ROAD SAFETY COMMITTEE

INQUIRY INTO IMPROVING SAFETY AT LEVEL CROSSINGS

Melbourne — 7 April 2008

Members

Mr J. Eren
Mr D. Koch
Mr C. Langdon
Mr S. Leane
Mr T. Mulder
Mr I. Trezise
Mr P. Weller

Chair: Mr J. Eren
Deputy Chair: Mr D. Koch

Staff

Executive Officer: Ms A. Douglas
Research Officer: Mr L. Groom

Witness

Mr D. Edwards, group general manager, safety, health and environment, Asciano Pty Ltd.

The CHAIR — Welcome to the public hearings of the Road Safety Committee's inquiry into safety at level crossings. All evidence taken at this hearing is protected by parliamentary privilege as provided by the Constitution Act 1974 and further subject to the provisions of the Parliamentary Committees Act 2003. Having said that, any comments you make outside the hearing may not be afforded such privilege. As you can see, we are recording the evidence taken today, and you will be provided with a proof version of the Hansard transcript at the earliest opportunity so you can correct it as appropriate.

I ask you to state your full name and the organisation you belong to and proceed with your evidence, and we will ask questions as we go.

Mr EDWARDS — Thank you, Chairman, and good morning, ladies and gentleman. Thank you for the opportunity to present to the committee here this morning. David Edwards is my name. I am group general manager, safety, health and environment, for Asciano Pty Ltd. Asciano is the new venture that controls and operates Pacific National and Patrick Corporation — Pacific National being Australia's largest rail freight operator and, by contract with GSR, operator of the long-distance, iconic, passenger trains.

It is a privilege to be able to talk to you this morning, I guess, following on from my colleague Rob Barnett on some of the same themes obviously. But certainly from my perspective not only have I had 40 years experience in the rail industry in Australia but I actually come from the background of a train driver, so I can speak with some passion in relation to having had a level crossing accident myself. This particular topic is something that is very dear to my heart in relation to the great number of level crossing accidents and certainly the massive number of near misses that occur Australia wide, but I will obviously speak in terms of Victoria specifically.

For our company — the Pacific National side of the business — this particular risk is one of the largest risks that we face today. Kerang was a massive accident and very tragic, but looking at it from a pure dollar perspective, our company probably is well out of pocket for many, many millions of dollars. The tragic Lismore accident two and a half years ago here in Victoria — that was putting us in the black spot there at around $30 million just for one accident. The recoverable on that looks like being around $10 million. It really hurts our bottom line. Above all, we certainly do not put the dollars ahead of the lives of individuals and the wellbeing of our employees. From my own perspective the passion I have is to protect our employees who come to work, are doing their job professionally and expect to be able to get home safely of a night-time.

I guess, taking again the lead from Rob, who mentioned similar issues, today we are facing quite a very different scenario to that we have faced traditionally over the years. If you went back just even 10 years ago, as Rob said, it would be very unusual to find a locomotive derailed in terms of a level crossing accident. That is not the case now. The size and weight of road trucks certainly has changed that. In the level crossing accidents that we experience certainly some involve ordinary vehicles — and that is tragic. But the big ones that we have involve heavy road vehicles. There is definitely a pattern.

I can talk to you today about the profiling that we have done in relation to the accidents that we have had, Mr Chairman, over the last couple of years particularly. I can also refer to work that we have done in looking at some of the major trucking companies such as Toll Logistics and looking at what Linfox does. There is a story to be told there in relation to the training and assessment, the recruitment processes and the supervision of their drivers. That is all good news — their drivers are not the problems. Our stats in terms of the total number of near misses and actual collisions that we have nationally do not throw up any of those major trucking organisations.

I will state for the record that clearly in our part of the business with the Patrick Corporation we actually run fleets of trucks ourselves. I state that for the record. But we are not having level crossing accidents with the Linfoxes or the Tolls or the Patricks. The accidents that we have involve sort of regional, smaller trucking companies. Sometimes they are owner-drivers and they are under time constraints and other such things. Sometimes they are like a very bad accident that we had 18 months ago in New South Wales at a place called Back Creek near Forbes. It was the son of a local farmer who had a truck licence and he did a bit of local driving with a semitrailer. He had a load of fodder, and he went through a passively protected crossing, straight into the path of an approaching grain train. That accident took that truck driver's life, badly injured and required hospitalisation of two of our drivers, and burnt out in the subsequent massive fire three locomotives that were lost to us and a bridge that part of the third locomotive was on; it was an incredible accident.

