# TRANSCRIPT

#### **ROAD SAFETY COMMITTEE**

## Inquiry into serious injury

Melbourne — 10 September 2013

#### Members

Mr A. Elsbury Mr T. Languiller Mr J. Perera Mr M. Thompson Mr B. Tilley

Chair: Mr M. Thompson Deputy Chair: Mr T. Languiller

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#### Witness

Mr D. Jones, manager, roads and traffic, Royal Automobile Club of Victoria.

The DEPUTY CHAIR — Welcome to the public hearings of the joint-party Road Safety Committee's inquiry into serious injury. First I extend the apologies of our chairman, Mr Murray Thompson, who is ill and unable to attend today. We thank you for coming. The evidence given is protected by parliamentary privilege. However, any comments outside the hearing are not afforded such privilege. The transcript will become a matter of public record. I invite you to state your name and the name of the organisation you represent for the benefit of Hansard, who we thank for their work, and our executive officers. We invite you to make your presentation.

Mr JONES — Thank you very much. I appreciate the opportunity. My name is David Jones. I am the roads and traffic manager at the RACV, and I have a card with my details on it if it helps. We are very pleased to have this opportunity. Originally we were just going to make a submission, and then I bumped into one of your parliamentary officers at a meeting who wanted to explore the concept of AusRAP with us. What I am proposing to do today is step through the Australian Road Assessment Program, which I will refer to as AusRAP. I have a presentation that talks about aspects of that in the folder that I have handed out, as well as a report with more substantial details of the program and its results. Of course I am more than happy to take questions about any aspect of it.

The Australian Road Assessment Program is a national program owned and managed by the automobile clubs of Australia, so the RACV and its equivalents and our umbrella organisation, the Australian Automobile Association. It is part of an international road assessment program, which you may or may not have heard of when you went and spoke to the Australian Road Research Board at Vermont South. The International Road Assessment Program operates internationally, using an agreed protocol to do road assessments, just like we have done through AusRAP. This presentation gives you a little more detail about that.

The Australian Road Assessment Program is a program intended to save lives by advocating for safer road infrastructure. It uses four protocols. One is risk mapping or crash mapping, which is reported on and published. It uses performance tracking, which is changes in crashes on roads over time. It uses a star rating of roads, which I will go through in much more detail with you today, and safer roads investment plans, called SRIPs, which are not to be confused with the TAC program of the same name — but they are very similar in nature. During the time between your consultation sessions we have updated the star ratings and released them publicly, and that is some of the information that I am supplying to you today.

AusRAP has a star rating program for highways, where we rate highways between 1 star and 5 stars according to the in-built safety features on those roads. A 1-star road is the least safe and a 5-star road is the safest type of road, and I have maps that show you how Victoria's roads rate in that regard. Our star ratings involve an inspection of the design elements of a road and roadside as well as the intersections and the frequency of intersections along it. It uses VicRoads-supplied video data. It codes the attributes of the road every 100 metres, which are then assessed and coded. Depending on the outcome of that coding it is used to determine a star rating in different bands. It only looks at rural highways at this stage and speed zones of 90 kilometres an hour or more.

The details of the methodology were essentially as the Australian Road Research Board explained to you. I saw the transcript of their evidence, where they explained how they use it in their ANRAM model — the Australian National Risk Assessment Model — that they are helping to develop. It essentially uses the same analysis engine as AusRAP. There is a memorandum of understanding between the Australian Road Research Board, Austroads, the umbrella organisation, iRAP and AusRAP to work together to have a common method of analysing roads and then to use the results of that analysis in different ways for different purposes. AusRAP is the partner program, if you like, to the developing ANRAM program, which Austroads and the Australian Road Research Board are developing.

On the next page I have included a map which shows that AusRAP is part of the International Road Assessment Program. On the map the green circles with white stars show you participating iRAP programs around the world. The methodology is constant across all of those countries. It draws upon research primarily out of Europe, England, the United States and Australia. The Australian Road Research Board has made a significant contribution to that program.

