ROAD SAFETY COMMITTEE

Inquiry into country road toll

Melbourne — 22 October 2004

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Mr P. Robertson, assistant secretary, vehicle safety standards, Department of Transport and Regional Services.
Mr ROBERTSON — Thank you very much for the opportunity to appear before you today. We do not often get the chance to talk about the ADR process to the extent that we would like to because often a lot of the issues are not all that well understood. I thought this morning I would try to give you just a bit of an overview of the whole vehicle certification regime: how the legislation works; how a vehicle that gets on the road is actually processed through the department; and how the ADRs that are the national vehicle standards are made and what the issues are that drive them.

In the presentation I will probably duck down a few alleys as we go. I have tried to keep it very short; I have knocked it down by about two-thirds to what I would normally do. Please feel free to stop me at any stage and ask questions. Obviously at the end of the process we will have time for discussion. It is one of those areas about which people, particularly if they have an interest in cars, often come to me afterwards and ask a lot of detail about how this or that works, what happens in a crash test, what happens when a vehicle is involved in a rollover or something like that, and how you deal with that. I am happy to explore all those issues for you.

Mr ROBERTSON — Just by way of introduction, on the screen are my name and position. You will notice there are two titles. The title ‘Assistant secretary, vehicle safety standards’ is the organisational title — that is where I sit within the department — and is a senior executive service position within the commonwealth public service. The title ‘Administrator of vehicle standards’ is a statutory position. Doing the job that oversees vehicle certification you are appointed and when you exercise delegations under the Motor Vehicle Standards Act you do so as the administrator of vehicle standards. That is appointed by the minister and you exercise those powers standing in the shoes of the minister. All the administrative law provisions that go with that apply.

Our principal function is to administer an act of the commonwealth Parliament, the Motor Vehicle Standards Act 1989. The objectives of the act are to have uniform national vehicle standards. The word ‘uniform’ is important because the act replaced a regime that was basically state-by-state administration. Safety — obviously, emissions, antitheft and the saving of energy — are the key reasons why we have the act and the Australian design rules which underpin it.

An important point to note is the jurisdictional responsibilities. The Australian government controls vehicles to the point of first supply to the market. Supply to the market is when a vehicle is delivered to a person for use in transport. There is a little bit of a grey area there, but certainly importation — everything that happens up to that point where you actually pass delivery of a vehicle to a person to be used on a public road — is a commonwealth responsibility. What happens after that becomes the responsibility of the states and territories. In other words, when you front the local state registration office and you need to get a certificate of roadworthiness or whatever or it is first registered, all of those after-market issues are state and territory responsibilities.

Mr ROBERTSON — That is a commonwealth responsibility. However, nothing is easy. There are provisions in the Motor Vehicle Standards Act to allow importation of non-standard vehicles. A non-standard vehicle is one that was not built to the ADRs but there are certain provisions that allow you to do it. For example, if you are bringing in a personal import from overseas — if you have owned and used the vehicle overseas for 12 continuous months or more there is a provision for you to return to Australia with your vehicle. That is to make it a little bit easier for migrants and expats returning from long periods to bring in what is a significant personal possession — motor vehicles are very valuable possessions, obviously. There are also provisions for race and rally vehicles, test vehicles, market and evaluation vehicles, exhibition vehicles and, as the legislation stands at the moment, if a vehicle is 15 or more years old it may be able to be imported without restriction. The purpose of that provision was to allow for classic car enthusiasts to bring in their vehicles. We do not want to be regulating 1965 Mustangs or 1934 De Sotos and the like.
Those issues are really for the states. The states can decide what provisions they will put in place where you have older vehicles or personal imports. They do that in consultation with other states and with us, through a forum known as the Motor Vehicle Certification Board, which I chair, and normally the states would require at the bare minimum child restraint anchorages; they may require an emissions test to be done; they require roadworthiness certificates; and they may require things. Particularly on the 15-year-old vehicles the individual states are getting a lot tighter in what they will accept and that is because the numbers of 15-year-old vehicles have been going up exponentially over the past couple of years. That issue is currently under review.

It is always a state right to decide whether or not to register a vehicle. However, where a vehicle has what is known as an identification plate — commonly referred to as a compliance plate, meaning full certification with the ADRs — each state would normally register the vehicle without question. Does that answer that part of the question?

The CHAIR — Yes. Are you going to talk about the ADRs later?

Mr ROBERTSON — I am indeed. It is quite timely that you asked that. ADRs — the Australian design rules — are the national standards set under the act against which road vehicles, trailers and components are assessed. A fair bit of our work is actually involved in trailer certification, which is a vexed area and needs a lot of consultation with the states and territories. We have been going through a review of the ADRs as a competition policy review for the last five years and we have been progressively reviewing them from the ground up, with the policy intention of harmonising them with the UNECE regulations. I will explain what a UNECE regulation is a little further down the track.

Before a vehicle can be supplied to the market, it requires an authority from the minister — from me, standing in the minister’s shoes. We refer to it as a compliance plate approval. That is not the technical term in the act but it is the term that everybody understands colloquially. If you lift the bonnet of your car you will normally find on the firewall a little plate that says that the vehicle was manufactured to be in accordance with the Motor Vehicle Standards Act 1989. For Holden Commodore, for example, we issue an approval to supply that vehicle to the market and the compliance plate will verify that that vehicle has been built to the ADRs.

I am going to talk just briefly about the sort of certification streams we have. The common stream is called full volume, which means there is no limit on the number of vehicles that can be manufactured. Full-volume vehicles are fully compliant with the ADR’s and that is what you will normally see on the streets — Commodores, Falcons, Camrys, Avalons, Magnas and the like are all full-volume vehicles. They fully meet the ADRs and go through a fairly rigorous process to get there..

We have another scheme that we colloquially call low volume. It operates under the auspices of what is called the specialist and enthusiast vehicle scheme. That applies to both new and used vehicles. The used vehicles go through what is called a registered automatic workshop scheme. That fairly new scheme was put in place to deal with what was becoming a very large problem with used vehicles imported from Japan. The purpose of the scheme is to enable enthusiasts to get access to vehicles that would not otherwise be available through the original manufacturer. For example, if Ford was not putting a Mustang into this market, there is a mechanism whereby you can get a Mustang from the United States, get it converted from left to right-hand drive, and supply it to the market. That is a fairly rigorously managed scheme. But the numbers are capped, so it is 100 vehicles per category per annum.

We also a scheme that is very small in number — there are only a couple of approvals — the ultra-low volume scheme, for up to 25 vehicles per annum. That is for very low-production cars — vehicles that have a worldwide production of no more than 500 vehicles a year. The reason that we have that separate scheme is because they need to get concessions against ADR compliance because it is just prohibitively expensive to crash test these vehicles. We have one major approval for what is called a TD2000 — it is an MG TD replica made in Malaysia.

As I mentioned, full volume has no limit on supply and numbers, all ADRs must be met, and they must have full evidence to back up each ADR. We refer to these under the act as standard vehicles. I will on come back shortly and explain a bit why I am going through the certification process. It is relevant to the international agreement arrangements.

In Australia we operate what is called a type-approval system. That is in common with systems that operate in Europe and Japan. It requires a vehicle model to be certified before being supplied to the market — in other words, a type of vehicle is given an approval. That distinguishes it from what is called a self-certification system, which is
the common system in the United States. In the United States you as a manufacturer may build a vehicle and supply it to the market. The regulator will then come along, take the vehicle off a showroom floor at random and test it. If the vehicles fails to comply with any of the regulations that have been tested, a very expensive recall follows.

In Australia we differ from the other type-approval system countries in that we allow manufacturers to do their own testing. If you want to get a vehicle certified in Japan or in UK, you would go through a fairly lengthy process whereby the certification regulator would be there supervising tests and ticking them off as they go. It takes about nine months. We allow our manufacturers to arrange their own testing, and they submit the evidence to us. We allow them to do it in electronic form, which is another thing that distinguishes our system and makes us probably the world leader in certification activities. Most people would like to follow our lead, and I think it will go that way. Instead of receiving large piles of test reports — a full set of testing for a car would probably stand 3 feet high when you add up all the test reports — we allow the manufacturer to extract the key information from those test reports and put them in an electronic form and send them to us.

The verification of what actually gets built is done through a system of conformity of production audit and test facility inspections. I will go through that graphically to reinforce it. The manufacturer does his own testing; the process runs on a computer system known as the road vehicle certification system. There is an SE form for each ADR, and it has all the key parameters. For example, if it is a lighting ADR, the SE forms will enable the manufacturer to put in meter readings taken of the luminous intensity of the light and the angles of visibility. If they are in accordance with the ADR, the machine will accept it. If it is not — if there is something wrong — the machine will throw up a query, and that raises what is called a discussion item. This is all done online. At any time people all around the world can be seeking to certify their vehicles in Australia. If someone from Volvo is doing it in Goteborg, it is all done over the Internet and every discussion item is recorded. When all discussion items are cleared, we issue an approval. There is a little bit of risk in this. There is risk management. We still have engineers going through each of these forms and checking for anything that does not look quite right, but most of the grunt work is actually done by the system. So instead of having an engineer sitting down making calculations, the system does it all for you. It is very efficient.

These last steps relate to the conformity of production on the test facility inspections. Once a manufacturer has an approval, we then audit them, and we audit them on average every two years. We actually go to the production line, and we trace through the building of that vehicle right back to the original test reports if necessary. So we are confirming that what is actually coming done the production line is what has actually being tested and what the manufacturer has told us it is going to build.

The test facility inspection is the inspection of the facilities at which the testing is done to ensure that that facility is operating correctly as a test facility — in other words, that the instruments are all calibrated correctly and that the procedures are all operating as they should. We need to have a high degree of confidence that the testing is in fact being done properly.

I will talk a little bit about international standards. I mentioned before that under the ADR review we had a policy intention to harmonise with UNECE regulations. UNECE is obviously the United Nations Economic Commission for Europe. The key point here is that these are not European regulations; they are international regulations. Often you hear people say that we are harmonising with Europe. That is technically not correct. It does happen, though, that because the European Union is an influential party in that agreement and much of the work gets done there for historical reasons, the various regulations known as the European Union directives are pretty well identical to the UNECE regulations, but technically the UNECE regulation is the international regulation.

We are a signatory to an agreement called the 1958 Agreement. That is one of three agreements administered under the UNECE framework for vehicles. It is applicable to countries with type-approval systems, and the key part about it is it allows reciprocal recognition of approvals against other UNECE regulations. It is open to all UN members. What that means, for example, is that if we have an ADR that is harmonised with a UNECE regulation, when we receive a test report that might have been done, say, in the United Kingdom, we accept that at face value if it has UNECE approval. Similarly we have the ability, being a signatory to that agreement, to conduct testing in this country which must then be recognised by other signatories for product that we wish to put into other markets.

When you are looking at the local vehicle industry and the sorts of activities that the manufacturers are wanting to get into to expand their export opportunities — Holden in particular at the moment is quite active — that offers us the ability to issue UNECE approvals against regulations for Holden to then put its vehicles into other markets without going through another certification process. It is quite a detailed agreement, and there are lots of
mechanisms in there for dealing with disputes and that sort of thing. The key point about it is that it is reciprocal recognition.

The other agreement I will refer to is the 1998 Agreement. There is a third, but it is only applicable to in-service regulation in the European Union. The 1998 agreement was done at the instigation of the Americans. As I mentioned before, the United States has what is called a self-certification system, so the concept of reciprocal approval recognition does not quite work. What they put on the table was a new agreement through which global technical regulations would be made. The global technical regulations would be the ultimate international regulation. We have had a system whereby many of the regulations that affect cars have grown up under separate streams. The Europeans have had their own way of doing it, the Japanese have had their own way and the Americans of course have had their own way, and bringing it all together is quite a task. In Europe, Japan and Australia it is not too bad — we are working towards full harmonisation. In the United States, because it has had a different genesis, it takes a bit longer. Even with simple regulations for things like tyres, door locks and hinges, lights and emissions, particularly with the Californians, you can have some quite disparate requirements, so it takes a bit of working through. The idea behind the global technical regulations is that there will be full international common regulations, but not necessarily with reciprocal approval recognition through a type-approval system. In other words, it brings the Americans — and the Canadians, for that matter — to the table.

