulling up a double bogey. They would say, "We should have the right of way. We should be able to do 100 km/h all the way through."

Mr EDWARDS: Mr Chair, I think the difference is that we do have the right of way on a level crossing whereas a truck at a road intersection does not.

Mr GIBSON MP (CHAIRMAN): If you hit someone it does not help to say you have the right of way.

Mr EDWARDS: That is right. It does not. I do not think you can make a fair comparison between a road user and rail user, because of the types of trains, tonnages and capacity.

Mr SOCHON: The other point too relates to the physics you mentioned. You will recall seeing a photograph at the end of my presentation. That occurred, Mr Edwards, I think at relatively low speed in Melbourne?

Mr EDWARDS: The Connex one, yes. That coincidentally, I might add, killed a senior Rail, Tram and Bus Union official. It is subject to an Australian Transport Safety Bureau investigation, but it has been alleged that it did not stop at the protection sign. Whatever the outcome, tragically the gentleman found himself in front of a Connex suburban train and that

was at relatively low speed and he was killed. And in the Salisbury bus accident, you will remember the horrible slide that was shown, the impact speed was 56 km/h. The train, prior to seeing the obstruction on the crossing, was doing only 76 km/h. Bear in mind that the Ghan is a heavy passenger train. It is not a matter of simply reducing speed.

Mr GIBSON MP (CHAIRMAN): Trains with a big load, at what speed do they travel when going through a station but not pulling up there? At what speed can they travel through?

Mr EDWARDS: Whatever the route speed is.

Mr GIBSON MP (CHAIRMAN): They can go through those stations at 115 km/h?

Mr EDWARDS: There are passenger stations where the route speed is 115 km/h and the trains are not exceeding 115 km/h. That is correct.

Mr GIBSON MP (CHAIRMAN): So that trains can go through a station where they are not stopping at 115 km/h?

Mr EDWARDS: Correct. Our trains do not stop at passenger stations other than for crew relief. For example on the Sydney to Melbourne we have crew relief at Junee, which is half way. It is 486 kilometres, just about, each way and we pull up at Junee platform and do a crew change. At Goulburn, which is 225 kilometres by rail from Sydney, the speed through Goulburn is to 60 km/h and our train will be doing 60 km/h through Goulburn today—right now.

Mr GIBSON MP (CHAIRMAN): Do they have to reduce speed to go through?

Mr EDWARDS: No. It is dependent upon the actual speed board assigned to that particular section, and that has no bearing other than the fact that—

Mr GIBSON MP (CHAIRMAN): The point is the train has to slow down to 60 km/h to go through Goulburn, does it not?

Mr EDWARDS: That is because of the track configuration, not because it is a passenger station. At Campbelltown, here in Sydney, the limit is 115 km/h, up to Lumeah and on to Glenfield.

Mr GIBSON MP (CHAIRMAN): Can you provide the STAYS SAFE Committee with information on train speeds through stations? Is such information available?

Mr EDWARDS: I can certainly provide to you the route and training packages. We have the route speeds on all the corridors. We do not have any correlation to the hundreds of passenger platforms. I guess Vince Graham's organisation would. Certainly, we can provide you with the speeds on all the corridors.

Mr BARTLETT MP (STAYS SAFE): I gather that what you want is enforcement. You are doing greater advertising and then you have this behavioural problem, or society has, of trespass and so on.

Mr SOCHON: Again, it is a matter of approaching it in the same way as you approach other behavioural issues. It has to include both educating and enforcing.

Mr MAGUIRE MP (STAYS SAFE): Going back a little bit to the question of speed through stations or other parts of the corridor. A document is produced for drivers, daily I understand,

that notates the speed restrictions and gives updates about the location of track work and where the boards are up. You have access to that as well, do you not?

Mr EDWARDS: Yes, we do.

Mr MAGUIRE MP (STAYSAFE): Have you received complaints from drivers that the document is inaccurate and that despite the hundreds and hundreds of speed restrictions that are logged every day and provided to drivers, things are occurring on the rail line. Marker 1433 may indicate a 20 km/h restriction but then there is no board at 1440, for instance, and the drivers are uncertain as to where the restriction ends.