The methodology has been updated quite substantially. Some older work that we did that was much more comprehensive and which covered most of Victoria's state highway network can no longer be compared to the

more recent work because it is much more complex and advanced and the methods are sufficiently different that you cannot just compare the results. That work is more complex and more labour intensive to do, so we have not been able to do the same coverage of the road network in Victoria as we have done in the past. Some maps later on will show the extent of the work that we have done.

**The DEPUTY CHAIR** — If I may very quickly interrupt you, Eastern Europe does not register?

Mr JONES — No, it does not, but I think one of the green stars is actually Russia. The extent of the programs in the countries with those marks could be through one state or road authority or it could be a larger area. I do not know the reason why in EuroRAP — which is one particular program, the European Road Assessment Program — Eastern Europe is underrepresented. The only one I have dealt with directly is the Serbian motoring club, which runs the program. Around the world I understand that it is mostly road authorities which run the road assessment programs. However, in some places it is the automobile associations. The Dutch automobile association has been heavily involved. I believe the Serbian automobile association has been heavily involved. No doubt there are many others that I have never dealt with, because there are so many and I am not involved with them all the time. In Australia it is the Australian motoring clubs.

The next slide talks about the work we have increasingly undertaken. I have divided it into stages. I will talk about stage 1 and what I call stage 2B. I did not bring the results of stage 2A today but they are there. I think this gives you a good overview of the type of work we have done. Stage 1 was part of a national program in the lead-up to last weekend's federal election. The automobile clubs rated the Australian national highway network or almost the complete network. The national highways are those roads to which the federal government contributes some proportion of the funding for capital improvements and maintenance.

In the case of Victoria's national highway network, we assessed 2363 kilometres of nationally funded highway. We released those results in July. The federal government committed 50 per cent of the funding to assist with that work, recognising the benefit of being transparent about road safety. In the case of Victoria, we used the VicRoads asset management data they donated that to us in accordance with the memorandum of understanding we have. We used data from 2010, 2011 and 2012. When you were at ARRB at Vermont South you saw the video-rating vehicles with the cameras on them. They are the vehicles we use. The same method of collection of data that VicRoads uses for its asset management system can be used for this purpose. That was released in July.

More recently we have been working on some work for Princes Highway east and west. There were two factors there. One is that the federal government is only contributing to the Princes Highway from Melbourne to Sale and as far as Colac for Princes Highway west. The sections from Colac to the South Australian border and from Sale to the New South Wales border are actually state roads. Even though the scope of our work was to look at the nationally funded sections of road for completeness, we wanted to be in a position where we can produce a map that shows the complete link all the way to the borders because drivers going out that way are probably driving all the way through.

Although this is an advocacy tool, as such, to be transparent about the standards of roads, we see it also as an important tool for the road user to make decisions about driving. Ideally we would like the whole state to be covered so that if someone is looking at a route from A to B, they might be able to choose a safer route or they might be able to adjust their driving or their rest stops, recognising that there are in-built dangers to certain bits of road and they might need to be more careful, drive at a lower speed, take more rest breaks and the like. We are using this information to speak to people like yourselves and to government agencies, but we also make it publicly available for the road user to use, hence the desire to fill in the gaps on the Princes Highway so we have complete routes, as far as we can, for the motorists to plan their trips and be aware of the risks on their trips.

**Mr PERERA** — Is there a booklet or anything that we are able to access?

Mr JONES — Yes, we have some information here and we are updating some of our information and maps. We have literally just completed this analysis on the Princes Highway and some of the things I will go through here about one and a half weeks ago. We have not got to the point yet of actually publishing it. Other than briefing the VicRoads chief executive last week, you are the only other people who have seen it.

The DEPUTY CHAIR — As a matter of interest, do you envisage, for example, a GPS situation where — as you would know, with my GPS I can choose the shortest way or the fastest way, time wise or distance wise — a driver may perhaps be able to choose the safest way? Is that a rating in some sort of app?