The first global technical regulation is to be put before UNECE in the week commencing 16 November this year in Geneva. It will be quite an event. It is all about door locks and hinges. It sounds pretty simple, door locks and hinges, and it was done because it was meant to be the easiest regulation. It is a very important regulation, though, particularly for passenger vans with sliding doors. There are a lot of politics in it. As you can imagine, with any form of standard setting it is a political process — there is a lot of history there — and when you get the technocrats arguing the points of difference, it can become quite passionate.

We signed that agreement in April 2000. As I mentioned, we have voting rights on international standards. We did it because trade facilitation was a large part of the equation. Motor vehicles are the largest internationally traded manufactured commodity by dollar value. We have a small domestic manufacturing volume now. Two-thirds of our vehicle fleet are imports. We are able to issue UNECE approvals. And the last point is very important: a lot of what we do hinges on the World Trade Organisation requirement to use international standards and play a full part in their preparation. We are a signatory to the WTO technical agreement on barriers to trade, which imposes quite a number of obligations on us that are fulfilled through the 1958 Agreement process, as I mentioned.

I will talk perhaps a little bit more about the agreement on technical barriers to trade as we go into the ADR development process, because it does impose on us a number of requirements that we need to observe. But it is not the only one; we have mutual recognition arrangements. We have a mutual recognition arrangement with the European Community which enables us — outside the 1958 Agreement for certain regulations — to give approvals to get vehicles into other markets. For example, there is a reasonable demand in the UK for hearses. The Falcon station wagon is a good vehicle for a hearse, so we can do certification here in Australia and supply the vehicle into the market.

We have a Thai mutual recognition arrangement to do the same sort of thing with the Thai authorities. We have a very important agreement with New Zealand: the Trans-Tasman mutual recognition arrangement provides a framework for mutual recognition for not only goods and services, including motor vehicles, but also occupations and qualifications. We also work very much through the Asia-Pacific Economic Cooperation (APEC) process. The Bogor declaration gives a commitment among the developed economies for full and free trade by 2010, which includes motor vehicles.

We will get into the ADRs themselves, and what is actually required to put an ADR in place. It is not a quick process. As an overarching comment I would have to say that the easy things have been done. ADRs are very sophisticated these days. To bring about a new one, particularly an important one which involves a major occupant protection standard, for example, it needs to be underpinned by a fairly solid program of research and development. It is rarely the case that any individual country has the resources to be able to conduct full intensive research programs in all the areas they would like to, even the United States. We participate in what is called the international harmonised research activities. There are six groups that deal with respectively side impact, which we chair; frontal impact; biomechanics; intelligent transport systems; and pedestrian protection, the latter being done by the Japanese, where it is a significant issue. That enables us to lever resources from other economies, and it avoids duplication of effort. The concept behind the international harmonised research activities is that that then
feeds into the regulation-setting process, so that regulations that have been developed through the UNECE framework have a proper research base.

Even where you have an international regulation, before the regulation can be taken into Australian law it needs to go through a process of cost-benefit analysis and assessment against a set of principles. These principles are set out by the Council of Australian Governments, and they apply to the commonwealth and all states and territories where you have regulations set by ministerial councils. The Australian Transport Council, comprising the commonwealth transport minister and all the state and territory transport ministers, is a ministerial council, and these principles apply to its members. You will notice I put there in italics:

Principles and guidelines for national standard setting by ministerial councils and standard setting bodies.

I will talk a little bit more about those in a minute. Through the ministerial council arrangements in the transport sector we have a process by which the ADRs can be examined and voted upon; if you get a majority, it would normally be carried.

Council of Australian Governments principles, as I mentioned, determine whether regulation or standard setting is the appropriate course of action. They are strongly biased against regulation for regulation’s sake. You really have to jump quite a few hurdles to get a regulation in place. The principles require application to ministerial councils; they outline good regulatory practice; they are consistent with the objectives of the national competition policy; and they aim to minimise regulation, complexity and inconsistencies between jurisdictions and costs to business. The whole genesis of these came out of a review in about 1993 — I could be wrong about that date, but certainly in the early 1990s — that formed the opinion that the economy was overregulated and that we needed some checks in place to ensure that regulation did not just happen because somebody had a good idea and it was not properly researched.

These are the key concepts: is there a need for regulation; what is the problem; is there market failure; are there non-regulatory options that can be put into place; costs and benefits have to be rigorously assessed; the presumption is against new or additional regulation; and adoption of international standards and adherence to international agreements, in particular the agreement on technical barriers to trade. That links again to the international agreement standard-setting process — where there is an international agreement, you pick up the international regulation. Our regulations should not be barriers to international trade, and they should be performance based rather than prescriptive. The performance-based requirement is also in the technical agreement on barriers to trade, and it is a key concept. We do not specify how people are to design braking systems for example, but we do require that a vehicle stops in a certain way, in a certain time, time and time again — that it does not fade, that it does so from certain speeds and that it remains stable.

People often ask me, ‘Why don’t you just mandate airbags in cars all around?’ There is no requirement for airbags in any car. In the case of side impact, for example, I am often asked now, because they are coming into the market, ‘Why not just regulate?’ The simple reason is that they are performance-based standards. What we measure in an occupant-protection test is the impact on a dummy representing a human being — in other words, how can the manufacturer design a vehicle to protect that person? We do not tell them how to do it. We do not tell them how much of the energy has to be absorbed in the structure of the vehicle; how much they have to rely on the airbag system; or how much they have to rely on the seatbelt system working in harmony with the airbags, the seats moving or any pre-collision technology that now goes into vehicles. The dummy measures it all, and it is really the only way you can do it.

What tends to happen, though, is that manufacturers do find new and better ways to do these things, and you start to find the technology filtering in through the market, as it is now. But that is primarily the reason why we do not make prescriptive regulations. We could do it, but it does not really help much. You can mandate an airbag in a car, but unless you are very specific about the type of airbag and how it is going to interact with the rest of the occupant protection system, you are really going to find it very difficult to make a regulation. Nobody does that. The only country that has a regulation for airbags is the United States, and that recognises the fact that it has a very low seatbelt wearing rate.

To get a new or amended ADR in place, we go through the COAG process. Depending on the complexity of the requirement, that can take anywhere between a couple of months and a few years. The last set of major emission regulations for Euro3 were two and a half years in the development of the code process and consultation and a three-year lead time for the manufacturers. By the time it gets to that point where the regulation is ready to go, we
allow a three-month public consultation period. The COAG requirements necessitate that there be a suitable period of public consultation and that ministers then review all of the comments that are received during that public consultation phase. Within the ministerial council that controls the ADRs, we have a further one-month consultation period with the chief executives of all the major transport departments. The idea behind that is to make sure that if there is anything likely to raise a disagreement, we know about it beforehand and we can iron it out before it actually goes to ministers for approval.

When we do send it to ministers we have a two-month consultation period. This process is managed by the National Transport Commission, which is an independent body financed by the commonwealth and the states and territories. They manage what is called the voting process. That would normally be the end of it. Once that is done, an ADR would go to gazetted. However, if the ADR involves a trans-Tasman vehicle standard under the Trans-Tasman mutual recognition arrangement, it needs approval of the Council of Australian Governments as well. We have not had any ADRs gazetted as TTVSs as yet, so we have never had to go through that process. Once it is done, though, the minister can gazette it.

I should make the point that the commonwealth minister has ultimate power because it is given to him in legislation, but — with a rare exception — it would normally be the case that the commonwealth minister would work through the voting process in consultation with his state and territory counterparts.

I have given you a bit of a list there. That is a bit of an overview of what is happening with the ADRs and the ADR review. This has been a difficult process, because the review has involved a ground-up assessment of each ADR against the COAG principles. As I mentioned before, sometimes it is easy and sometimes it is not. We have just recently done one — ADR 18 — for speedometers. It only took about two months to go through the COAG process, write up the regulation impact statement, get it cleared by the Office of Regulation Review and whatever.

Other more demanding regulations take a lot more time and often you find there are problems that emerge that you did not foresee. You will notice under the heavy vehicle section, ADR 17, that fuel tanks for heavy vehicles was one that was almost ready to go until we found that there was a local manufacturer whose interests are affected, so we had another 12 months of consultation while we had to go through the process of answering queries and hearing objections, and responding to them.

You will also notice ADR 34 is an occupant protection standard which is child-restraint anchorages. It is another illustration of where the process can require a fair bit of work. We have a reasonably unique child-restraint anchorage requirement; it is modelled on the Canadian system and partially the American system and involves a top-tether. The UNECE regulation that has now been introduced as an international regulation, is one that we could potentially adopt. The difference is that in Europe they regulate the restraint, in other words the child seat, and the anchorages, whereas we only regulate the anchorages.

They have mandated a system called ISOFIX which means that the seat has to actually mount into the vehicle. That is not easy for us to accommodate in Australia because when people buy vehicles you could have a mixture of older vehicles and newer vehicles which may not have ISOFIX built into the car, so we could be facing a situation where you have to buy a particular type of child seat that matches the car. We are also concerned about the side impact performance of the new regulations and have undergone a testing regime ourselves to ensure that if we introduce that regulation, we are not taking a backward step at all. As you can imagine, child protection is a fairly significant issue for the community.

Mr STONEY — Just while we are on that list, you mentioned speedometers, would you like to tell us a little about what is happening because it was a subject of debate yesterday and it might be appropriate if we did add a little bit more.

Mr ROBERTSON — Certainly. The Australian design rule had a requirement that basically the speedo could be accurate to within 10 per cent, depending on how fast you were going. The UNECE requirement, the international regulation, works on a different basis. The long and the short of it is that it is impossible to under-read. In other words it will always be slightly over-reading. That became a very significant issue, particularly here in Victoria because of the state government’s low tolerance policy to exceeding the speed limit and in fact it was VicRoads who were very strong on driving that particular ADR amendment and we accelerated that because of that approach.
That regulation will be gazetted shortly. We have got it put down for gazettal in October 2004; it has just finished the voting process. It should be in before Christmas. I think we have allowed an 18 month period for the manufacturers to have all vehicles with the new regulation apply to their speedometers.

Mr STONEY — Could you just explain what the new regulation will actually say, and what will be the effect?

Mr ROBERTSON — The effect will be that the speedo will need to be accurate to the point where it does not under-read. Under the current ADR it could under-read by 10 per cent and it would still be within the limits of the ADR. Under the new ADR it will not be possible for it to under-read.

The CHAIR — It will over-read?

Mr ROBERTSON — It will over-read, yes.

The CHAIR — Up to 10 per cent?

Mr ROBERTSON — Depends on the speed, there is a sliding scale in the ADR but the key point of it is you will not be able to say, when you get pinged for speeding, ‘But my speedo said I was doing 98 kilometres an hour, when in fact I was doing 103’.

Mr STONEY — So it is actually mechanically possible to have a machine that will not under-read, it will always over-read?

Mr ROBERTSON — Yes.

Mr HARKNESS — The other issue — and I wonder whether this was covered in the discussions with your group — is with the speedos which show up to 260 kilometres per hour. Why is it that when you are going at the maximum speed you are still in the left hemisphere of the speedo? On the left side of the speedo, when you are doing the maximum speed of 100, the needle is there because the dial goes all the way round to 260 — a speed which nobody can do.

Mr ROBERTSON — Yes. What the ADR has always required and in fact the UNECE requires as well, is that when certifying the vehicle you need to be able to state the top speed of the vehicle, and the speedo needs to be able to cover all of the speed ranges that the vehicle is capable of doing. That is a separate issue to enforcement or regulation, it is simply a design issue so that if the vehicle is capable of doing 260 kilometres an hour, the speedo has to have a scale going up to 260 kilometres an hour. You can argue the point as to whether that is sensible or not, because there are proposals to require speedos to stop at a certain speed and you have to ask, ‘Will they be any good?’. The problem with that is there is no real data to back up whether that is going to have an effect at all. In this country we still have areas where there are no speed limits — for example, in the Northern Territory. From what I understand not that many people engage in excessively high speed even in the Northern Territory, and it is also not necessarily the case that if you cap a speedo at, say, 120 kilometres per hour that will stop those people who wish to exceed the speed limit excessively from doing so. The argument then becomes, ‘Is it less safe if they do not know how fast they are going?’. Half the fatalities occur in 100 kilometre-an-hour-plus speed limit areas — that is not to say that is the speed the car is going and it is not to say that it is excessive speeding outright or simply excessive speed for the circumstances that are causing the problem.