The point that I would like to make with that one and why I highlight it is that the impact speed of the locomotives onto that truck was 37 kilometres per hour. Do not think for a moment, ladies and gentleman, that you need to have high speed to have a tragic level crossing accident. The mechanics of what occurs, the weight and different other things and the circumstances of a truck simply driving in the path of a train means sometimes that it is not necessarily the high end of the scale in terms of level crossing accidents.

And I think, too, whilst I just have it at the forefront of my mind, Rob made a very good point in relation to

the definition of near misses pertaining to level crossing accidents here in Victoria. A near miss is officially defined as the locomotive driver having to have made a brake application. I do not think anybody in industry follows that. We record all near misses. Let me tell you, in some of the worst near misses we have, the locomotive driver has not even had an opportunity to put the brakes on, because it can happen in a fraction of a second that someone literally goes across the front of the train and the driver has not had a chance to apply the brakes. It is all over — the car has gone and the train is continuing along. We place a lot of emphasis on reporting, and it is a condition of employment with our people to report all incidents, particularly near misses and obviously the collisions that occur. We have made the system fairly user friendly to achieve that outcome. That is by way of a radio call from the locomotive driver straight into our system, and that is put straight into the process. They do not have to fill out any paperwork. It is recorded 24/7 in a live sequence back into our system.

Mr KOCH — David, in saying that, what percentage of those reports would be where braking has not been activated? In your reporting process, for example, is it 40 per cent of them reported although the brakes have not been activated for avoidance?

Mr EDWARDS — I am embarrassed to say I cannot give you that figure.

Mr KOCH — Is it recorded?

Mr EDWARDS — No, it is not.

Mr KOCH — Can I ask why not?

Mr EDWARDS — Why not? Because we report the near misses, and there is a lot of subjectiveness in relation to what defines a near miss. But in terms of whether the brakes have been applied or not, I am at a disadvantage to say that we currently do not record that. Maybe that is something that we should look at.

Mr KOCH — Although those reports are recognised?

Mr EDWARDS — Yes, they are. The simple fact is, to give you an idea of the quantum, Australia-wide last financial year we had 282 level crossing incidents. Out of that 232 incidents, 20 resulted in major collisions. If you then analyse that figure down to a Victorian environment, 10 of those 20 collisions occurred in Victoria and a very large percentage of them were near misses. If we look at corridors, the two corridors that affect us the most in Australia in terms of level crossing near misses or actual collisions are the Melbourne to Dimboola line on the Melbourne to Adelaide main line, and on the Adelaide to Port Augusta line, heading north out of Adelaide, the majority of which is in the northern suburbs of Adelaide. They are the two main corridors where we have most of the big hits, and of course there is a lot of work that is going on in relation to that.

Mr KOCH — Why is that? I assume they are both standard gauge high use.

Mr EDWARDS — Yes, they are.

Mr KOCH — The Melbourne–Dimboola–Adelaide line certainly is. I cannot talk for the South Australian one.

Mr EDWARDS — Yes, it is.

Mr KOCH — Why are we getting this higher incidence? Is it just purely on a usage basis, or is there something else on that line that is attracting the situation?

Mr EDWARDS — I think there are several answers to that. Certainly there is a greater number of rail services on the defined interstate corridors now.

Mr KOCH — Yes.

Mr EDWARDS — We believe there is certainly an increase— and I cannot quantify this — in the road traffic. I think that is subjective from my perspective, but the road traffic would appear to us to have increased dramatically. Then of course the length and weight of the trucks that are being involved in some of these accidents have increased dramatically.