Mr JONES — That would be an ideal position to be in, where we covered all the major roads across Victoria for a driver who was particularly concerned about safety. For example, someone who might not have time pressures and has the luxury of choosing a route — perhaps they are doing a touring-type trip — might have a choice of routes from A to their next night's accommodation. They might say, 'I like driving at a slower pace. This road has certain in-built safety features that I would feel more comfortable driving on'. That could certainly be a factor, and we have published information; there is nothing stopping companies taking that public information and talking to us about incorporating it into their mapping devices.

Mr ELSBURY — Through you, Chair; the GPS in my car today warned me every time I was coming up to a speed camera and every time I was going over a train line and also told me that there were traffic problems and road construction up ahead. Why would you not also be able to have a warning system that says, 'This part of the road is potentially dangerous; keep your eyes peeled.'?

**Mr JONES** — I agree. My car warns me when I have been driving for more than 2 hours and have not stopped. An alarm goes off and you have to press a button on the dash. Those sorts of in-built safety features are, I think, the future. They can be embedded in the cars or transmitted to cars for embedded devices in the dash or aftermarket devices that are added on. We do not have a problem with that.

So there is some data there. You will see on the page headed 'Roads rated and released in July 2013' there is a list of the highways we star rated as part of a national program. They are the Calder, the Goulburn Valley, the Hume, the Princes Highway east and west, the Sturt Highway, the Western Highway and the Western Ring Road, excluding roadwork sites — substantial lengths of those roads were, at the time the data was collected, under construction; for example, for duplication works — as well as sections zoned below 90 kilometres.

This is the first tranche of information that was released in July before we did the updated Princes Highway work. We actually looked at those highways and the star ratings, and we also calculated what will be required to lift them to at least a 3-star level as well as to implement every safety project that had a benefit-cost ratio greater than one. We estimated that it would cost \$470 million for the federal government to lift the national highways in Victoria to a 3-star or better level. I appreciate that you have not seen the extent of that — that is on the maps following — but I thought I would just give you that context. That \$470 million would eliminate the least safe roads from the national highway network in Victoria as well as implement a whole series of other works where the benefits would exceed the costs of the works themselves. I will explain more as I go through.

We also estimated that it would save at least 2700 people from serious injury or death over a 20-year period. Regarding the works you have identified — whether it is for wire rope barriers, improved surfaces and the like — using the research from organisations like the Australian Road Research Board, where those treatments, if you like, reduce the severity of injuries or prevent fatalities, we have applied those factors to the works we are recommending and we have estimated 2700 people over 20 years. It is a substantial number. Twenty years is a long period, but that would have a big impact on serious injury and fatality — the road toll in Victoria.

**Mr PERERA** — What is the definition for 3 stars?

Mr JONES — Three stars? I will go through some pictures which show examples of these roads. The next one is talking about the types of things, the key treatments. There are illustrations of where these roads are as well as the types of roads that we are talking about. Without knowing the quantum of what we are talking about, I thought it useful just to explain that first and then show you what it means on the road, as such. The sorts of treatments we looked at were roadside barriers; central median barriers; skid resistance, so improved road pavements or road surfaces, I should say; rumble strips on shoulders and centre lines; and protected turn lanes at at-grade intersections. We used what we call the iRAP tool or the AusRAP tool and we looked at the types of crashes that are occurring and at the standards of the infrastructure along these roads and identified the missing elements that will save the most lives or reduce the highest number of injuries. Consistently we found those five elements were missing from many of the national highways in rural areas, and they are the things that would have the biggest impact on reducing the serious injuries or fatalities.

The first map there shows our star rating of the existing national highway network in Victoria. I am looking at the stage 1 map there. There are several maps in there; it is the very first one. That is the network as it presents, using the data from 2010, 2011 and 2012. That was the most recent we could get at that time.

Mr TILLEY — Sorry, 2010?