As far as I am aware the only attempt that has been made at capping a speedo was done in the United States, particularly during the energy crisis when they had the 55 mile an hour speed limit — the double nickel at the top of the dial — and an 85 mile an hour limit on the speedo. I am not sure this has been properly researched — and bear in mind their interest was energy saving rather than safety and to slow people down. The effect, I understand, was negligible. So that is one of those issues to really explore. Before we could consider an ADR and put it through the COAG system and take it through the UNECE process we would really need hard data to demonstrate that that would actually have a safety benefit.

My suspicion is that you would be really targeting, as is nearly always the case — as in seatbelt use — those fringe dwellers, those people who, for whatever reason, are going to speed; they are going to drink; they are not going to wear their safety belt or whatever the case may be, and they are going to be putting themselves into a high-risk
category. You can bring in all the regulations in the world, but they are still not going to change their behaviour. So you need to see something that was really persuasive to carry that argument.

Mr BISHOP — I have a question on the ADRs, too. A number of times during this inquiry we have had people say, ‘Why do manufacturers make the icons and the numerals so jolly hard to read?’, and that is showing my age perhaps, but a number of people have to wear reading glasses but they would not read long distance glasses. Do any of the negotiations pick that up?

Mr ROBERTSON — That is an interesting point. I have never heard that raised. Most of the little symbols, the tell-tales are international standards organisation (ISO) tell-tales. So you have a standard seatbelt light, oil light and that sort of thing that apply in any vehicle around the world. I am not sure whether in fact the ISO symbols specify size, I really do not know.

The CHAIR — We did an inquiry into issues that affect older road users, which recommendations went to the government earlier this year. That was an issue that was picked up on a number of occasions throughout our inquiry which lasted 12 to 18 months.

Mr STONEY — We came to the conclusion that the dashboard layouts were designed by BYMs — bright young men — and they are not really conscious that as people get older they still have long distance vision but, as Mr Bishop said, they need reading glasses and you would have to put your reading glasses on to read the symbols and dials, which is ridiculous. You would be driving along looking down and not at your driving. It is actually quite difficult and it is a wonder it has not come up before because it is quite widespread once you get over 50 because your vision deteriorates and you cannot read the dials, but you can see perfectly, 20–20, on the road.

Mr ROBERTSON — That is an interesting point. Did you raise that with the manufacturers?

Mr STONEY — We have raised it in many forums during that last inquiry, as the Chairman has said, but obviously it has not filtered through. It is a big issue.

Mr ROBERTSON — Yes, it would be. No, I have never heard it raised.

Mr STONEY — Which now raises an interesting question. When something like this arises, just out of conversation, is there a process, what happens and how does that feed into the system as an issue?

Mr ROBERTSON — Yes, that is a good question. When you have an issue like that it can be raised through a number of quarters. You can go direct to the minister, and the minister can then put it into a work program. You can raise it through any of the states and territories, and they can bring it through the consultative forums into the process. What we really need to do is to look at the nature of the problem first, then look at what the regulations actually require. When I say ‘regulations’, in this case they are standards rather than regulations. So you have a common symbol rather than mandating a particular type of symbol.

In this case I suspect it might be an international standards organisation issue that we could take up with ISO, although just thinking out aloud a bit, if it was really the size of the icons that is at issue, I am not sure how easy the solution is.

Mr STONEY — I do not believe it is the size of the icons, because they are quite large, it is just that as vision deteriorates those things become blurred at a short range but they are perfect at a long range. So it is not actually the size; it is just the layout and perhaps the lighting as well.

Mr ROBERTSON — So if it were more prominent, with greater contrast in lighting?

Mr STONEY — I do not know, you would have to do the research on that but it certainly is an issue that as people’s sight deteriorates, the layout of dials is one of the first things to go, along with the phone book.

The CHAIR — As part of the report we did raise it with the minister, so no doubt the minister will feed it through this system.

Mr ROBERTSON — What I would be inclined to recommend if that came to us is that we would look at whether we could do a research project on it, engage one of the research organisations to do that.
Mr STONEY — It is very hard to imagine that it has not come to your attention because it is widespread among older people, that it takes them longer to read the dials and therefore takes their attention away from the road. If you look at the dials for a while — I speak from experience — it becomes clearer, so you have to look at it for a longer period in order to work out what it is saying, which means you are taking your attention from your main job, which is the road.

Mr ROBERTSON — Yes. Certainly in the case of speedos, it is a big issue; other warning lights I think you would have to make a case that the inability to see the warning light clearly was going to be a safety issue.

Mr STONEY — It is actually not the warning light, they have moved away from warning lights to computer readouts so you have got all this information coming out in computerised form and there is lots of information flowing through in the modern cars, which is fine when you read it and look at it. So it is the distance the tank dial is from ‘empty’ and things like that which you cannot read because you need your reading glasses. They have moved away from warning lights to all this computerised information which you cannot read. You can read your speedo, which is fine, but it is the computerised information which you cannot read.

Mr ROBERTSON — Yes. When you get into that sort of area of computerised information, very little of that would be regulated. There is no requirement to have a computer tell you the distance to ‘empty’. That sort of issue would need to be one for the manufacturers to address.

Mr STONEY — We have raised it with the manufacturers, haven’t we?

Mr ROBERTSON — It is a very interesting point though.

The CHAIR — I would also be interested in the last one on this list, which is under-run barriers for heavy vehicles.

Mr ROBERTSON — Yes. That is in the national road safety strategy. We have been working on that one for quite a few years. We did have one proposal out for public comment but the manufacturers objected strongly to the costing. They put it to us that we had underestimated significantly the costs and when we examined the issue again, yes we had. It is a vexed issue, under-run barriers. It is one that is almost universally supported and when you look at it you say this is instinctively a good thing. What it comes down to is that there are three types of under-run protection: front, side and rear.

Rear protection is really an anti-scalping mechanism; side protection is really for the benefit of vulnerable road users, motorcyclists, push-bike riders, possibly pedestrians. Side and rear protection in the statistics does not show up as being an issue. Really in most of the accidents, something like 67 per cent to maybe 70 per cent each year are frontals and they are also high-speed frontals. The issue of frontal under-run protection becomes important.

However, what tends to be the case is that even with the presence of under-run protection it is not going to prevent the fatality. It is a simple fact of physics that when you have very large vehicles colliding with smaller-mass vehicles, it is going to be an unpleasant outcome.

That equation could improve a little bit with the adoption of more energy-absorbing barriers. There are energy-absorbing barriers being developed, however, what happens with those barriers is it adds length to the vehicle, it adds weight to the vehicle because you are putting greater moment over the front axle and most vehicles at the moment are right on the very limit of the axle loadings that are permitted to be used on infrastructure in this country. It has become something of an issue to work through with the trucking industry and the regulators, how to manage a system where the freight task is growing at a significant rate — it is going to double at least over the next 20 years. We need vehicles that are capable of carrying more freight but at the same time our regulations are putting greater imposts on vehicles with under-run protections.

Cabin strength is another issue on our horizon. The emissions and noise regulations are putting quite an impost on the ability of vehicles to be able to take weight. It becomes an issue of analysing should you put more onerous regulations in place for the benefit of heavy vehicles, which will have the effect of putting more heavy vehicles on the road, and you have to start to evaluate that equation as well, and that is a fairly significant one that is doing the rounds at the moment.
We are about to go out to public comment with the regulation impact statement on under-run and we see what comments come back.

The CHAIR — Frontal under-run, or are we talking sides too?

Mr ROBERTSON — No, it is all three, but it makes the potential case for under-run barriers on rigid trucks on the front but we have not been able to make a really strong case for under-run all around. But we will see what comes out of that. We have been going at it for a few years now. The sums are not adding up and there might be areas for further analysis at this stage, but it would be wise to get it out, get some public comment and have more people participate in the process because that is not a contentious area at all. The trucking industry are quite happy to have under-run except for the issue of weight in what they are being asked to carry. That will have to run its course a bit further.

Mr STONEY — So when you say in the way of the listing for under-runs, it is due to be gazetted in June 2005, that may not necessarily occur?

Mr ROBERTSON — It may not necessarily occur, no.

Mr STONEY — It is just aiming for that date?

Mr ROBERTSON — That is correct, yes. Just before I move on, are there any other issues on those ADRs? The numbers all mean something to me but I they may not to everyone.

Mr BISHOP — You have got vision there on something that came up yesterday and was raised by the Chairman, about blind spots in relation to the right-hand side caused when your vision is blocked when you turn around, in modern motor cars. The issue of whether a flat or a convex mirror would be an advantage. Do you look at those things as well?

Mr ROBERTSON — Yes, very much, in fact recent amendments to the ADRs that we have just put through for gazettal — ADRs 12, 15, and 16 — we have adopted the UNECE regulations relating to mirrors which allow convex mirrors whereas it never used to.

For the internal passenger mirror and the driver’s side we only ever allowed flat mirrors. That is a difficult question, because we receive a lot of representation on it, particularly on the driver’s side external mirror. Obviously the convex mirror gives you the ability to get a greater field of vision for when you are changing lanes and the like, but it has the effect of distorting the perception of distance behind you. So there is a bit of a learning curve there for people who are about to change lanes to make sure that they are strongly aware of the presence of a vehicle behind them and just how close it may be. That has always been there. I think most manufacturers have had the left-hand external mirror convex for quite some time.

Mr BISHOP — With a warning on them.

Mr ROBERTSON — With a warning on them. We do not require the warning, they put that on themselves, but it is a learning experience. The flat mirror obviously does not distort the distance perception but neither does it give you the field of view. It is still open to a person; it is still legal to have either. We have advised people that if they do have difficulty with a convex mirror and it does not work as a personal preference they can replace it with a flat mirror, provided it meets the flat mirror requirements in the ADR as well.

The CHAIR — So do the convex mirrors actually overcome the issue of that blind spot, or is the blind spot still an issue that needs to be resolved?

Mr ROBERTSON — The convex mirror certainly gives you better field of view, but it is always a difficult question when you are driving in traffic whether you should turn your head to see what is there and be conscious of where you are in the flow of traffic. There is no easy way, because in any form of design of vehicle there is going to be a trade off somewhere. If you are looking over your shoulder at the right hand B-pillar, obviously it has to be of a certain thickness because side impact is a major issue for us and the manufacturer will need to design the structure of the vehicle to make it suitable, and similarly for the A-pillar at the front.

As vehicles are getting more sophisticated in their pedestrian protection capabilities, you need to be able to design a vehicle that makes a trade off between the strength of the pillar and the softness of it because if you have a body
come over the bonnet and run into it, that can be a fairly significant object to collide with. So you have softness, width, strength all built into the component and you do not want to trade off the vision nor do you want to have a thin pillar that is very strong but also very hard because that will cause you a problem in a pedestrian collision. So there are always those sorts of issues for the manufacturers to work through.

If there are no further questions about that I will go into some of the future work. The biggest gains in vehicle protection come out of the research effort. Normally what you see in a regulation is the culmination of years of work. Sometimes it is there, but you are not even conscious of it, and a good example is in the side impact area. The next change to the side impact regulation will barely register as a blip externally, but internally it will incorporate what is called the world SID — world side impact dummy which is a highly biofidelic dummy — in other words, it represents a person to a much greater extent than the current dummy that is used in testing. It has very sophisticated sensing technology, and that will significantly up the ante on side impact protection.

To get to just that point, the work on that started in 1988 and I think from memory there are at least more than 30 organisations involved, including our department, a number of research organisations around the world, different governments. The cost just to develop the dummy is in the order of $16 million euros, so a lot of work has had to go into that. So what you will see when the regulation finally appears will be just the tip of the iceberg of what has happened to get there. The manufacturers do a lot of research themselves. For the purpose of regulation we have to understand what happens in a crash so what we put forward as regulation is soundly based.

The key areas where we will have the biggest gains over the next few years are, firstly, pedestrian protection. Anywhere between 12 per cent and 17 per cent of fatalities each year are through pedestrian collisions, and protecting our pedestrian population requires some fairly significant redesign of vehicles. There are really two key areas — the leg impact area, which is the softness of your bumper bars and the like; and the head impact area, and that is really a trade-off between the aesthetics of vehicle design and having a bonnet that is capable of withstanding a head impact.