Mr EDWARDS: First up, in terms of temporary speed restrictions, the primary defence that the driver has to respond to it is the physical board to out there on the network, not a special training notice or a temporary street affixion that he might be given. It has to be out there physically. If the driver receives misinformation or does not get the information, he is still using his own senses in driving that corridor. At 2,500 metres out from where a track defect may be he will get a caution board. It might have on it, for argument's sake—the worst-case example, 20 km/h speed. That is telling him that when he gets to the warning board that he must have his train speed down to and not exceed 20 km/h. But that is going to be 50 metres out so that he is going to have more than two kilometres to get his train under control and reduce the speed to that level. That is the primary defence. The driver does not drive a train with an issued document that lists all the speed restrictions and is trying to work out exactly where he is per the kilometre post to make sure his train is not exceeding that speed.

Mr MAGUIRE MP (STAYSAFE): The question is: Are the boards placed accurately to enable the driver enough time to plan to slow down the train? Are the boards placed so that when he exits the restricted zone the driver is told that he can speed up pass that exit?

Mr EDWARDS: I will answer the first question first. We are not in receipt of a great number of issues being raised by our crews that the boards are inappropriately placed. However, I do acknowledge that from time to time with incident investigation and what have you those issues are raised. It is the Track Network Manager's responsibility to place those boards appropriately. Secondly, in terms of the clearance point from these work sites, we do not have any issue with that. Our trains are long; they are not short passenger trains. We have an integrated computer screen in front of the driver. The driver knows exactly the length of his train—let us assume it is 1,500 metres—so that when the locomotive pulling the train through this work site or track defect at perhaps a 20 km/h speed, as soon as he gets to the clearance board he logs in 1,500 metres into a computer trip and from that point on that computer trip calculates the distance down to zero. So that when the driver gets down to zero you can accelerate, power up the train and move away because—the rear of his train is 1.5 kilometres back and he cannot see that it is clear—he knows that it is clear at that point and off he goes.

May I make one comment that the Australian Transport Safety Bureau did not seem to come in for a mention. We certainly accept all of those recommendations and I think it is a good body of work. Recommendation 8 refers to all investigations at railway level crossings being undertaken by the Independent Transport Safety and Reliability Regulator. Yet, where we have defined interstate networks there is Commonwealth legislation and coverage, and the Australian Transport Safety Bureau is currently investigating a range of major level crossing accidents. We certainly were very co-operatively with them and they are a very important part of the whole environment.

Mr GIBSON MP (CHAIRMAN): Does the Independent Transport Safety and Reliability Regulator conduct investigations on behalf of the Australian Transport Safety Bureau?

Mr EDWARDS: No.

Mr GIBSON MP (CHAIRMAN): Any further questions? Gentlemen, are there any matters that you might wish to raise in a concluding statement?

Thank you for your evidence today. There may be some further questions arising from your evidence today, which we will forward to you in writing.

I declare the hearing closed.

Chapter Two—

DOCUMENTS RECEIVED RELATING TO THE REVIEW OF THE SAFETY OF RAILWAY LEVEL CROSSINGS

WITNESSES WHO TESTIFIED IN PUBLIC HEARINGS BEFORE THE STAYSAFE COMMITTEE FOR THE INQUIRY INTO PROGRESS IN IMPLEMENTING THE FINDINGS AND RECOMMENDATIONS OF THE INQUIRY INTO THE SAFETY OF RAILWAY LEVEL CROSSINGS

IAN JAMES GLASSON, Director General, Ministry of Transport

VINCENT JOHN GRAHAM, Chief Executive Officer, RailCorp

MICHAEL BRUCE BUSHBY, Director—Network Planning, Road Maintenance and Traffic Management, Roads and Traffic Authority

PHILIPPE LOMAS DRAKEFORD SOCHON, Deputy Chief Executive Officer, Australasian Railways Association

DAVID STANLEY EDWARDS, General Manager—Safety, Health, Environment and Security, Pacific National Pty Limited

Appendix A –

Extracts from the minutes of the STAYSAFE Committee regarding

This appendix contains relevant extracts from the minutes of STAYSAFE Committee meetings of:

- Friday 15 December 2006

regarding the inquiry into the safety of railway level crossings in New South Wales

STAYSAFE

PROCEEDINGS OF THE JOINT STANDING COMMITTEE ON ROAD SAFETY

11:30 A.M., FRIDAY 15 DECEMBER 2006
AT PARLIAMENT HOUSE, SYDNEY

MEMBERS PRESENT

Legislative Council
Mr West

Legislative Assembly
Mr Gibson
Mr Maguire
Mr Barr
Mr Bartlett

Also in attendance: Mr Faulks, Manager of the Committee, and Ms Yeoh, Assistant Committee Officer.