Mr JONES — From 2010, 2011 and 2012 from VicRoads. It is from two financial years there, 2010–11 and 2011–12, because VicRoads was in the process of updating half their data at the time and it was not available at the time we wanted to use it; we have done some later work with some of their more recent data. But that shows very clearly where there are black and red sections of road — they are the 1 and 2-star sections of road. For example, on the Western Highway between Ballarat and Ararat, because of the age of the data there is red section to the west of Ballarat. That is largely under duplication now or has actually been duplicated already in the intervening years. Some of the oldest data was on the Western Highway, simply because of the order in which it is done by VicRoads. That large section there has largely been eliminated from there. What it shows on the national highway network, as you can see north of Bendigo on the Calder Highway, are perhaps some of the worst sections of road in Victoria. They are the greatest lengths of 1 and 2-star sections of road. I have some photos of the sections of that road if you are not familiar with it or have not driven it recently. There will be some photos later that will show that.

Mr ELSBURY — Just on that, that is the main Calder Highway, not the alternate included?

Mr JONES — Correct; it is the main Calder Highway. South of Bendigo we have been careful to rate the new duplicated sections of highway. If you turn the page, there is another map. If the \$470 million for infrastructure improvements that I mentioned a little while ago was actually invested in Victoria's national highway network, that would be the result. You would have a whole network being at least a 3-star level, you would have substantial lengths of 4-star and long lengths of 5-star. To be crystal clear, in the handout with the printing colours the section from Melbourne to Geelong is largely 5-star. That is very dark green, just in case it may look dark black to you. It is at the top level of road. It is probably the longest length of 5-star road even now in Australia, and if this money was spent just on addressing some of the final issues then there would be much more length of 5-star road rather than 4-star road through there. I do not have an actual list for that section of road with me now. Just things like extending crash barriers and those sorts of low-level treatments could make a real difference on that road. They are pretty simple treatments but of course have a cost, but it is perhaps already one of the best sections of road in Australia and definitely in Victoria.

**Mr TILLEY** — What is the RACV's estimated investment value again to achieve that?

Mr JONES — It is \$470 million for the national highway network in Victoria. People say to us, 'That's a lot of money', but we quickly compare it to the fact that the state government has already committed to spending \$1 billion over 10 years, or \$100 million a year. In the federal election campaign we said to people, 'It's not unreasonable to ask any incoming federal government to spend \$100 million a year, for four or five years, matching the contribution that the state government is spending on its roads, and this will be the outcome'. If the state government can afford it, the federal government should be able to afford it. So, yes, \$470 million is a lot, but on the scale of what has already been spent it is not so much.

**Mr TILLEY** — You could not achieve all that work in one year anyway.

**Mr JONES** — No. It would probably be beyond the ability of the industry to deliver on it, let alone manage the contracts and the like, but we think that a four to five-year program of \$90 million to \$100 million would not be unreasonable.

**Mr PERERA** — There are no 1 and 2-star roads entered?

Mr JONES — No, because the \$390 million would be all projects where the benefits exceeded the costs, so a BCR greater than 1, but that left pockets of lower volume road which were still at the 2-star level. So then we did some additional work to eliminate those remaining pockets of low-standard road. In order to have consistent routes for the motorists, with a consistent standard along the routes, it is necessary to spend more money, and \$470 million was the total amount to eliminate all 1 and 2-star roads from national highways in Victoria.

There is a pie chart which shows you the percentage breakdown of the network on the next slide there, just to help clarify the mapping — the information on the previous slides. Then we have some pictures of the different types of roads just to illustrate to you some of the differences between the 1, 3 and 5-star roads, where the differences are greater — we picked the top, the bottom and the middle. The 1-star section of road is actually the Calder Highway north of Bendigo, where it has some elements that have road safety benefits. It does have sealed shoulders, but they are relatively narrow in comparison to the higher standard of road, if you like. It does have good-quality line marking, but it has a poor road surface. On that one slide there, what is in red are the negatives and in green are the positives. Because it is a scale, a 1-star road does not necessarily mean that is has absolutely no road safety features; it just means that there are not enough there to lift it as such.