Modern cars are designed quite low down so the engine sits fairly close to the bonnet underneath, and you need to allow some space there. Some of the vehicle manufacturers are getting quite innovative in not only making space there but providing pop-up facilities for the bonnet to come up — things like windscreen wipers and their attachments and the spindles. These are all things that someone can collide with, and it can be fatal. Those sorts of designs are important. As I mentioned before, a lot of work is going into the A-pillars. No-one has perfect answers; it just requires more research, and it is getting more sophisticated.

The European Union and the manufacturers within Europe have entered into a voluntary agreement for more pedestrian-friendly designs of vehicles. That will be incorporated into what is called an EU directive. Similarly, Japan is sponsoring a global technical regulation on pedestrian protection, and the issue for us will be when we take that up. We are expecting the global technical regulation to be presented to a major conference of vehicle safety in June next year, and when that is available we would expect to put that through our own process domestically and take that up as a regulation.

It is one of those issues where in Australia, because it involves such significant redesign of vehicles, it is not one of those areas when you could do it alone. Our vehicle fleet is too small to be able to mandate that sort of requirement.

I have mentioned a little about the other area of side impact simply because we have been coordinating the work through the international harmonised research activities, and we would be putting forward a proposal for a new side impact standard at that same conference in June next year. A lot of testing has gone on there, and that will be a significant improvement.

The next area that I mention, vehicle compatibility, is one of the most critical but probably the most difficult to resolve. You can crash-test a vehicle into a barrier and get results, and that is fine; but in the real world vehicles crash into other vehicles. You have big vehicles crashing into small vehicles, so you have disparate masses colliding; and it is not just the mass but the geometry of vehicles. Even where the vehicles are basically of the same character — roughly the same mass, the same sort of geometry — when they collide it can still be an unequal contest, depending on how the vehicles are designed. One vehicle might override another.

Resolving that is a really difficulty issue for researchers, as I mentioned. There is a vehicle compatibility group that is doing a lot of work. The United States in particular is looking at all sorts of concepts: there is an average height-of-force concept they are trying to wrestle with to see if vehicles can be designed in such a way that they can
at least interact in those areas where they are designed to interact and to take force. There is no easy solution there, but it could well find its way into regulation at some point down the track.

Other issues they are looking at as well are differential speeds for certain masses of vehicles. If you can imagine a vehicle with a very significant mass, if it has to crash test at the same speed as a small vehicle, you are dealing with basic physics. The kinetic energy is basically the average of the mass by the square of the velocity — in other words, higher mass vehicles have to absorb a great deal more energy. So if you have to absorb the same amount of energy in a high mass vehicle, you have to build it stiffer. If you are building a stiffer vehicle, it protects the occupants up to a point — you have to be careful on that point — but you exacerbate the vehicle compatibility problem. So there is a fair argument that vehicles of a very high mass should be tested at a lower speed.

A lot of other issues drive the development of regulations. At any time there will be many minor amendments being put through the regulation process. I will put a couple of examples in there. There were a lot more but I had to cut it down to fit it all on the one page. Hydrogen fuel cells: obviously, if you are going to have genuine hydrogen fuel cells you need to have some sort of regulation covering the carriage of hydrogen on vehicles.

ITS applications are next. They are notoriously difficult to regulate because the technology proceeds at such a rate that you just cannot keep up with it. You have to argue: why regulate anyway? However, you have to be careful that there are no unintended consequences. In the US they are particularly concerned at the moment with the issue of driver distraction, because you have so many advanced systems beeping at you and telling you things — sat. nav. systems and systems telling you that the vehicle is doing this or that — that they can be quite distracting, so the behaviourists are looking at that area.

You also have issues with compatibility — the use of the radio frequency spectrum. But the range of new systems — vision guidance systems, collision warning systems, the latest technology in vehicles — is not just about protecting the occupants through airbags and the like; it is actually preparing the occupant for a collision. So when a collision is imminent you will find that the brake system will activate by itself. In the really advanced systems the seat will move; it will put you upright into the ideal position, it will sense your body weight, where you are, how the airbag will fire, how the seat retractorS are going to work, so this is all very advanced stuff.

I have mentioned there are also data recorders because they are starting to become an issue. They have looked at that carefully in the United States as well. There is no proposal to regulate data recorders, but they are looking to get a standard for the collection of information so that when you are taking a data recorder, basically a black box, out of a car in an accident, each black box is basically recording the same sort of stuff in the same sort of format. So you can compare what were the actual speeds that were involved in the accident, what have been the characteristics of the use of the vehicle over its life, have people been wearing seatbelts or not — all this sort of information. It is a fairly new area, but it is important to get on the front foot with it.

Mr STONEY — What will be required in that process with privacy? Will it require new legislation to enable crash researchers to take the data or the police to take the data?

Mr ROBERTSON — That is a very good point. That issue was raised in the United States. I do not know what the outcome would be or how it would affect us in Australia. Generally, the privacy legislation in Australia works on the basis of a set of privacy principles that are designed to protect personal information. I do not know how that would relate to the collection of information about how a vehicle was being used — for instance, did it stop on time, was something faulty, how fast was the vehicle going when it collided. It is probably a different concept to the privacy issues associated with provision of information. If it was something along the lines of where the vehicle was at a particular time, that could well be a privacy issue.

Mr STONEY — It might go against the owner of the vehicle that has a black box as against one that does not — it might be an older vehicle or something — so the owner of the vehicle might have all the evidence that he has provided through his black box used against him whereas the other owner does not have to provide that, and it might be a case of fairness as well as anything else.

Mr ROBERTSON — It could well be, but certainly I think the issue at the moment has been driven by the researchers who just want to understand more about what happens to vehicles over their life and when they have an accident. That is a good point, though. I had not thought of that. That is really about it. There is a lot more that I left out for the sake of brevity.
Mr BISHOP — You missed out on daytime running lights.

The CHAIR — They have been enthusiastically waiting for that last one!

Mr ROBERTSON — Okay. That is one that has been around for a while. It is on the National Road Safety Strategy to look at. We have had good look at it and we commissioned the Australian Road Research Board to do a review of the literature on it. Quite a number of studies around that point to positive results coming out of daytime running lights, but the studies are not particularly consistent. We had a good look with our overseas counterparts. In Europe it was proposed to do an agreement between the manufacturers and the European Union on the installation of daytime running lamps, but a number of the countries involved in that process refused to do it because they considered the evidence was not there. We had a long talk with our UK counterparts on that issue and their transport research organisation, and they felt strongly that the case needed to be made a bit better. We also looked at it with our Japanese colleagues. In Japan they do not support daytime running lights because they have a night-time policy for motorcyclists, and it is the motorcyclists who really do not like it. They argue, obviously, they are vulnerable road users and if all cars have DRLs running they become less conspicuous.

We did have an experience with it in Australia in the mid-1990s with ADR 19, where the ADR did mandate hard wiring of headlights for motorcyclists, and it was a very emotive issue and actually lead to the repeal of the ADR. The motorcyclists argued that they should have the right to decide whether they turned their lights on for particular lighting conditions, and they are strongly against a general lights on policy because it will affect their interests. So there were was a fair bit of emotion in that debate.

More research is coming out of Europe. An organisation in the Netherlands — I cannot recall the name at the moment — has taken the running on this. If the research is better than it is now then it makes the case for doing it, but right at the moment it does not appear that the case is particularly strong, particularly in a country like Australia where you have very bright sunlight for most of the time.

Mr STONEY — I would like to take you up on that point. When this committee was in Europe over the winter the thing that I noticed was that the atmosphere is totally different. Even on the best day it is still cloudy and not as bright, and I noticed that the lights were of some use on the highways and a lot of the cars have them. But if you bring it back to Australia where it is very bright, it has been my experience — —

Some years ago there was a campaign to have your headlights on. One of the ministers thought they knew all about it so everyone had their lights on for a while, and there were complaints that the drivers were becoming fatigued with the lights and the bright sunlight and the whole bit; and long lines of traffic and having to meet these lights as well as the bright sun became a fatigue issue. I am wondering how it is looked at in Australia..

Mr BISHOP — On the other side of the ledger, all the same, on a cloudy day in Australia a lot of motorists are now turning their lights on.

Mr STONEY — It is a different issue. If the visibility drops or it rains, turn them on straight away.

Mr ROBERTSON — A lot of the Scandinavian countries have a lights-on policy, for obvious reasons, which is different to a DRL policy. In Canada they have daytime running lamps — have done for quite some years — but they have never really been able to tell us whether it has been effective, because you also have an energy issue in there as well.

Mr HARKNESS — You mentioned that your colleagues in the United States at the moment are looking fairly closely at issues relating to driver distraction. I guess we can all think of many examples — phones, DVD players and what not. Can you just expand a little on some of the work they are doing and what lessons we might learn for here in Australia?

Mr ROBERTSON — I am sorry, I cannot. I am aware that they are doing it. I am aware that they are conscious of it as an issue and that they want to examine it, but I have not had anything from them in the way of a research finding. I could certainly have a look. I will be meeting with them again in mid-November, and we will be asking them for updates on that sort of thing.

Mr HARKNESS — One of the key terms of reference for the committee is those very types of issues, so I am sure that would be useful for us, even in November.
Mr ROBERTSON — We will certainly do what we can there.

The CHAIR — I am mindful of the time. We have VicRoads coming back in at 11.30 a.m.

Mr BISHOP — On the issues we saw overseas to do with the advancement of making cars safer inside and the level that has got to, how much work do you do on that? You said you do not regulate the airbags, for example. How much work has been done on that? We raised the issue overseas that if you put a formula 1 capsule in a car it would be fairly safe, but obviously it is not practical. So has any research been done on what level that can reach?

Mr ROBERTSON — Most of that research, I would have to say, would be done by the manufacturers themselves. All sorts of interesting things come out of it. You will notice, for example, in the latest ANCAP ratings the Subaru Impreza got a five-star rating and got excellent side-impact results both with and without airbag. It is always one of those most difficult issues. Do you assume that just because a vehicle has, say, an airbag, it will be safer? Part of the issue there becomes what sort of crash are you going to have, particularly in a side impact, because even at lower speeds where most of the accidents occur the presence of the airbag will put more trauma on the occupant. But you are trading off that for the extra protection you might get at a higher speed accident where you will get an incursion of metal into the chest area that is not buffered by anything. You have to be careful not to make simplistic judgments there.

Certainly some of the new model vehicles that are being manufactured are performing extremely well before you look at the extra technology. I think it has always been the case that you could significantly improve safety if you were prepared to go to enormous lengths. You could put roll cages in cars, you could require — and some people have proposed this — particular head protection in the vehicle because obviously most fatalities occur through head injuries. You could do it, but you start to lose the amenity of the use of the vehicle to protecting lives.

The CHAIR — Thank you, Peter, we appreciate your time and your coming interstate to meet with us today. As I said, we are taking a transcript and we will provide you with a copy of that in due course. Thank you for your input; we appreciate it.

Witness withdrew.
CORRECTED TRANSCRIPT

ROAD SAFETY COMMITTEE

Inquiry into country road toll

Melbourne — 22 October 2004

Members

Mr B. W. Bishop            Mr T. W. Mulder
Mr J. H. Eren              Mr E. G. Stoney
Mr A. R. Harkness          Mr I. D. Trezise
Mr C. A. C. Langdon

Chair: Mr I. D. Trezise
Deputy Chair: Mr E. G. Stoney

Staff

Executive Officer: Ms A. Douglas
Research Officers: Mr G. Both and Mr P. Nelson

Witnesses

Mr D. Anderson, chief executive;
Mr E. Howard, general manager, road safety; and
Mr D. Williamson, acting manager strategies and programs, VicRoads.
The CHAIR — Welcome to David Anderson, Eric Howard and David Williamson from VicRoads. Thank you for your time. I will not go through the general spiel telling you who we are because you well know. We are operating under parliamentary privilege so what you say cannot be held against you legally in the future. I will hand over to you, David.

Mr ANDERSON — It is our understanding that the committee wanted to raise some issues with us. We also have some information that we think is relevant and on which we can provide an update. It is up to you, Chair. It is my understanding that the committee has some questions about some things it has seen or learnt, so we can give you a quick update on some of those things since we last presented.

The CHAIR — Let us do that.