That goes to whether you are a B-double — and the main concern for us is the tendency to go to B-triple networks; the time it takes for a B-double or a B-triple to actually clear a level crossing; and the mismatch that sometimes occurs between vehicles and associated road infrastructure. A truck driver comes along in his B-double, and he might be doing the right thing. He checks that there is no train coming, and he drives across the level crossing in an appropriate manner. But because there is a parallel road with the train line, he comes out of a side road and has to stop at a give-way or stop sign, or there may be a set of traffic lights, as there was in that horrendous Salisbury accident in South Australia — I was on the board of inquiry into that a few years ago — where blocking back occurs because there has been no consideration given in the town planning or in the design of the infrastructure and the associated infrastructure around the level crossing to accommodate the larger and longer vehicles going through that level crossing.

We have had significant incidents. If I can refer to the Salisbury accident — we were operating the Ghan on that occasion — as the train driver came around there was traffic blocked back as a result of the intersection, and a particular bus driver, instead of holding back across on the approach side of the level crossing,

proceeded across and was about two-thirds clear of the level crossing but the back of the bus was foul of the main line. Even though the train was travelling well under the permissible speed at that time, obviously the locomotive hit the back of the bus and tragically five people were killed.

Mr LEANE — Were there keep-clear markings on the line?

Mr EDWARDS — There certainly were. On that particular crossing there were. Of course hindsight is a wonderful thing. When we worked on that inquiry we found that there were many, many reports of near misses. People said this was a known black spot for people blocking back across the crossing.

Mr LEANE — That is an interesting thing you say, because after an accident members of the public seem to come out and say, 'This has been an issue, this particular crossing'. Do you think that it would be an advantage to have some sort of contact number at every crossing, whether it be active, passive or whatever, for people to ring in to the authority there and then if they see an issue? It seems that when something happens, people come from everywhere and say, 'This has always been like this', and I assume they have not always contacted the authority with their concern at that time. Do you think it would be advantageous to have some sign at every crossing to say, 'If you have an issue with this crossing, you should contact this number'?

Mr EDWARDS — I agree, and that goes to the point of any defect or irregularity that might be noticed in relation to the operation of that equipment. Queensland Rail — which is a competitor of ours in a business sense, but we operate on their network going up to Cairns and for some of the coal work — has a system where there is a contact number on each level crossing, and it works very well.

Mr TREZISE — I would imagine that at the end of the day just about every crossing would be reported because every local is going to see an incident near their crossing.

Mr LEANE — I suppose the more information you have the better.

Mr TREZISE — I just imagine you would have every crossing listed.

The CHAIR — David, could you just expand on locomotive and train visibility in terms of colour?

Mr EDWARDS — Certainly, Mr Chairman. We have a policy internally for a bright yellow colour scheme and reflective material on the face of our locomotives. We are just in the process of spending some $30 million at the moment in repainting a lot of the NR class of locos. We have 119 of those that operate on the standard gauge interstate corridor.

The CHAIR — What colour would that be?

Mr EDWARDS — The face of that is basically bright yellow.

The CHAIR — Yellow; right.

Mr EDWARDS — We do not have any locomotives in our main-line fleet that are dark by nature on the front. I have made comment in the additional information that we have provided in relation to a couple of other initiatives that we are taking. There is an American idea in terms of pulsating ditch lights. All of our mainline locomotives have ditch lights and we are looking now, with our engineering people, to provide an interface between the blowing of the horn and then the pulsating of the ditch lights. It is a given that the ditch lights have to be illuminated and the headlight on and all that sort of thing, but the pulsating of the ditch lights in an American context just is another small, but very — sometimes that will grab somebody's attention to an approaching train. It just may help.

Mr LEANE — I assume ditch lights are lights on the front of the engine that point down towards the side of the track.

Mr EDWARDS — Yes, they are. If I start at the top, you have a big dual-beam headlight which has a high and a dim setting and very, very powerful lights; you have marker lights which are just two white lights up on the front, and of course if the locomotive is travelling light engine going the other way you switch those to red, just like a tail light; and then the ditch lights are down at the floor level of the cab or a bit lower, and whilst they do not point directly down, they are lower-level lights that you can use in very foggy conditions where you cannot have the headlight on because it turns everything white. And it helps with the visibility of that approaching train onto a level crossing.