This type of road — a country highway — would have gravel road intersections periodically. Where the local roads intersect, it would probably have a frequent number of driveways — entrances to farms and the like. For example, I have been out in Ararat talking to people about the Western Highway, and I was talking to a lady who lives on one of the farms. Her greatest fear is the fact that she has to turn off into her farm on a road very much like this. She has to stop in the middle of the road, amongst some bends, at risk of a truck running up the rear, and she waits to get a gap to turn right into her property.

Mr ELSBURY — I was there when Tony Abbott's car was almost taken out by a truck on the Calder.

**Mr JONES** — Yes; I have seen the footage of that.

**Mr ELSBURY** — Going up to Colac; I was there when it happened, and it was the scariest moment of my life. I thought I was about to lose three friends who were in the car. Not much fun.

**Mr PERERA** — I think he will fix that stretch.

Mr ELSBURY — It has already been fixed!

Mr JONES — The 1-star road is there. Then we have two examples of a 3-star road. This picture on the left is an undivided road, and the picture on the road is a divided road. They can both be 3-star simply because of the presence or the absence of some features, which are again shown in the red, the green and the yellow text to make some points there. For example, there are some duplicated sections of the Western Highway which remain at 3-star even though they have been recently duplicated. Driving along them — though I have not got out to actually measure them — there is a drain in the middle of the road which has very steep embankments, and my concern is that a car losing control would actually go nose down into the drain in the median. I think it probably should have some sort of barrier along it. That section is so new that it probably was not rated as part of this program, but just driving through I was looking at it and thinking that the road is generally great but that there are still those things that mean it is not quite at the 4 or 5-star level.

A big issue on a lot of these rural highways is the presence of roadside objects, which I should clarify as well — so trees, like in that 1-star road. There are pictures of 2 and 3-star roads — also utility poles. Anyone driving down to Colac or past Colac will see there are rows of concrete electricity poles very close to the edge of the road. I believe that part of the VicRoads upgrading works is either to put barriers around those sorts of obstructions so drivers cannot hit them or, as part of the duplication works, to get them moved as far away in the road reserve as they can from the edge of the road. That is a significant factor in the poor ratings of some of these rural roads — the presence of roadside objects like trees, steep embankments or utility poles.

Turning the page, there is an example of a 5-star road in Victoria, which is the Geelong Ring Road. We are certainly not saying that every road in Victoria could possibly be this standard of road; the RACV is saying that every rural highway should be at least 3-star, and if it is duplicated, it should be designed to a 4-star level, and when it obviously meets volume requirements and the like it might be this sort of 5-star road. Five-star roads have interchanges rather than intersections, plus median and roadside barriers, good road surfaces, wide sealed shoulders, high-quality line marking — all the things you can see in these photos.

The next slide is starting to look at our Princes Highway east work. I explained in one of the early slides that we did stages, where stage 1 was this work on the national highway network more broadly, then much more recently — the data we received in the last week or so — we actually looked at Princes Highway east and west and collected new data. This actually shows the sections of Princes Highway east, from Nar Nar Goon just beyond Pakenham to Sale and Sale to the New South Wales border. The federal government contributes to the

Nar Nar Goon to Sale section, Sale to New South Wales is the Victorian government's responsibility and then the total is there. There are very different traffic volumes and very different standards of road, hence the difference in the results here, but the duplication work is progressing through from Pakenham to Sale in the various stages there. You can see that 61 per cent of the road has been lifted to the 3-star level, 32 per cent to 4-star and some short links — about 1 per cent — to the 5-star level.

**Mr PERERA** — Why do you say it is the Victorian government's responsibility? It is a national highway, isn't it?

**Mr JONES** — No, it is only a national highway as far as Sale. Melbourne to Sale is a national highway, then Sale to the New South Wales border is a state highway, and the federal government does not contribute any money at this point in time.

Mr PERERA — Okay; it is not classified as a national.

**Mr JONES** — There is some breakdown of the results there. You can see that from Sale to New South Wales 35 per cent of the road is at the 2-star level and 54 per cent is at the 3-star level. I have not driven out there myself for a fair few years. Some of my team have been out there, and there are photos and the like. The alignment, the presence of the large trees and the things that we value about this scenic route are obviously a road safety problem as well should someone lose control and run off.