Mr ANDERSON — The first thing I wanted to provide the committee with is about the government announcement in the last budget of a road safety program, total value $130 million and funded through the Transport Accident Commission. The status of that program is that most of the funds have been allocated. There is still another group of projects that will be submitted to the government for approval. A large proportion of the funding is being allocated to rural Victoria, particularly to deal with run-off road crashes. So there is a lot of work to be done in terms of shoulder sealing, tactile edging — those bumpy edgelining — and in some areas barriers, mainly wire rope barriers.

The approach we have taken is to look at the crash rates on road links, so town to town or major intersection to major intersection, to try to lift the general standard of entire routes. This seems to be successful in terms of economic analysis. It is the sort of work that we think will start to transform some of the safety standards in rural areas of Victoria in particular. I do not know whether Eric would like to add a bit more detail.

Mr HOWARD — The tool we have used is an Australian Road Research Board tool called the road safety risk manager. Without going into unnecessary detail, for the first time it is giving us a chance to really assess the risk on a section of road, the likelihood of going off the road, but most of all the consequences if you do.

The outputs of that model have been very instructive. We have actually used the model to work out — and it would be no surprise because it is where the trees are in most cases — where the works are proposed, where we are putting in barriers or other treatments. We have compared that with where crashes have occurred, and crashes have occurred in many places other than the ones we are treating. Just on those crashes that have occurred in the places we are treating on a length of road we are getting very good BCRs of 3 to 4, which is encouraging because it says the model is working well, and it has given us a whole new way of assessing the risk on the network. As David said, we are optimistic that this sort of program into the future can transform the safety of the network in relation to that type of crash.

Mr HARKNESS — With the risk management software, what mechanisms are in place to share the knowledge there and also to modify the technical details?

Mr HOWARD — There is a major national program which our chief executive has auspiced and which David can talk about.

Mr ANDERSON — Austroads is an organisation of all the Australian and New Zealand state level road authorities, and it is run by a council of the chief executives. Austroads has a fairly large collaborative research program. We have tried over the last couple of years to focus on five main strategies, instead of trying to spread our resources all over the place. One of the main strategies, of course, is road safety. Within the road safety research program we are trying to put the vast majority of our funding into the Road Safety Risk Manager.

At chief executive level there is commitment to invest in this tool. What it does is use the information from historical and current research and determine risk. We are also investing in new research studies where we feel the tool needs enhancement. Where it is a bit weak we do some specific research so we can get some better information — for example, what is the crash reduction due to a particular roadside treatment, and does it vary from state to state? Is it typical all over Australia? Once we get this information, then it is included in the risk manager.

We see this as a multi-year program where we just keep improving the information in that tool and make it better and better. It had a bit of a slow start and different states had different priorities, but I can say that there now is a
national push to use this, both in Australia and in New Zealand. We have an Austroads council meeting next week in Melbourne and we will be reviewing the proposed next stage.

Mr Howard — Just to add to the question of how widespread it is, it varies between states, but Victoria does have take-up with some local governments. There is no doubt that desirably it should be across every road authority in due course, particularly our local governments, and there is an issue there about their take-up of that. I know the meeting David is referring to has a report which addresses some of those issues about how local government can be encouraged to do that, but we have a knowledge-sharing role there as well and that is something we can look at through our regions, of course.

The Chair — So how does this fit into the Road Management Act that we have just passed through the Parliament?

Mr Anderson — It is not directly relevant to the legislation, which is enabling legislation, but it is a tool for assessing relevant risk. The Road Management Act has, as members of the committee will be well aware, places a fair emphasis on addressing risk in a safety sense. It is a very powerful tool for us to be able to direct resources, or recommend that resources be directed at activities that are really going to make a difference. We have had other tools in the past, but they have tended to be better for black spots where you have a real concentration of crashes at intersections or bridge sites, but we have not had a tool where you could look at long lengths of road with any sort of sophistication at all. So the Road Safety Risk Manager is not directly relevant to the legislation but a valuable road management tool.

Mr Howard — I would add one other comment. It is not only this program of special funding that we are using this tool for; we see it as being a part of our total road development and even maintenance programs into the future so that it will become a fundamental part of assessing what you do on the network and not an add-on activity.

Mr Anderson — We might move to another issue. It is my understanding you may have been talking to federal or commonwealth representatives about vehicle safety. In Victoria we have been developing a vehicle safety strategy which focuses primarily on marketing. Its main benefit will be to make members of the community, who are going to buy vehicles, aware of the relative safety of different models. They can often purchase safety and select safety without spending more money. Through customers, the strategy aims to force the manufacturers to take safety seriously. If we can get their market interested in safety then manufacturers will respond because they will be driven by the market, and the resultant benefits for their bottom line.

That strategy has virtually been finalised by the road safety agencies: the TAC, Police, VicRoads and Justice. We will be putting it to the government to try to get it endorsed so that it is a very clear set of actions for Victoria to follow. We have a view that that might be a more effective way than trying to only push the federal government to improve safety standards (ADRs). I do not think it matters which federal government has been in power; timely development of ADRs been a problem. I suspect there are factors that federal governments take into account in addition to safety. We can elaborate on some of the ideas and proposed actions in the draft strategy if the committee wishes.

The Chair — We have probably seen the tip of that, have we, if we are talking about customers driving demand? We have seen that in recent weeks with the state government coming out with a couple of ads as part of a campaign.

Mr Anderson — That is right, and there is a whole suite of actions. Eric has talked to, as I have to some extent, the chairmen or the chief executives of all the major car companies in Australia, and those discussions will continue to try to bring them along with us, which is similar to the European experience, particularly in Sweden. The Swedes who have been very successful in having Volvo and Saab work with them to actually exceed the national standards. We think the market driven approach will provide better value for Victoria, because it seems to take, I forget the figure, something like seven or eight years to rush through a new Australian Design Rule. I think we have just broken the record by getting one through in four years.

The Chair — We just spoke to Peter Robertson from the Department of Transport and Regional Services, and I was personally surprised at the bureaucratic process that is required to change an ADR.
Mr ANDERSON — It is worth noting that the Australian Transport Council (ATC), which consists of all the state and federal ministers for transport, at its last meeting, requested a thorough review of the Australian design rule process. I do not know whether that was mentioned to the committee, but the issue will be on the Agenda of ATC at its next meeting it will be on their agenda next time because several of the ministers are quite concerned that developing ADRs involves such a long-winded process.

Mr STONEY — We can see that today.

Mr HOWARD — I want to comment on one specific as an example of the opportunities here. We know from extensive US research and European research that side curtain airbags in vehicles will provide about a 40 per cent reduction in fatal crash outcomes at intersections. Of course one of our biggest problems in metropolitan Melbourne is side impacts at intersections, causing both fatal and serious injuries. There is only one locally produced car that has a true curtain airbag in Australia — that is, the Ford Territory, which has just been released — and that is a welcome development.

But the opportunities that earlier introduction into our fleet of that particular feature have is very significant, and we are going to do all we can to encourage the manufacturers to bring that forward as quickly as they can. It is, we understand, a couple of years off. We think there is an opportunity for governments, corporates and others — and the public — to say to the companies, ‘We want this earlier than that’.

The CHAIR — I would support that. We spoke to people from Ford yesterday, and they pointed out that Ford’s first cars with standard airbags came out seven or eight years ago. I suggest it probably has not progressed much since then.

Mr BISHOP — On the point of side airbags, it was my understanding that the federal representative said that they do not regulate in relation to airbags at all. So are you suggesting that in fact they should take a proactive line and start to regulate in relation to airbags?

Mr HOWARD — The point there is a valid one. They specify a crash outcome with the use of whatever technologies the companies come up with, and they do not want to be too prescriptive in then spelling out the components. This is very much a case of the market pushing these things to happen. There are other things in design rules that are a tick or a cross — if you have them it is safer; if you do not it is not — but there are various configurations of airbags and often it is best left to the manufacturer to sort out the best configuration. There are many head-protecting airbags available in Australia but not the curtain type, and that is what we need to see.

Mr HARKNESS — Another design issue raised yesterday and again this morning was the speedo dial and how in some vehicles you can see that it goes up to 260 kilometres an hour so that when you are travelling at the highest legal limit you are still on the left-hand side of the dial. The gentleman this morning indicated that the design rules require you to graphically illustrate the speed at which the vehicle could possibly go. I think it sends a mixed message. A simple and sensible idea would be to make sure that you do not have that as the broad spectrum. As Barry said yesterday, it also makes the numbers a bit bigger. What are your views on that?

Mr ANDERSON — Several of the states have similar views — that is, that there ought to be a redesign of the speedo. No-one has done enough work to say exactly what it should look like, but I know from my attendance and observations at the Australian Transport Council meetings that a number of the bigger states, including Victoria, would like this examined. Unfortunately it will have to be done via the process of design rules. I mentioned that we seem to have broken a record recently in getting a rule changed in four years. The change means that the standard for speedos in Australia will be the same as the European standard.

One could have said it was fairly obvious that that was the way to go, so that drivers’ speedos cannot tell them they are going slower than they actually are. That has just been voted on by ministers and approved, but of course it only applies to new vehicles. We are going to embark on the redesign of speedo issues. Again, it may be that marketing
will be more effective. I do not know whether there is a rule that says the full speed of the vehicle has to be shown on a speedo.

**The CHAIR** — Yes, according to our federal — —

**Mr HOWARD** — I think there is, David. The speedo must show the speed at which the vehicle is capable of travelling, which seems to me — —

**The CHAIR** — When we were in Europe — and I cannot recall which car manufacturer it was — they were talking about redesigning their speedos?

**Ms DOUGLAS** — Saab, was it — where the 100 or the 110 was at about 2 o’clock as compared to 11 o’clock that we see here?

**Mr HOWARD** — At night when you are driving a Saab the speedo is only illuminated up to about 120.

**The CHAIR** — I did not know that.

**Mr HOWARD** — Chair, could I just respond to Alistair’s point? That is a very interesting symptom of a much bigger problem — that is, it is a symptom of the disconnect between responsible attitudes to speed and power and those sorts of things — yet there is an underlying community culture, for all we might like to admit, that tends to support that. There is the whole issue of video games for young kids, the movie film clip chases and the culture of speed and power.

**Mr STONEY** — Advertising of motorcars.

**Mr HOWARD** — That is difficult in itself. It is very difficult to expect young people going out on the road for the first time to disconnect their minds from all they have grown up with and suddenly to behave as model citizens that those with greater experience have.

**The CHAIR** — Especially after they have watched 12 hours of Bathurst!

**Mr HOWARD** — I was not going to mention that, but I agree with you, and dad is probably beside them, as we all are, enjoying it. It is very difficult for young or inexperienced people to handle those messages, so we have some underlying tensions in our culture that are a problem.

**Mr ANDERSON** — But VicRoads is not suggesting that Bathurst is not a good thing.

**The CHAIR** — That is right — I have watched it!

**Mr BISHOP** — Can we add in that if you are having a look at the speedometer process to have a look at the instrument cluster? A number of people have said to us that for those who wear reading glasses but who do not wear long-distance glasses it is pretty jolly difficult to pick up either the icons or the descriptions that are translated to you.

**Mr STONEY** — That was good timing.

**Mr HOWARD** - Yes.

**Mr ANDERSON** — Yes, sure.

**The CHAIR** — With regard to the campaign we are talking about with customer driving safety bonds in vehicles, the thing that always sticks out in my mind — even in the campaign we have just run which was focused at people my age— is that people are putting their children, the most vulnerable being drivers aged 17, 18 and 19 — into second and third-hand 1975 red Lasers, for example. I know it is a matter of cost as well, but I think there needs to be an education process saying to people my age, ‘If you can afford it, where you can put your children into a car that is equipped with airbags; put them into a modern car’.

**Mr HOWARD** — We had some Swedish experts out here a couple of months ago. I do not know whether you saw this at Saab, but apparently Saab is now finalising a personalised key so that if mum and dad are happy for
the young person to get in their car at night but do not want them speeding or driving when they have had a few drinks, then that can be built into the system.

**Mr STONEY** — Could I raise the issue of young people? Is it appropriate now?

**The CHAIR** — Yes.

**Mr STONEY** — The issue of the high accident rate and death rate of young people has become very topical in Victoria. This morning on Radio National — I do not know where you heard it — there was a quarter-hour debate at quite a high level about it. Did any of you hear it?

**Mr HOWARD** — I did not hear it, but I am aware of it.

**Mr STONEY** — I will read into the record some of the issues that were covered and ask for a response from you because I think it is a very important issue.