Mr LEANE — When you have those instances of low visibility, you would not pulsate them?

Mr EDWARDS — No. What I am suggesting there is linking that to the blowing of the horn and that I guess goes to the next point. We have to get — —

The CHAIR — Sorry, David. As you are approaching a level crossing you would blow the horn?

Mr EDWARDS — Yes.

The CHAIR — Depending on the distance and then automatically as you blow the horn some strobe lights would come on? Is that what — —

Mr EDWARDS — As you blow the horn it automatically makes the ditch lights pulsate, which I am told from an engineering perspective is a fairly easy thing to do. We are currently building some new locomotives for our Queensland operations and that will be a feature in-built into those new-build locomotives.

Mr LEANE — Does that cause another hazard? Obviously the ditch lights are there for a purpose; does that take away from the purpose if all of a sudden they are pulsating as you approach a crossing?

Mr EDWARDS — No, I do not believe it will do so. It will add purely in terms of that visibility of the approaching train. It will not take away operationally anything from the train driver. I guess one of the things members and the public and road users do not understand is that it is very, very hard to accurately assess the speed of that approaching train. I do not know if you have ever done it — stood there and looked at an approaching train head on so you can see the front of the train. Whether it be one of our locomotive-hauled trains or diesel multiple units, it is one of the hardest things to do.

Mr KOCH — Exactly.

Mr EDWARDS — And particularly with the newer diesel multiple units. They are very quiet and they are travelling at speed. But let me make the point in relation to locomotive-hauled trains in particular, there has not been any increase in train speed from the steam days, if I can put it that way. In relation to all of these level crossing accidents and near misses that are occurring, let it be recorded that that is not because train speed has been increased but primarily because there is a behavioural change in how people are driving their vehicles, and how they are approaching level crossings. Mr Chairman, with your permission, I would really like to talk about and expand on that point, purely from a train driver's perspective and to give you an understanding of what we believe is happening out there.

Fundamentally there is a very good program, and I thank the Victorian government for some of the work that it has done in relation to it, particularly the Minister for Public Transport. The minister was a guest speaker at our Australian rail safety conference in February here in Melbourne. She announced the reduction of approach speed on level crossings, and that is a really good start. We would like to see it lower but it is a good start, as is the support the government has been giving in relation to the road motor user behavioural strategy that is going forward to try to control this risk.

Mr KOCH — Crossing speed, David, is being dropped from and to — —

Mr EDWARDS — To 80, and I gather the regional road speed would normally be 100. A drop to 80. That is a good start. What I am now going to talk about is something that I cannot quantify to you in any mathematical sense, but I can speak about from the heart in response to hundreds of our train drivers who are having these incidents now. Each one of them, after these incidents when we interview them and investigate these instances, is saying the same things: you will be driving along in your train doing everything that you are supposed to be doing, and sounding the horn — I would like to also make comment in relation to a set requirement that we have put in, in relation to sounding the horn — and you will observe a truck approaching either from the left or right. The consistency of what we are being told is quite incredible — that is, that you might see a B-double or a very heavily loaded single trailer approaching. All of a sudden you will observe — and you can do this, it is like when you have a suicide; unfortunately we have these things happen. These events only take seconds but there is so much that you can see. Your life flashes before your eyes when these events occur. You will see the truck driver commence to violently brake and within a millisecond that truck driver goes through a little analysis in his own mind and suddenly realises that he is going too fast and he is not going to be able to potentially stop, so he is off the brakes and next minute he is accelerating again. You can see that — in some cases eye contact can be made. That truck driver's only chance of getting across is to accelerate and try to get across, because he suddenly realises that there is a train coming.

This is a consistent and continuing story that is being told to us in these instances. Sometimes they do get across and sometimes they do stop, but we have had many incidents where the prime mover will get across and the locomotive goes through the trailer. I can talk until the cows come home in relation to those incidents. But even if you look at the Kerang incident, there is evidence there that that truck observed the train right at the last minute and tried to pull the truck around to one side. We are seeing the same with our operations. Why is this happening? I put it to you that fundamentally and basically the road motor user is approaching level crossings not being prepared to stop. It is as simple as that. It is a behavioural thing. If a road motor user, regardless of whether they are driving a Mini Moke or a B-triple, approaches a level crossing being prepared to stop, if a train is approaching that level crossing with the headlights and ditch lights blazing and with the horn sounding and so forth, the road user should be able to stop. There is advance warning; it is all a road traffic issue and there are rules pertaining to that. But what we are seeing is this behavioural change, and it has really started to become a community issue, where people are just not approaching these crossings being prepared to stop.