This assessment here, using the data from earlier this year, incorporates the TAC's investment in crash barriers and the like and a whole range of innovative road safety treatments I have documented on the next page. If you turn the page there, you can see the current level of the star rating for Princes Highway east where the duplication and a lot of the work in crash barriers in the centre of the road — median barriers and good line marking, particularly from Melbourne to Sale and Sale through to about Orbost — are delivering big benefits in improving the standard of the road. As far as we can examine, the TAC has spent through their Safer Roads Infrastructure Program, called SRIP, as well — they have invested about \$36 million in low-cost, innovative road safety treatments.

We have listed those — there is a page with a whole lot of dot points on there — just so you can see the sorts of work. We have listed the sorts of things from the VicRoads website that have been done to improve safety on those roads, giving the star rating that we have there. The ones that the AusRAP methodology factors in are in the black text, and we have greyed out the text for the sorts of road safety things that do not get factored into our AusRAP model, like road safety messages on variable message signs. Rest areas are not factored in at this point in time to the AusRAP model. On our colouring roadside posts, the presence of guide posts is something which is factored into the model, but what colour they are does not get factored in. So some of those benefits are reflected through in the star rating. I am nearly finished.

The next multicoloured table shows the before and after. The 'Before' uses the older data we have from December 2011 to 2012. Looking at that same section of road from Nar Nar Goon to Sale, nearly 70 per cent of it was 3 star and 21 per cent was 2 star. Yet after the TAC had spent their \$36 million on those innovative road safety treatments and regular road safety treatments, using the data we have collected in the last couple of months, the star rating has gone up in categories by about 25 per cent, such that now only 6 per cent of the network is 2 star, 61 per cent is now 3 star, 32 per cent is 4 star and 1 per cent is 5 star. There has been \$36 million invested; there is quite an improvement in the star rating of those roads. That is clearly a safer road than what it was back in December 2011 or 2012.

We are using AusRAP as an evaluation tool, if you like. We recognise that using a more traditional — more in-depth, if you like — analysis like MUARC might do analysing crash rates will give a more objective view. But that will take three or four years for crash data to be collected — hopefully there is none, as in there are no crashes. To do that before and after analysis you typically need, say, three or four years of data for before and after something has changed on the road network to do an evaluation. We will wait for that and see whether it corresponds to this. But this gives a more instant way, based upon past research of the benefits of different road safety treatments, for government to be able to give feedback and make transparent to people the benefits of investing in road safety infrastructure.

On the final slides there we have done a before and after of sections of road at a lower level because the earlier maps are at a scale where you cannot see some of the detail. The before and after show what the differences

mean on the ground within some of those communities. Morwell has a stretch of 5-star road, which I believe is where some centre-of-road crash barriers, wire rope barriers, have been put in place as well as edge-of-road ones, and the road has been duplicated. The page after that looks at some of the detail in Moe. In the west-bound direction of the dual carriageway there was a 2-star length of road which has now been lifted to a 4-star length of road, with some median wire rope barriers as well.

**Mr TILLEY** — How often have you driven the road personally over the last three years?

**Mr JONES** — Myself, I have been to Traralgon only once in the last year and my colleagues, similar. Team members I have sent down there twice, I think it is; one of them lives down there.

**Mr TILLEY** — I am just interested in your personal experience of using it and if you have seen the difference yourself, experienced the difference.

Mr JONES — I have not had reason to drive down over the longer period. I was in a different role before then. No, I have not personally experienced driving in the time period that this assessment has happened. My last trip down to Traralgon, I think, was roughly four months ago, so as such I have seen it since the work has been done.

Finally, the very last slide shows some work that came out of Queensland earlier this year, where the RACQ was looking at the Bruce Highway. They worked directly with iRAP. They quantified the cost of crashes on different star-rated roads. From this work we estimated that every increase in star rating can reduce crash costs by 40 per cent to 60 per cent, as shown on that table. That is using Australian data to determine those numbers rather than research from elsewhere. We think that is very important. We had previously estimated that it was about 50 per cent using international research. This worked out that depending on the changes it is 40 per cent to 60 per cent, which correlated well to what we had previously determined.