The Chairman presiding.

1. Apologies

Apologies were received from Mr Souris, Mr Bartlett, Mr Hunter, Ms Hay and Mr Brown.

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15. Consideration of Chairman's draft report: 'Progress in improving the safety of railway level crossings in New South Wales'

The Chairman presented the draft report: 'Progress in improving the safety of railway level crossings'.

The draft report was accepted as being read.

It was agreed to amend the title of the report to 'Progress in improving the safety of railway level crossings in New South Wales'.

The Committee proceeded to deliberate on the draft report:

Chapter 1: read and agreed to

Chapter 2: read and agreed to

Appendix 1-2: read and agreed to

On the motion of Mr Maguire, seconded Mr West:

That the draft report: 'Progress in improving the safety of railway level crossings in New South Wales' be read and agreed to.

Passed unanimously.

On the motion of Mr Maguire, seconded Mr West:

That the draft report: 'Progress in improving the safety of railway level crossings in New South Wales' be accepted as a report of the STAYSAFE Committee, and that it be signed by the Chairman and presented to the House.

Passed unanimously.

On the motion of Mr Maguire, seconded Mr West:

That the Chairman and Committee Manager be permitted to correct any stylistic, typographical and grammatical errors in the report.

Passed unanimously.

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17. General business

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There being no further business, the Committee adjourned at 12:30 p.m..

Chairman

Committee Manager

Appendix B—

Reports of the STAYSAFE Committee 1982-2006

STAYSAFE 1 (1982)	Alcohol, drugs and road safety.
STAYSAFE 2 (1984)	Car driver licensing and road safety.
STAYSAFE 3 (1984)	Motorcycling safety.
STAYSAFE 4 (1985)	Is there a police quota system?
STAYSAFE 5 (1985)	Traffic law enforcement.
STAYSAFE 6 (1985)	The administration of random breath testing.
STAYSAFE 7 (1986)	Police hot pursuits.
STAYSAFE 8 (1986)	Speed control.
STAYSAFE 9 (1986)	Safe speed and overtaking on 100 km/h roads.
STAYSAFE 10 (1986)	Radar detectors and jammers.
STAYSAFE 11 (1987)	Safety of 2-lane country roads.
STAYSAFE 12 (1988)	Bicycle safety.
STAYSAFE 13 (1989)	Immediate and certain loss of licence for extreme drink-driving.
STAYSAFE 14 (1989)	Malpractice in driver licence testing.
STAYSAFE 15 (1989)	Alert drivers, and safe speeds for heavy vehicles.
STAYSAFE 16 (1990)	B-Doubles.
STAYSAFE 17 (1990)	Novice drivers: the student's view.
STAYSAFE 18 (1990)	Steering novice drivers towards safety.
STAYSAFE 19 (1992)	Alcohol and other drugs on New South Wales roads. I. The problem and countermeasures.
STAYSAFE 20 (1993)	Alcohol and other drugs on New South Wales roads. II. Offences, penalties, and the management of convicted drivers.
STAYSAFE 21 (1992)	Culpable driving.
STAYSAFE 22 (1992)	Towing caravans and trailers safely.
STAYSAFE 23 (1992)	A decade of the STAYSAFE Committee 1982-1992.
STAYSAFE 24 (1992)	Livestock warning signs: Road safety implications of the draft Rural Lands Protection (Amendment) Bill 1992.
STAYSAFE 25 (1994)	Death and serious injury on New South Wales roads: An examination of the provisions of the Crimes Act 1900 (NSW) regarding dangerous driving.
STAYSAFE 26 (1994)	Pedestrian safety. I. School children around buses.
STAYSAFE 27 (1994)	Traffic stops, police chases and police pursuits of motor vehicles.
STAYSAFE 28 (1995)	Sleep disorders, driver fatigue and safe driving.
STAYSAFE 29 (1995)	Pedestrian safety. II. Cleaning windscreens and other itinerant commercial activities on or alongside the roadway.
STAYSAFE 30 (1996)	Pedestrian safety. III. Bicycle courier activities in the Sydney central business district.
STAYSAFE 31 (1996)	Review of the road safety situation in New South Wales in 1994.
STAYSAFE 32 (1996)	Aspects of road safety administration in New South Wales.
STAYSAFE 33 (1996)	Responses to recommendations in STAYSAFE reports of the 50th Parliament.
STAYSAFE 34 (1996)	A 50 km/h general urban speed limit for New South Wales.
STAYSAFE 35 (1997)	The Traffic Amendment (Street and Illegal Drag Racing) Act 1996 - A report into the sunset provision.