It goes to the number of trespass incidents that we are seeing; the number of rock-throwing incidents that we are seeing; two events in the last 12 months of people firing .22 bullets at our locomotives — one of our drivers, for the first time ever, was actually shot, just south of Port Augusta 12 months ago, and took a bullet in the leg; it ricocheted off the back of the electrical cabinet and shot him through the leg — the number of suicides that we are seeing. And I am pleased to say, for Victoria's sake, in our stats New South Wales leads

the poll there in terms of the number of suicides that unfortunately occur in front of our trains — Victoria is a close second.

But this is just a general attitudinal thing, where there is less respect for authority or respect for danger. Years ago when we were all kids about the worst thing you could do was that people would put a penny on the train line and have the train run over it. They do not do that any more. They actually spend quite some time building obstructions trying to derail you. and then standing back and videoing the impact of that obstruction. One case that springs to mind where we had that happen was up between the New South Wales border and Acacia Ridge in Brisbane, with one of our super freighters coming out. After the train came to a grinding halt, with the first wheel set derailed — fortunately everything stayed straight and upright — a great team of young people stood there laughing and cheering, and they did not take off until the police were called, train control was contacted and so forth. This is a worrying thing, it is a general community issue, but I believe it goes through — and you can see the effects of that sort of lack of authority-type issue in the community today, reflecting through to how we as a community drive motor vehicles. I am here to tell you that if indeed any of us approach a level crossing not being prepared to stop and a train is approaching, we have got a high probability of being killed or seriously injured; it is a simple fact. Unfortunately that is where we are at.

We are trying to do as much as we possibly can in terms of visibility. A question was put to the last presenter in relation to freight vehicles; I can certainly refer to that, Mr Chairman, if you wish. All of our freight vehicles have to be identified and have to be fitted to an Australian standard in relation to visibility and material. There is a standard for the high-reflective visibility strips that go down the side of vehicles. In relation to any logos or markings on the side of the vehicle, it is all reflective stuff, and we are taking it one step further. As we do rebuilds now on bogies we are experimenting with putting reflective spots on the disc of the hub of the wheels, so that that wheel going around will be picked up by a motorist in the headlights. It is another active device to get people out of a potential trance-type state where they are just driving along, notwithstanding the fact that they have passed advisory road signs that they are approaching a level crossing, a give-way or stop sign or flashing red lights and bells. It is something to break that. But I cannot tell you why people ignore all these signs and why they still drive into these trains.

Mr KOCH — David, every time I go home or come back to Melbourne, I cross a series of crossings. It does not matter whether I go via Ballarat or Geelong, I still have got to cross those railroad lines. I find the most difficult things to see of an evening, or after dark, are the flat-tops that normally carry steel, or the ones with no bed in them that carry containers. If the containers are on them, you can always see them because there is illumination. With steel, you never can see them. They are about eye height, those things, and I find those most difficult to see. I wonder why you do not illuminate the chassis of those rail carriers. I do not think they are illuminated anywhere near enough.

Mr EDWARDS — They are fitted with reflective material, which is a metre and a half apart. There are about six of them down the side of each vehicle. But I accept the point that there is always more that we can do.

Mr KOCH — They are the difficult ones. And the cleaning of them; I do not know how often they get washed, but they are often dull. Certainly if they are clean, yes, they do come up. Lots of times they just do not come up.

Mr EDWARDS — That is a problem. We are running approximately 15 000 items of rolling stock Australia wide, and fundamentally, other than loading and unloading and maintenance, they are constantly on the go. Freight wagons are not necessarily washed. With the signage and the reflective material there is a serviceability time frame on that, and when the vehicle goes through for periodic maintenance, that reflective material is either cleaned or changed.