This particular debate talked about the maturation of young peoples’ brains and the psychology of young people, which I thought was interesting. They talked about peer pressure and the use of mobiles. In fact young people were almost texting each other within cars for fun. I think it even mentioned that some people were texting the driver just to have a bit of fun watching him react. They spoke about why advanced driving might be counterproductive because kids think they are better than they are, and of course they are not.

There was a consensus that if young people saw that they had to go through a more graduated licence system, even more graduated than it is now, to get their full licence, that they may accept it and take it on board, because it was felt that young people would react violently if we suddenly said, ‘You have all these things’, but there is no realisation that they had to go through this sort of pain to get to the full licence. I am wondering if you have thought about it lately, or do you think more work should be done on it?

**Mr ANDERSON** — Yes, we have thought about it lately and in considerable depth. There has been a fair bit of debate in Melbourne over the radio, much of which has been informed debate. Our view is that we have to pull together all of the known research and consolidate it. We propose to suggest to the government that information is provided through some sort of discussion document so we can get people to focus on particular issues. Some of these issues are complicated in terms of social equity, for example country people have different needs and opportunities et cetera. Consequently so it is the view of VicRoads that we should put together all of the information that is available on young driver safety including but not limited to those you have mentioned. If this was made generally available then the media could use it if they wanted to have talkback discussions. It could also be sent to particular interest groups or community groups to enable us and the government to get better feedback on these and other issues there might be and what tradeoffs could be considered there.

We think there is a whole smorgasbord of ideas, but it is important that the community has a chance to consider those properly and governments have the chance to take that into account when it is making decisions. Graduated licensing is certainly something that we will be having a very close look at and suggesting that perhaps there are some improvements that can be made to the current systems. Young driver safety can be seen as a continuum. It may be possible in the next year or so to make some changes, but other issues may need further debate. There is no reason why we should stop still and assume that what we do at the moment in Victoria is best practice. We say that there is new information available now and we ought to look for continuous improvements to our licensing systems.

**Mr STONEY** — No doubt we have the figures — which was really the core of why you would be doing it — on the accident rate or various ages. Do we have the figures on the accident rate versus how long kids have held their licences?

**Mr ANDERSON** — We have information on how long they have held their licences and how far they have travelled as learners. You will notice that TAC ads as part of our overall road safety program concentrate on 120 hours learning experience. That is based on very solid research. Some people say, ‘You should mandate 120 hours’, but the reality is that some people just cannot get access to vehicles.

**The CHAIR** — Is 120 hours mandated in New South Wales? I think it is, is it not?

**Ms DOUGLAS** — Fifty.
The CHAIR — But it is mandated.

Ms DOUGLAS — Yes.

Mr ANDERSON — Because we collect the information from learners, we know that the average learning period in Victoria is up to about 90 hours, and it used to be about 50. We are not doing badly in this regard, but what the community might want to consider is how to deal with a young person, or an adult for that matter, who cannot get access to a car often enough to get that level of experience. We think that there may be community groups — Rotary, Lions etcetera — that could develop schemes that provide opportunities for people who are disadvantaged. There are important things for the community to consider as opposed to adopting some sort of mandatory legislative proposal.

Mr HARKNESS — David, I understand that up in New South Wales and the ACT there is a proposed trial on for young drivers. If you know a little bit about that, could you tell us your views on that?

Mr HOWARD — A couple of years ago in New South Wales a trial was proposed, I think it was auspiced by the NRMA. There was a suggestion that they would carry out a big trial of young drivers with control groups to see what might improve crash outcomes. It ran into some problems, but I do not know the detail. The federal government and the Federal Chamber of Automotive Industries — that is, the Deputy Prime Minister at the time who is still the Deputy Prime Minister and the FCAI — suggested that we should look at what could be done to improve young driver outcomes.

There was a suggestion of a trial involving Victoria and New South Wales. That has moved around quite a bit. The current position is that Victoria certainly has put its hand up to be involved. The Premier has expressed a view on the matter publicly. The commonwealth government is aware that Victoria wishes to be involved. There probably will be a need for a separate trial here than in New South Wales. I do not know about the status of official response though, David. We have had informal communication and we are optimistic that it will proceed, but there is quite a bit of detail to be worked out. The election has intervened.

Mr ANDERSON — The Victorian government wrote to the federal government saying that we would like to be involved. We have heard that the response is going to be positive, but I have not seen a formal response. Whether the Minister has, I do not know at this stage. But we are looking at multimillion dollar trials, and we have spoken to others in Victoria who may also be prepared to contribute. There is a tremendous will, for the first time I believe in this country, to do two massive trials of driver education — one in New South Wales and one in Victoria.

Obviously our input, if it is agreed, will be through our financial assistance, as well as the provision of our expertise and staff to work with the commonwealth and others on these trials.

Mr BISHOP — Might I say that I am delighted with the way the conversation is heading in relation to the last few comments. David, you would be disappointed if I did not talk to you about pre-licence driver education.

Mr ANDERSON — Possibly not disappointed, but surprised.

Mr BISHOP — I am sure that is right.

Mr STONEY — You did not have to go through Europe with him!

Mr BISHOP — Might I report that when we were overseas it certainly was one of my interests to see if we could flesh out some of that, and it was not easy.

Mr STONEY — It was not easy for us either.

Mr BISHOP — As you would know! However, we did not strike pay dirt until we got to the United Kingdom where the parliamentary committee on road safety had recommended pre-licence training. They had not put it in place, but they had recommended it. There seemed to be an understanding that there needed to be after-licence training.

It was not Sweden — I think it was Holland — that had a 300-person trial in place on that particular issue. They were going through that process. Certainly the pre-licence stuff in my area is picked up. Now Mildura has
pre-licence driver training on the curriculum in every secondary school, and it is fully supported by all of the schools. They are doing it off their own bat, regardless of anyone else. Having had the discussion we have just had, is there a place for a package for pre-licence and post-licence training of our young drivers?

Mr ANDERSON — We would hope so. But the difficulty we have had — and I know it has caused great debate in places like *Charlton and others — is that everyone has been teaching something slightly different, and there has not been the volume of participants enabling a conclusion to be drawn from research. It has therefore not been possible to advise government — any government over the years — ‘This is the way to go, and this will have an effect’. Obviously, as you have discovered, the research is not conclusive. We are now planning an experiment with 7000 drivers doing a specifically designed program or package. This should be developed in consultation with others as to what are the best ideas. There would also need to be a control group of 7000 who will not do the training. The research would then determine if the groups perform differently from a safety perspective.

I think that until we complete such a study we will continue to have arguments from statisticians about the value of training. So that is the plan, and I think we are looking at 7000 in each state. We are talking about probably the biggest experiment of this kind anywhere in the world, that we know of.

Mr BISHOP — That is reasonable. I think the numbers going through Charlton were about 1500 students a year, which is not 7000 but still a substantial number of students. Again, from my perspective the question is: is it likely to be a package that would include the prelicensed and the licensed?

Mr HOWARD — The intention at this stage is to focus on the licensed drivers in their first period of licensed driving, rather than the learners. That is the idea for the trial and was the original genesis of it. With the learners, we think it is very much about them getting that experience and getting up to a certain standard. At present we are looking at our own drive test and thinking of possibilities of ways in which the drive test, for example, might be able to assess whether a learner has had 120 hours of experience by the way that their brain is working, they are reacting to hazards, actually handling multitasking and those sorts of things. That is very new as well, and we do not know if that is going to be the possible but that is where we are working at the moment. That would be our view with the learner phase but this project is very much focused on that first few months of driving — the first six months of driving — because we know the learners are not a problem. It is trying to get them right at the time they go on the road. It may lead to some recommendations to do something prior to the licence being given to them, but the focus is on that first period when they are fully licensed.

Mr ANDERSON — Just to expand on that a bit, we know that in the first period after someone gets their Ps they are still at reasonably high risk but this reduces fairly rapidly, to a ‘normal’ level after one year. Someone mentioned graduation. It may be that one of the things we can look at is another step. We do have a graduated licensing system in Victoria — Ls, Ps and the full licence. It may be that we have to look at another step at about that point. This is just open-mind thinking at the moment. We can often be accused of having closed minds to these things, particularly when people want funding for off-road centres. All we want to do is give the best advice we can and from our point of view reduce the number of injuries and deaths among kids, who are at a much higher risk than the rest of us.

Mr BISHOP — Just to conclude on that, it would seem to me that this is ideal opportunity to do some better research in that area. It has been particularly frustrating for those of us who have a belief, if you like, in it and believe that the evidence is there but that it keeps on being ignored because of the weight of numbers required to drive the issue home. I would just urge that you take that issue into consideration. Otherwise people will go on and do it ad hoc, if you like, which is being done now and is not satisfactory to me.

Mr STONEY — I think TRL are doing something similar in England. Will you be able to exchange results with them?

Mr HOWARD — With the Web we get that instantly and we communicate very carefully with the Europeans, the British and the North Americans. I did not hear the piece on Radio National this morning but we are getting a copy of the transcript. My young driver people did hear it, and they said it was a really good discussion about the issues.

Mr STONEY — Yes, it was.
Mr BISHOP — When you go through the process, can I ask that you contact those training areas that I am talking about, to see if they can feed in something that we might have missed along the way?

Mr ANDERSON — Certainly. There is a fairly small group of world experts. We think that it numbers about 20 people and that there are a couple of that 20 in Victoria. They are in Finland, Holland, Sweden, the UK and other countries, and all got together in one place some years ago to discuss these issues. This is a network of people who rely on each other. I can guarantee from VicRoads’ point of view that we will be continuing to use that expert network.

The CHAIR — More on the theme of young drivers, could you comment on the effectiveness of antihoon legislation in other states?

Mr ANDERSON — Either of us can comment. We actually had a discussion about that with ministers earlier in the week, and it has been agreed that the agencies will assist the police do a pretty thorough investigation of exactly what legislation exists in other states, how they administer it, and what the benefits might be. I think that is all we can say this stage. We intend to do the investigation in the next few months.

Mr HOWARD — I would simply add that one of the challenges is to distinguish if there separate or existing offences and if there are not, how do we make enforcement at least practical. I think there are a whole of the issues around that that need further work.

The CHAIR — In investigating that issue will you at other experiences interstate?

Mr ANDERSON — Yes. Queensland, Western Australia, Tasmania and New South Wales have legislation. We have also been asked to make sure we understand the links between the application of hoon legislation and road safety, as opposed to neighbourhood annoyance or other things. The latter may well be legitimate issues for government to deal with but from our point of view we will be trying to examine the road safety implications in particular.

The CHAIR — We will look forward to those results.

Mr BISHOP — When we were overseas we saw particularly in the UK that there was a great acceptance of vehicle-activated signs. Yesterday we heard from an organisation about their reasonable price, if you like, in relation to road safety. How much research has VicRoads done in those areas?

Mr HOWARD — We are aware of these. We have seen the TRL signs, and we plan to trial a couple. We are particularly interested in the signs that alert drivers of vehicles on a busy highway that a vehicle has approached a side-road intersection. We would really like to explore whether that can improve safety outcomes or at least tell the driver of a vehicle that is travelling at a high speed that there might be a risk coming up. We think that is an important application. It is really a crash countermeasure and its cost is such that you have to have a justification for spending the money.

Mr BISHOP — The views out of the application in the UK were extremely good, with extremely strong results.

Mr HOWARD — Yes.

Mr BISHOP — The other matter is that we have been discussing in the Parliament the issue of fatigue in debating the new bill that was introduced under which the fatigue will become part of the culpable driving issue. There are couple of matters that I would like to get your views on. One is testing for fatigue and the research you may have conducted in that area. The other is the wide use overseas of audio strips, even though they are different from ours — they are indented rather than being raised — but certainly they were considering putting them and had put them in the centre of the road as well in addressing the issue of fatigue. Perhaps you might like to make some comments on that.

Mr ANDERSON — I would like to deal with the centre-of-the-road strips because this is easier than the other one, and I will ask Eric to answer the first question.