- STAYSAFE 36 (1997) Drivers as workers, vehicles as workplaces: Issues in fleet management.
- STAYSAFE 37 (1997) Driver licensing in New South Wales: First entry into the driver licensing system.
- STAYSAFE 38 (1997) Report of the 2nd meeting of Australasian Parliamentary road safety committees and Ministerial nominees, Parliament House, Sydney, Wednesday 2 April 1997 and Thursday 3 April 1997.
- STAYSAFE 39 (1997) Young drivers - Proceedings of a seminar at Parliament House, Sydney, 30 April 1997.
- STAYSAFE 40 (1997) A 50 km/h general urban speed limit for New South Wales: Progress report and edited minutes of evidence.
- STAYSAFE 41 (1998) Review of the road safety situation in New South Wales in 1995.
- STAYSAFE 42 (1998) Review of the road safety situation in New South Wales in 1996.
- STAYSAFE 43 (1998) Electronic drivers licences.
- STAYSAFE 44 (1998) Developing safer motor vehicles for Australia.
- STAYSAFE 45 (1998) Injury prevention and infection control in the taking of blood samples from drivers suspected of alcohol or other drug impairment.
- STAYSAFE 46 (1998) Falling asleep at the wheel C Legal and licensing implications of driver fatigue.
- STAYSAFE 47 (1998) Review of the road safety situation in New South Wales in 1997.
- STAYSAFE 48 (1998). Pedestrian safety. IV. Child pedestrian safety in New South Wales.
- STAYSAFE 49 (1998). Comments concerning the development of uniform traffic law in Australia—the Australian Road Rules.
- STAYSAFE 50 (2000). Speech by Grant McBride MP, STAYSAFE Chairman, in opening the 4th Local Government Road Safety Conference, Millennium Hotel, Kings Cross, 11-13 August 1999.
- STAYSAFE 51 (2000) Review of the road safety situation in New South Wales in 1998.
- STAYSAFE 52 (2001) Responses of Government agencies to recommendations in STAYSAFE reports of the 51st Parliament.
- STAYSAFE 53 (2001) Traffic control and safety around schools - Part 1 - Major recommendations and summary.
- STAYSAFE 53 (2002) Traffic control and safety around schools - Part 2 -Responses of government agencies to the major recommendations and summary.
- STAYSAFE 53 (2002) Traffic control and safety around schools - Part 3 -The evidence.
 VOLUME 1 – The testimony of school communities in 2000.
 VOLUME 2 – The testimony of school communities in 2001.
 VOLUME 3 – The testimony of representatives of government agencies.
 VOLUME 4 – The testimony of representatives of local councils.
 VOLUME 5 – The testimony of bus and taxi operators, representatives of non-government organisations, private citizens and Members of Parliament.
- STAYSAFE 53 (2002) Traffic control and safety around schools - Part 4 - Summaries of submissions received from government agencies, non-government organisations, and the community.
- STAYSAFE 54 (2002) Road safety and street design in town centres: Towards best practice in traffic control and safety for main streets in New South Wales: Proceedings of a conference held at Parliament House, Sydney, 31 July - 1 August 2000.
- STAYSAFE 55 (2002) Review of the road safety situation in New South Wales in 1999.
- STAYSAFE 56 (2004) Railway level crossings: Improving safety where railways and roads intersect at the same level.