Mr KOCH — How often is that?

Mr EDWARDS — That will depend on the class of the wagon, but that could be on a six-monthly basis.

Mr KOCH — I think there is probably a responsibility there for the owner of rolling stock to be on top of that a little bit more. Through the winter months when you are getting a lot of stuff off tracks and loading up and getting onto any of that protection stripping, I would have thought that six months was probably at the extreme end of keeping that in order.

Mr EDWARDS — One of the issues that is always difficult is having a cyclical nature to rolling stock maintenance and having such a large fleet in terms of getting it through. But I take that on advisement. There is always more that can be done. We are experimenting with the dots on the wheel hubs.

Mr KOCH — But that is not going to come in overnight, is it?

Mr EDWARDS — No. As it goes through maintenance, that is being done.

Mr KOCH — I appreciate what you are saying, and that is the endeavour. But with a truck coming down the road there is a responsibility at night-time for him to have lights on so your train drivers can see

him, yet there is no responsibility on your management to have those reflectors on the side of those low-level or eye-level wagons so motor car drivers more than transport drivers can see them. They really do not reflect what is going on. You see them go along, David. You have a wagon, you can see it easily, then nothing, and then all of a sudden another container comes up.

Mr EDWARDS — Yes, I accept that. All I can say there is that we do have a responsibility for that standard of reflective material on those container wagons, whether it has got a container on it or not. The reflective material is on the wagon, not on the container. Secondly, the statistics that we can show are that we are just not having people driving into those wagons. That is a point. I accept that it is a risk, but the stats show us that the majority of our collisions are trains striking a vehicle on a crossing, closely followed, obviously, by the road vehicle striking the train. The last incident we had just a couple of weeks ago here in Victoria, a few days after the tragedy of the mother and daughter being killed on the same corridor, fortunately involved no death; there was an injury. A single male driver drove into the side of the second locomotive on one of our trains. The stats that we are seeing are that when people drive into the side of trains, it is into the side of the locomotive or the second or third locomotive; they are not hitting the wagons.

Mr WELLER — On that same point, you spoke about B-doubles and B-triples: what are the stats where the train runs into the second or third trailer of the truck?

Mr EDWARDS — In terms of the majority of the accidents it would be upwards of around 70 per cent of those total number of accidents are hitting the trailers. The prime movers are getting across.

Mr WELLER — Yes, but you are talking about the problem with B-doubles and B-triples. How often does it hit the second or the third trailer? We will forget about the third trailer, because they are not really here in Victoria. How often does the train hit the second trailer of the B-double?

Mr EDWARDS — In approximately 70 per cent of those incidents that we are having where we are striking a truck, we are hitting the trailer. But that does not mean that — —

Mr WELLER — But are you hitting the first trailer or the second trailer?

Mr EDWARDS — Hitting the first trailer. We have had very few accidents where the locomotive has hit the cab or the prime mover. However, if you hit the trailer, the mechanics of the accident and the energy normally will either take the trailer clean off and the truck driver escapes with a couple of bumps and bruises, or else it will pull the prime mover back around and into the side of the passing train. Lismore was a classic example, if I can go back to that one again, of what happens here in Victoria.

Mr WELLER — So what you are saying is it is not the length of the truck, it is the weight of the truck?

Mr EDWARDS — It is the weight of the truck, but of course you have got other issues in terms of the clearance of the truck over the crossing and the time it takes for the truck to actually clear the crossing. If you are a B-double, it takes a bit longer. If you are a B-triple, it is going to take longer again. Lismore is a classic example where we had three locomotives and that truck with a trailer. It was not a typical B-double because it was like a tip truck with a dog trailer. He came in and collided with the rear of the trailing end of the second of three locomotives. It was very clear and easy to investigate that aspect because the bullbar from the truck was just welded into the side of the locomotive where he struck the rear of that second loco. The third loco, one of our newer ones, went over the top and it was totally destroyed. The truck driver was killed. It took us five days to find the truck driver's body. The biggest piece left of the truck was the engine block. It was a horrendous accident which I am sure you are across. There were 750 000 bottles of wine destroyed, 96 shipping containers, 46 rail wagons and 2 of our locomotives.