Mr BISHOP — We all make speeches on it in the Parliament. It is not an easy issue.
Mr HOWARD — There is a study going on at the Austin Hospital for heavy-vehicle drivers — I think they are putting 10 000 or 15 000 people through it — which is measuring sleep apnoea. We do not understand how widespread the problem is and there are indications that it is perhaps much more widespread than first thought, certainly with males above about 40 years of age. That is very much targeted at heavy-vehicle drivers, but we are hoping hopeful that that technology can be made available on the Web to enable a reasonable self-assessment to be done by people in their homes about their predisposition to sleep apnoea and then go and seek medical attention and so on. So we think that is an issue.

The technology for measuring fatigue — again mainly in heavy vehicles because of the cost — is advancing dramatically. Recently I saw a demonstration from a Canberra-based company. It is a video-based technology that looks at the face of the driver and forms in image on computer of that face and the minute the eyes are not tracking in the direction that the vehicle is moving in, it sends out a warning signal.

So there are those detection devices that are improving. The question is: how does someone respond to that when they are on the road? We have recently, in the last 12 months, installed a lot of signs about fatigue across the country highway network — you may have seen them. We have tried to make the messages a little bit different, to just put them into people’s minds. We are supplementing those with that temporary banners that will run the power nap message and they will be across the highway network as well. That is starting between now and the end of the year.

Education is really important. There are some countermeasures but how people react to that in their behaviour is uncertain. We think the heavy-vehicle area is extremely important, though, and the sleep apnoea issue is an underlying subset of the problem that we do not think we know enough about yet. But we are getting to know more about it.

The CHAIR — Just related to the fatigue issue, and one that was raised with us on numerous occasions when we travelled through regional Victoria was the provision of rest areas and the quality of rest areas. I think it was in Gippsland that people said that when you left a particular town there was a stretch between there and the east coast — —

Mr STONEY — Bairnsdale and the border.

Mr LANGDON — You and I went to the last stop for ages.

The CHAIR — It might have been, yes — and that was a good rest area but other than that there was no rest area. So it is not just the number of rest areas but the quality of rest areas so that people feel confident in calling in — where there is lighting, toilets and running water.

Mr ANDERSON — We have just recently finished a study of rest areas across the State. We have developed lists of priorities for not only providing additional rest areas but also improving the size and certainly the security, lighting and signage at existing rest areas. We have also considered the role of towns providing facilities for rest so that we do not end up creating an unnecessary new facility that is close to a town, although sometimes commercial vehicle drivers prefer separate facilities. We are working with local government to try to develop a complementary system. We do accept that it is time to improve rest areas in many parts of Victoria, probably as the number 1 priority, and there are stretches of road where additional rest areas need to be created. We will be considering recommending to government that a more concerted effort be included in our program. It is a matter of fund allocation and priority setting but certainly we would see that there is quite a bit of scope for improvement in rest areas.

The CHAIR — The other issue with fatigue that was also addressed, especially down through the west coast and Geelong and those areas, was Melbourne tour operators promoting day trips — and we have all heard this story — to the Twelve Apostles and coming back within a day when in fact, especially for international motorists, firstly, they are not equipped with the skills to get themselves around the Great Ocean Road, and secondly, they are just not going to make it in a day. They attempt to and finish up fatigued three-quarters of the way back home and inevitably have a crash.

Mr ANDERSON — Some months back the government released the Great Ocean Road Regional Strategy. Flowing from that the Government announced a package of works in this financial year to improve safety on the Great Ocean Road and the inland routes. In addition there is an undertaking that we will work with Tourism
Victoria on a better marketing plan for that region which will also indicate that it is not a region that you can visit in a day. We have some private views, yet to be agreed by others, that we should be thinking of that region as virtually three different subregions: the first being the area of maritime wrecks at the western end; the central part being the environmental rainforest, the Otways area; and then perhaps towards Geelong, the surf coast. If we could get a marketing strategy whereby, even with the simple things like colour coding signs and directional information, we could direct people to different parts of the coast. We want to develop these areas to the point where, as the Geelong bypass is completed, we can have such a concept in place. Through that process, we could advise tourists that there are at least three different sorts of experiences in the region and you cannot jam them into one day.

The CHAIR — It was not just the west coast, either. Another example was a package of something like the Gippsland Lakes and Phillip Island in a day. It was just ridiculous.

Mr ANDERSON — The Great Alpine route, too — right across the top and back.

The CHAIR — These are tour operators obviously based in Melbourne and saying, ‘We will make sure you come back to our hotel in Melbourne that night’, instead of saying, ‘Stay down in Bairnsdale’ or, ‘Stay down in Gippsland’.

Mr ANDERSON — Hence our desire to work with Tourism Victoria — because I think it is more complicated than just VicRoads erecting some signs.

Mr STONEY — I think that is great because I am sure the industry down that way and in Gippsland would be supporting that, because if you can get people to stay and on extra night it becomes income.

Mr ANDERSON — Of course.

Mr STONEY — While we are on the Great Ocean Road, yesterday we had evidence that VicRoads is going to actively encourage slow drivers to pull off of the road, perhaps with signage and so forth. I am quite heartened by that. You may remember that this committee had that as an issue some years ago in an inquiry where we were trying to convince the police, mainly, that slow drivers do cause an enormous amount of frustration on narrow roads. Has there been a change of policy or has there been any thought that that initiative on the Great Ocean Road might be expanded? I know that you were trialling it down there.

Mr ANDERSON — Yes. I think probably somewhat unsuccessfully. There is no change of policy — it is probably not a very strong policy anyway — but perhaps there is a strengthening of policy. We have had these slow-vehicle turnouts, which are not quite the same as passing lanes; they are shorter. It is really a matter of trying to find the way to assist drivers to understand what they are for and how they might use them. Again, we think that the traditional signing we have used has not been effective because it does not emphasise the purpose of those facilities. Sitting here now I am not sure what the answer is other than that we think it is important that they are used to remove frustration from following drivers. We know that in some countries, like Norway in particular and parts of Scotland, there is an acceptance that these facilities are there for that purpose.

Mr STONEY — I think in the USA as well.

Mr ANDERSON — Yes. So we might have to learn from others on the best way to go. Again, it is almost a cultural issue. The engineering issues are relatively easy.

Mr STONEY — But surely if it is an issue of road safety and a cause of frustration — the police take the line that people just have to wait and put up with a slow driver, but in reality after a few kilometres they just get sick of it and they pass in unsafe places.

Mr ANDERSON — Take risks, yes.

The CHAIR — Again just building on that theme, in Sweden we saw the 2+1 system. I know we are talking costs and big dollars, but have we considered trialling a 2+1-type system in Victoria?

Mr HOWARD — Yes, we certainly have, and it is certainly something for the future. It has been a highly effective treatment in Sweden, as you would have heard, with tremendous reductions in head-on crashes. The thing that struck me, thought, when I visited there — a couple of years ago now — was that their problems are different from ours. The use of a barrier in that circumstance is because they do have a lot of head-on crashes. They built
roads that are one and three-quarter lanes wide in each direction so they were getting simultaneous overtaking in different directions. Also, their volumes on those roads are generally much higher than ours. Our country road network has much lower volumes than you would see on their networks because their towns are more distributed and they have a more decentralised population. There is no doubt that the risk of head-on crashes goes up dramatically as your volume goes up, because you have more opportunities to hit something coming the other way.

I cannot remember the exact figures, but their run-off-road and hit-fixed-object crashes were far less a proportion of fatalities than ours. It almost had an inverse of our problem. Our big problem was the trees and poles on the side of the road; theirs was the head-ons. We looked at a couple of locations where they could have been trialled, and we are still anxious to do that.

The CHAIR — What type of locations?

Mr HOWARD — You would want something where you had 4000 or 5000 vehicles a day to make it worth while.

Mr ANDERSON — One we looked at was the Princess Highway west of Geelong where we had fairly high traffic volumes, but we did not have the same head-on problem they had in Sweden, probably because our lane widths do not encourage people to crib and try to make two lanes out of one and three quarter lanes or whatever. We actually deferred the project; we did not do anything. We had some funds in our research program to put in a trial, but when Eric had the opportunity to have a look in Sweden, we said, ‘It’s chalk and cheese. It is not the same issue’.

Mr HOWARD — That is not to say there will not be a place for this, but it would seem to us that it is a very cost-effective way of getting a lot of the benefits of duplication without the cost of duplication. It may be that on the routes where fatigue is the greater problem, such as the Western Highway, there will be an opportunity to do something in the future, because duplication may never occur. It is still on our agenda, but the focus now is on the prevention of hitting the trees.

Mr ANDERSON — I do not think we answered the question about tactile lines in the centre of the road. At your suggestion I will ask David Williamson if he would like to make some comments.

Mr WILLIAMSON — This relates to the previous discussion on the two-plus-one treatment, too. If we look at the statistics of the head-on crashes on country roads, they make up about 18 per cent of the country road toll. But when you drop down to the serious injury category, it is far less — it is only about 6 per cent of crashes on country roads. The head-on problem, as we have said before, is not as significant as it is in Sweden.

In relation to the tactile centre-line marking, we have a trial running at the moment on the Western Highway on two sections near Horsham and Ararat which cover approximately 25 kilometres of roadway. They were put in early in 2004, so we are still in a position where it is too early to really evaluate the outcomes of those trials. They were in locations where we had problems with head-on and run-off-the-road type crashes.

We have some research that backs up the benefits that can be achieved out of the tactile centre-line marking. For example, there was a study done by a Canadian university in relation to a number of roads in the United States where they achieved something like a 20 per cent reduction in head-on crashes and run-off-the-road-to-the-right crashes. So there is significant potential there for the use of centre-line tactile markings at locations where we have those sorts of problems, and we are doing some further work in relation to that to identify locations where it might be appropriate.

The CHAIR — Is it recognised that you could also create overcorrecting, and that therefore instead of people drifting across to the right-hand side they might overcorrect if they are fatigued and finish up running off the road to the left?

Mr WILLIAMSON — I do not think we have any evidence or research that shows those sorts of effects.

Mr HOWARD — We do know that when people go off the carriageway onto the shoulder and when they attempt to correct, the consequence is not as disastrous on sealed shoulders as it is on unsealed shoulders, which I am sure you are familiar with, where you can dig in and go right across. So the sealed shoulders are very important where you have that tactile line.
Mr STONEY — Absolutely. Just on a new issue, when we spoke with you in May or June we raised the issue of the DSE and its attitude to moving trees and so forth, and we had very frank discussions with DSE about that at the time. Has there been any movement from that time that might give us a bit of an indication that there is light at the end of the tunnel in relation to its attitude or any solutions to the issue of getting permission to pull down dangerous trees?

Mr ANDERSON — Yes, there has been. Our director of regional services, Gillian Miles, to whom all the regional managers report, and a former DSE regional manager herself, has had some very successful discussions at a high level with DSE to achieve recognition — possibly with this committee’s help, we do not know, — that there is an issue other than the environment to deal with. We are trying to work towards some guidelines that their people can use which take into account safety and which our people can use to try to get a less confrontational approach to dealing with the issues.

Mr STONEY — Would that apply to local councils as well? They were having dreadful trouble getting permission.

Mr ANDERSON — I am not aware of it. Perhaps Eric can add to that.

Mr HOWARD — I will just make a comment. With the guidelines we are developing, we plan to involve local government with DSE in that consultation. That is the proposal. Just as a simple example — we may have mentioned this when we came in last time, but it came out very strongly in the evaluation of projects for this run-off-road program — without clearing some trees, you have to fall back on steel barrier treatments. To put in wire rope, you need to have some clearance so that you can get the deflection and therefore use it. Instead of a 50 per cent reduction in crash outcomes with steel barriers, with wire rope it is 90 per cent. It is a very measurable effect for discussions with DSE and others about the benefits of taking the trees out to at least allow a better barrier to go in.

Mr STONEY — Does the difference between the 50 and the 90 represent a 40 per cent better chance of survival or better crash outcomes? Is that what you mean?

Mr HOWARD — More chance of survival. They are not as injured.

Mr STONEY — That is highly significant.

Mr HOWARD — Yes, it is.

Mr ANDERSON — The other piece of information that is relevant to this is that the very recent Municipal Association of Victoria conference. It included a number of discussion groups, which were very well attended. I was asked to participate with a chief executive from local government in one that dealt with the issue of environment and safety. There was a very good discussion involving a lot of local government people, and we expect some follow-up from that. We are encouraging the MAV to continue with that theme and to start to raise awareness. Some councils were already able to provide examples of how they had tried to deal with the issues. It is probably early days, there seems to have been a very important breakthrough in thinking somehow, and if that can be encouraged it will be a great thing.