- STAYSAFE 57 (2002) Work-related road safety. Proceedings of a seminar held at Sydney, Thursday 8 February 2002.
- STAYSAFE 58 (2002) Bullying, abuse, intimidation and assault on the road – selected Australasian research on ‘road rage’ and aggressive driving.
- STAYSAFE 59 (2002) On strategic planning for road safety in New South Wales.
- STAYSAFE 60 (2002) A decade of the STAYSAFE Committee, 1992-2002.
- STAYSAFE 61 (2004) Car surfing and the carriage of unrestrained and unprotected passengers on motor vehicles.
- STAYSAFE 62 (2004) “Road safety is no accident”: Proceedings of a seminar for World Health Day, 7 April 2004.
- STAYSAFE 63 (2004) Road crash statistics in 2002
- STAYSAFE 64 (2004) Road crash statistics in 2003
- STAYSAFE 65 (2005) Aspects of motorcycle safety in New South Wales—Proceedings of seminars on issues in motorcycle safety held at Sydney, Friday 3 December 2004 and Tuesday 4 May 2005, and other selected papers.
- STAYSAFE66 (2005) Repairing to a price, not a standard: Motor vehicle smash repairs under the Insurance Australia Group (NRMA Insurance) Preferred Repairer Scheme and its implications for roadworthiness, crashworthiness, and road safety.
- STAYSAFE 67 (2006) Driver distraction: Proceedings of an international conference on distracted driving, Sydney, Australia, 2-3 June 2005
- STAYSAFE 68 (2006) Improving the health of the motor vehicle insurance and smash repair industries: Shifting the focus to public safety—Report of a review of progress in implementing the findings and recommendations of an inquiry into motor vehicle smash repairs under the Insurance Australia Group (NRMA Insurance) Preferred Repairer Scheme
- STAYSAFE 69 (2006) Brief comments on organ and tissue donation
- STAYSAFE 70 (2006) Road safety: From local to global perspectives. Proceedings of the 4th meeting of Australasian Parliamentary road safety committees, together with supplementary papers, Monday 3 April 2006 and Tuesday 4 April 2006, Parliament House, Sydney.
- STAYSAFE 71 (2006) The crash testing of repaired motor vehicles: Further report of an inquiry into motor vehicle smash repairs under the Insurance Australia Group (NRMA Insurance) Preferred Repairer Scheme and its implications for roadworthiness, crashworthiness, and road safety.
- STAYSAFE 72 (2006) Inquiry into road safety administration and mid-term review of the New South Wales Road Safety 2010 strategy: Report on actions undertaken by the Motor Accidents Authority to address the road safety situation in New South Wales, 2000-2005.
- STAYSAFE 73 (2006) Inquiry into road safety administration and mid-term review of the New South Wales Road Safety 2010 strategy: Report on actions undertaken by the WorkCover Authority to address the road safety situation in New South Wales, 2000-2005.
- STAYSAFE 74 (2006) Inquiry into road safety administration and mid-term review of the New South Wales Road Safety 2010 strategy: Report on actions undertaken in the Environment portfolio to address the road safety situation in New South Wales, 2000-2005.
- STAYSAFE 75 (2006) Inquiry into road safety administration and mid-term review of the New South Wales Road Safety 2010 strategy: Report on actions undertaken in the Health portfolio to address the road safety situation in New South Wales, 2000-2005.

- STAYSAFE 76 (2006) Inquiry into road safety administration and mid-term review of the New South Wales Road Safety 2010 strategy: Report on actions undertaken by agencies within the Transport portfolio to address the road safety situation in New South Wales, 2000-2005.
- STAYSAFE 77 (2006) Inquiry into road safety administration and mid-term review of the New South Wales Road Safety 2010 strategy: Report on actions undertaken in the Attorney General's portfolio to address the road safety situation in New South Wales, 2000-2005.
- STAYSAFE 78 (2006) Inquiry into road safety administration and mid-term review of the New South Wales Road Safety 2010 strategy: Report on actions undertaken in the Education and Training portfolio to address the road safety situation in New South Wales, 2000-2005.
- STAYSAFE 79 (2006) Inquiry into road safety administration and mid-term review of the New South Wales Road Safety 2010 strategy: Report on actions undertaken in the Police portfolio to address the road safety situation in New South Wales, 2000-2005.
- STAYSAFE 80 (2006) Inquiry into road safety administration and mid-term review of the New South Wales Road Safety 2010 strategy: Report on actions undertaken by the Roads and Traffic Authority to address the road safety situation in New South Wales, 2000-2005.
- STAYSAFE 81 (2006) Progress in improving the safety of railway level crossings in New South Wales