Mr WELLER — I accept all that, but you are saying it is the weight of the truck, it is not the length of the truck. In this case the truck ran into the train. It was not the train hitting the third trailer, was it?

Mr EDWARDS — That is right; the truck ran into the train.

Mr KOCH — The truck was not under braking anyway, was it? It just sailed straight into the train in dense fog, didn't it?

Mr EDWARDS — I do not think that was ever conclusively — —

Mr KOCH — There were no marks on the road.

Mr EDWARDS — That is right; he just drove in. The approach speed was calculated using the actual load in the second trailer that went up through the air and over the train and spread down the road on the other side. The ATSB was able to try and calculate some kind of an approach speed.

Mr KOCH — David, what is the incidence of rail accidents, night-time versus daytime? Does it significantly favour daytime more than night-time? At night-time, I believe, trains are easier to see. I think flashing lights are a lot easier to see, especially flashing lights on booms. In daylight, depending where the sun is or where you are coming from at a particular time, there certainly is not that opportunity that is afforded of a night-time. Is that reflected in your statistics?

Mr EDWARDS — That is a very good point. There is a very clear daytime preference in terms of the

accidents that are occurring. Most of the bad level crossing accidents are occurring during daylight hours. Notwithstanding all of that, I still come back to the point that if we as road users approached a level crossing being prepared to stop in the event of a train approaching, we would not be having these accidents. It comes back to the behaviour. It comes back to education, particularly of the heavy truck operators, particularly the smaller ones, as I have talked about, and also community education in relation to awareness campaigns about the dangers of level crossings.

To the point in relation to whether we can do more about closing some level crossings, I believe we can. If you look at Lismore again, ask yourself the question why you have a regional main road approaching the Melbourne–Adelaide main interstate corridor and a few hundred metres before you get to the main line that road forks and you have two roads across the train line literally 400 metres apart. Two level crossings — one actively protected with lights and bells, and one with a give-way sign.

Mr KOCH — They are both actively protected now.

Mr EDWARDS — Are they?

Mr KOCH — The one on the Camperdown Road was always actively protected and the one on Skipton Road has been upgraded. We inspected that on our recent tour.

Mr EDWARDS — Okay, thank you — at the time it was a give way. The point is: why have two level crossings there, where you have got an easy solution to have one and you can reduce by one level crossing? There is a point where that road could branch on the other side and with just some deviation you could eliminate one level crossing.

Mr TREZISE — And then you have got twice as many trucks going over the one level crossing.

Mr EDWARDS — That is true. It does not reduce the risk in terms of the volume of traffic.

The other point is one I learnt just a little while ago when we have had a workshop here for the first time with rail industry and road industry and the various government agencies such as VicRoads. It is the first time we have ever sat down — and I compliment everybody for that work — with the road agencies to try and work on this problem. The one thing that worried me from a policing perspective — and we need to do more with enforcement such as obviously visible deterrents like red-light cameras and other such things — is that the police cannot enforce a give-way sign. I had never even considered that before. Give-way signs are just useless. How do you assess somebody's compliance with a give-way sign? I was amazed to hear policing people and roads people talk about that scenario, whereas a stop sign is obviously finite. I had never even considered that. We are getting people who just do not give way, but then of course you cannot prosecute them. It is just one of those anomalies at law, as I understand it.

Mr LEANE — In your recommendation you suggested that they should be replaced with stop signs, is that correct?

Mr EDWARDS — We offer a suggestion that certainly, given the defined interstate networks where you have got the heavier, longer trains, there should not be any give-way signs on those defined interstate networks — the railway highways. There is a different level of risk in relation to some of the regional, rural lines where you have got low speed. But where you have trains that are doing the 110 kilometres per hour and we have got trains that are 1800 metres in length, 4000 or 5000 tonnes, you cannot effectively operate a train like you drive a car and if you get into an emergency situation you jump on your brake. It just does not work like that. You simply have your brakes and it can take 2 and 3 kilometres to stop the train, and the trains have the right of way. It is a matter of trying to come up with scenarios to keep the vehicles off the railway, whether that be grade separation, elimination of level crossings or through to more imaginative-type scenarios and strategies that we need to develop.