Mr STONEY — We like to think we might have played a small part in that, because, as Mr Bishop said to me as an aside, they were more than just frank discussions; they were frank and meaningful.

The CHAIR — The other part of that was disused power poles that are no longer inserted, but they continue to sit right beside the road. The power companies have no pressure or obligation on them to remove those poles.

Mr ANDERSON — We think the Road Management Act may provide us with some extra encouragement.

Mr BISHOP — Does that also provide you with encouragement to do something about the poles you put signs on that are dangerous as well? Overseas we saw collapsible poles, so might we see a change of policy from VicRoads in that area as well?
Mr ANDERSON — I agree. The Act applies right across Victoria, and it will influence VicRoad. For many years we have been mindful of the fact that you can use frangible or slip-based poles — the ones with the little bolts where the pole slides out — and we have used those. Where there have been small 50 millimetre galvanised poles, we have tended not to use those sorts of bases, because the research showed that people were not going to be very seriously injured. You will also notice on the freeways that the large wooden posts have slots in them — two large holes with a cut between them — which have been designed to break easily in a collision without causing problems. As a general comment, as we get new people into the organisation we cannot assume that good practice is just going to somehow filter into them without proper training, so I accept that point.

The CHAIR — I think that is a good point. I compare what we saw in Sweden, where they have very thin poles that are obviously going to crumple if you hit them, with what I travel past every day on the Geelong road. Some of those traffic signs that tell me it is 29 kilometres to Melbourne — and nothing else — have poles holding them up that are as big as this table.

Mr ANDERSON — If they are within the clear zones on the Geelong road, they will have — I know you are going to check — slip bases on them.

Mr HOWARD — There are a number of large ones down there, but they are outside the clear zone. The ones in Sweden you are talking about are the lightweight box trusses.

The CHAIR — Yes. They hold up the same signage, except they come across instead of having the one big one that comes out over the road.

Mr LANGDON — On a local issue, we have had several motorcycle groups coming to see us, as you can imagine, and the issue of signs on the side of the road has been a major concern. The issue of the wire rails was also raised. I was heartened to pick up on a fact that two people have mentioned — that is, it is not so much the wire rail as the multiple posts that are the major concern. Is VicRoads looking into that as well?

Mr HOWARD — Yes, we are. We have had the overseas manufacturers in our office or we have been in their office, and we have impressed on them the need for better thinking and better products. We await those outcomes. We have only recently advised VMAC — the Victorian Motorcycle Advisory Council, which Neil O’Keefe chairs — that we are looking at piloting in high-risk locations on popular recreational motorcycling routes some treatments different from posts and even some protections in the front of the barriers that could reduce the risk for motorcyclists. In fact we are going back to them with a paper in December about those things. We are very committed to doing something, and they are very supportive of that. I think we will see a number of trials around the state in the next couple of years as we go down that path. There are four or five different treatments we would like to trial.

Mr STONEY — I will just make a comment about the Geelong road in the context of always upgrading our technology and information. We took evidence that perhaps some of the bridge abutments and some of the infrastructure on the Geelong road could be better, and I was wondering if you sign off on the design of the Scoresby? How does that work? How does the consortium get access to the latest world best practice on those issues?

Mr ANDERSON — We have had input into some of the performance standards for the Mitcham–Frankston freeway through SEITA, the special organisation to oversee the building of it. In most cases — in fact I cannot recall an exception — the VicRoads standard is required not because it is VicRoads but because it is the Victorian standard. We will have very close working relationships with both SEITA and the consortia, without interfering in the contract. We will keep very close contact with them. The Consortium have a desire to make sure their product is as good as it can be. Their aim is to produce the best there has ever been. That is a great aim, and we do not have an antagonistic or uncooperative attitude to those private sector provided facilities, so I do not see that there will be a problem.

Mr STONEY — Just taking the Geelong road as an example, our information has grown since that was designed and built. How does that feed into the consortium? How does the consortium get access to the latest world best practice on those issues?
Mr ANDERSON — It will be up to them, to some degree, to have a look at best practice, whether it be from Victoria, Australia or elsewhere. Certainly any information we have can be readily made available to them. I will be having regular meetings with SEITA and so will our people in the region. One would hope that we will pass on knowledge both ways. There is no formal process of sign off on those standards that involves VicRoads, but most of the people in SEITA came out of VicRoads anyway, and are familiar with the standards.

Mr HOWARD — In terms of our own methods of working and that continuous improvement you were getting at, we basically review from time to time all our standards and we then apply an improved standard for new construction. We can only really deal with the retrofitting as we are able to by going back and bringing those up to standard, because it is a massive task. We do review our standards, they are signed off by the chief executive, and then they become the standard for new construction.

Mr ANDERSON — On the Geelong road there is much more extensive use of median barriers than there has been before. Some would say there is still a gap down near Geelong where the median is wider than 15 metres and it could have gone all the way. That may well happen one day, but what we are now doing is backing up to earlier projects such as the Princes Freeway at Warragul. We installed barriers on the Eastern Freeway some time back and more recently on the Monash Freeway. We now have a statewide set of priorities to try to bring the older freeways up to current standards. The other option, of course, is to make new facilities absolutely perfect, but it is a matter of using available resources to address older low-standard facilities.

Mr STONEY — I will not continue with this issue, but from memory the person who gave evidence commented that the barrier posts were set in concrete, but that they were designed to be in earth as part of the giving process, if you like. That was just a comment about those barriers, and I was wondering whether we have in fact moved to having a standard where our barrier posts will be set in earth rather than set in concrete.

Mr ANDERSON — I am happy to examine the evidence, but no posts on the Geelong road have been constructed differently from the way we would have expected. There are various views about whether the 9-metre clearance from the traffic lane is appropriate. We have looked at a couple of those installations that are very close to the limit and have drawn a conclusion and advised the Coroner and others that we believe they satisfy the standards that existed at the time and that in fact still exist. If there are specific instances and if there is other evidence that is available, I would be happy to have a look at it, but I would be reasonably confident that all of the installations down there met the standards at the time.

Mr STONEY — I am sure they did. I am just wondering about the future.

Mr ANDERSON — I think it is a matter of determining where you do the first improvement. Our view at the moment is that you go back 10 years or so and look at Morwell bypasses and Warragul bypasses and others and bring those up to standard first.

The CHAIR — As we travelled the length and width of Victoria we heard a lot of evidence concerning the illegal use of mobile phones, including from the family who lost their son out on the Portarlington road, just outside Geelong. What do we now know about the risks and the incidences of illegally using mobile phones?

Mr HOWARD — The research is fairly unequivocal that it is about equivalent to people being at between .05 and .1 blood alcohol level in terms of impairment, for comparison, whether it is hands-free or hand-held.

The CHAIR — It is the same, is it?

Mr HOWARD — Yes, what is going on up here, mentally, that is the problem and not the nature of one hand being off the wheel. It is hard to see that that would assist, but the real problem is your mind is not focused on the driving task. That is a very difficult issue to respond to and in a society where it is all pervasive. Many companies have introduced policies now of phones off when their staff are in a motor vehicle. So there is no hands-free use at all. Two of the large petroleum companies I am aware of have done that, and it is becoming more widespread as well with other companies.

I think as this research information becomes more widely known there will be much more of that. We have a responsibility to promote those messages with the Transport Accident Commission and others, but I think education offers the best chance of dealing with this because enforcement is very difficult and if we get the
community to the point where there is large acceptance of the risks and there is compliance — people decide they will not use the phones in the vehicle — then I think that is the best chance in the short term of getting changed behaviours.

The CHAIR — I am interested in what you say about enforcement because, of course, hands-free phones are legal to use in cars and I know myself the experience of driving along and not being able to safely put in telephone numbers and drive. It is no different to texting.

Mr ANDERSON — It has been raised in a lot of correspondence and you have raised it again. We were concerned at some stage and questioned how much enforcement there was in this area. Illegal use of mobile phone but it is one of the very frequent infringements picked up by the police. Eric will remember, but I would guess it is the third or fourth highest — third highest — infringement by number and the numbers are quite significant. But we do not think we have seen the end of this yet and, as Eric said, it is really almost the nature of the conversation. If an activity is distracting, but fairly simple, simulators have shown that it is not so bad from a safety point of view. Whether with hands or hands-free, if a conversation is going to take your mind off the driving task because of its severity or interest, then the risk of a crash increases. We can never control the nature of conversations in a vehicle whether they be on the telephone or between passengers.

In the package we talked about earlier, the discussion paper that we might propose, regarding young drivers, we would like to also address conversations between passengers in vehicles. Maybe the more people you have the more distracting it might be. There would be some very serious social issues to consider if we intended to ban passengers, especially for young inexperienced drivers.

Mr HOWARD — I would just make an observation that those of us in road safety would dearly like to know how much of the increase in the road toll as it came off the low base in 1997 was related to mobile phone use or economic growth, of course — those two factors — and we cannot know how much of that very strong trend for 4 to 5 years was due to that, but certainly it was at a time when mobile phone use was taking off.

The CHAIR — Are there examples of laws internationally that ban the use of mobile phones full stop, both hands-free and hands-on?

Mr HOWARD — I think one United States of America jurisdiction may have banned them altogether, but it is very rare. The Irish government went very close to doing it a year or so ago, but it has not happened.

The CHAIR — Japan?

Mr HOWARD — I do not know.

The CHAIR — Somebody mentioned Japan to me, but whether that is right or wrong I do not know; it surprised me.

Mr HOWARD — So much good legislation that has happened in this state as a result of your committee’s efforts in the past has come out of encouraging compliance to a point where legislation actually helps the balance of the population to do what is safe as well. So I think we have really got to push the education message very strongly in the short term.

Mr LANGDON — Cyclists and motorcyclists have also pointed out to us that they are a very low percentage of actual road users and their biggest concern is people like my brother. He is a prime example. He used to love riding bikes as a kid and still has one, but probably gets on it about once every couple of years and thinks he can still do exactly the same thing he did when he rode it day in and day out. Is VicRoads doing anything to educate these casual bike riders who may not follow the rules?

Mr HOWARD — The older rider returning to riding is an issue that the Victorian Motorcycle Advisory Council is examining and we are doing a bit of the work. They are aware of it and they are looking at ways in which they might deal with it. Some people suggest they should do a licence test after a certain period of time, but that is as far as it has gone — it is just a suggestion. It is a serious issue, but we have got to do the research and the work to see what might be some sensible options to deal with it and we have not done that yet.

Mr ANDERSON — Or whether indeed there is a relationship between what seems intuitive from your comments, and the actual data. Whether it is really a problem or a perceived problem.
Mr Howard — We had a problem for a few years with the older riders, but this year, for example, it is the younger riders that are the problem. The motorcycle numbers are still well down, but there has been much greater emphasis on younger motorcyclist deaths, so these things tend to go in cycles.

The Chair — Another thing I noticed in Europe in regard to trucks was how they have underrun skirts or protection, and, of course, that is not in existence in Australia. Has any thought been given to the provision of underruns on trucks?

Mr Anderson — One of our advisory councils is the Victorian Road Freight Advisory Council. This issue is on its agenda. Suggestions that government could somehow subsidise underrun protection have been considered but are not universally supported. Our vehicle safety people are working with a couple of companies to try to produce effective designs. We have not seriously looked at any legislative approach. Again, we would run into the national scheme if we did. I do not know if you can add anything more.

Mr Howard — Just as David has alluded to, it is in fact one of the ADR requirements that our minister has brought up and it has been adopted nationally. A regulatory impact statement has been prepared and is out there for comment right now. It would seem to be in this sort of order: side underrun would be difficult to justify; rear underrun is apparently more difficult; but front underrun looks like it does meet the regulatory impact standards. Now, if we can we are very keen to see that ADR proceed because anecdotally we are aware that Volvo and Scandia trucks are coming into Australia, a big part of the fleet, and all the built-in front underrun is being taken off them so that the hauliers can have a bit of extra mass. I think the starting point has to be new trucks. We need to get an ADR out for the front. Our advisory board has discussed this and we are of the view that just as tractor rollover was implemented through the new ones and then after a period of time there was some assistance to deal with the backlog of existing tractors. It is an important issue. There are a large number of deaths, the outcomes are never in doubt with the severity of a front collision, so we hope that proceeds.

The Chair — Thank you for your time.

Committee adjourned.