Mr KOCH — Just very quickly before we close. David, I notice in the paper you have given the committee this morning that although V/Line has indicated that rumble strips are not its province, it is a great supporter of them under road advance warning.

Mr EDWARDS — Absolutely.

Mr KOCH — Could you indicate to the committee on what grounds you are a great supporter of these? Is there scientific evidence? What has brought V/Line to that position, although it does not want to get into that discussion? It sees this as a road authority responsibility.

Mr EDWARDS — From our perspective we offer a view, and we are looking at any measures that we can hopefully convince the road authorities and local councils to implement. Rumble strips are very effective. They have been used effectively when introduced into the New Zealand environment, which had a level crossing accident rate that was far in excess of anything that we have had here. Rumble strips are one of the very effective measures that are used over there. If I can just use a road analogy — and excuse me, I am from Sydney so please do not pay it any heed — —

Mr KOCH — We are very forgiving, David.

Mr EDWARDS — Thank you. I have worked a lot here in Victoria over many years, let me say. If

anyone has driven the F3 expressway from Sydney to Newcastle, it has perhaps the heaviest use of any road in Australia bar none. It has a 110 kilometre speed limit, and basically you have an hour and a half where you are doing 110, and some people break the law and do more than that, but as you approach Newcastle the F3 basically comes — and it is not a good infrastructure design — to a shuddering end. There is a big roundabout at the end of it where most of the traffic going up the north coast has to go around the roundabout, turn right, go down a bit further and then over the Hunter River and continue up north or keep going straight into Newcastle.

There is a big roundabout right at the end of it. You come down a slight, descending grade towards that in two lanes of traffic. As you get down there you have the decreasing speed signs from 110 to 80 to 60 and you have a period of time where you have rumble strips that go for about 100 metres and maybe even a little more. These are strips that, if you are having a micro sleep or you are in a trance doing 110 — —

Mr LEANE — Looking at your text messages.

Mr EDWARDS — I am here to tell you that you cannot continue to do that speed over those rumble strips. I have actually talked to the traffic police in Newcastle. They do not have a great rate of incidents where thousands upon thousands of people are simply not reducing their speed and going through this roundabout or over the top of it. The rumble strips are very effective and have been there for years. Just on my own experience of that, and I go to Newcastle regularly with our operations up there, those rumble strips work perfectly well. It is a low-tech solution.

We are doing similar work in South Australia where I am on the ministerial level crossing committee. Poor old South Australia does not have a lot of capital funding either but it is looking at effective use of low-tech solutions. Where there are multiple crossings in an area, close one. We have just closed two crossings over there. But the use of rumble strips is coming right in.

Mr KOCH — Modewarre and Terang are not saying that in Victoria.

Mr EDWARDS — I beg your pardon. Sorry?

Mr KOCH — Modewarre, where we had loss of life, and a near loss of life in Terang are not saying that. Rumble strips were in place at both those crossings. I just query the technical or scientific reason of greater safety offered by rumble strips or if they are an antidote.

Mr EDWARDS — I would say to that, how many rumble strips and how high? Some of these areas have literally one or two or three and I believe there should be a greater spread of these rumble strips to force a person out of that trance — and the example I have cited in terms of the end of the Newcastle expressway is one such location. It is not just 1 or 2 or 3, it is 20, 30 or 40 and it works very effectively now. In proportion to a level crossing, you have a narrower road carriageway and what I am suggesting there is some multiple strips. I am a very good train operator and safety person there but I am not the expert on roads; this is just a view that I am offering. Potentially if you had three or four or five or six in a pattern that would be effective, and out from the crossing to break people from that trance, to force them to take some action to slow.

Mr LEANE — It wouldn't make it less safe, having them.

Mr EDWARDS — There you go. I am not the expert but that is just a view I put. I would hope that the result would make for a reduced risk of collision at the crossings.

The CHAIR — Okay, thank you very much for attending today.

Mr EDWARDS — Thank you, Mr Chairman, thank you, committee.

Witness withdrew.