There is one last slide with recommendations on the next page. Part of the reason we did this work was to try to convince the federal government to invest the sort of money that we were looking for into the national highway network in Victoria. The state government is already funding the collection of the data. We would like to see AusRAP incorporated into the standard project implementation processes, if you like, so that whenever the state government or VicRoads invests or builds safety-related infrastructure using state or federal funding they also do an AusRAP rating for that length of road and update the data so that there is a common map of the Australian highway network. We would like it to be complete — all the state and national highways in Victoria. When the TAC — —

Mr TILLEY — Did you not say earlier that the data is not accurate until about 2010–11?

Mr JONES — The data we obtained through VicRoads? VicRoads collects the base level data for the network every two years. They alternate half of the state every year. But once that is done as a complete set for the Victorian highway network, VicRoads knows where it is spending the money. If it puts in crash barriers between two towns, it knows where it has sent spent the money, so then it could update the star rating and provide that data to us to update the map or, through a joint arrangement, it could update the data.

It also knows when sections of duplication have been finished, because it is managing the works on behalf of the federal or the state government and the star rating could be built into the process and then be updated. That would remove the need for either VicRoads or us to completely review the whole network every two years, not knowing where work had been done, and just focus on where the changes are known to have been made that will have a safety outcome and then updating the data at that point. Once the initial bite of getting a complete picture is done, it then becomes a series of much smaller investments as part of normal project processes to keep the data fresh, updated and publicly available.

**The DEPUTY CHAIR** — Thank you for your very comprehensive presentation, which has answered some of the questions we had anticipated. For the benefit of time, I will ask my colleague Jude Perera to ask question 4.

**Mr PERERA** — Before that, I have a quick question on the classification of federal and state road responsibilities. Is that a static one or does that change or upgrade? How do they do the classification?

Mr JONES — It is very hard to find the information, but there is a national land transport infrastructure network which incorporates rail and road and, within that, the roads the federal government actually contributes to. The roads linking the capital cities or major industrial or agricultural production regions are contributed to on a 100 per cent, 80 per cent or 50 per cent level by the federal government. We have just called them the national highway network for simplicity because the federal government has some responsibility for funding them.

**Mr PERERA** — So how come there is federal responsibility from Nar Nar Goon to the New South Wales border — the same road?

Mr JONES — That is what is declared. It is only part of those roads. The Princes Highway, as you know, goes from South Australia to New South Wales, but the federal government is only contributing from Colac to Melbourne to Sale. It must be on the basis of the economic production from those regions and perhaps the links to the export port or rail terminals and the like, rather than the sections beyond. I do not know the history of how that was determined, but I am presuming that is the case from the description of the land transport network.

Mr PERERA — Thank you. The RACV states that the Australian Road Assessment Program, AusRAP, received commonwealth government funding in 2013. However, there has not been a commitment to fund the program beyond this year. That is why you are lobbying for \$100 million a year from the federal government. Why are most road assessment programs in developed countries funded by government but not in Australia? Do you have any idea?

Mr JONES — I do not know the history of that either. A lot of the research analysis out of AusRAP came from Australians. Although it is part of the International Road Assessment Program and the organisation is based in London, its CEO is an Australian living in Brisbane. That person, Robert McInerney, undertook a lot of the underlying research. He used to work at the Australian Road Research Board, which is where the research took place. I do not know what the process was, but at some point the Australian clubs recognised that this was a way forward for advocacy and transparency. It enables comparisons on roads between states. It was being developed in parallel with EuroRAP. At some point they came together, and now they are in a similar situation.

The states are now interested in it. VicRoads is certainly interested in AusRAP as a tool; they have been talking to us. New South Wales is undertaking some projects as well, largely to try to work towards getting some commonality with the Australian National Risk Assessment Model project, or ANRAM, led by the Australian Road Research Board.

**Mr TILLEY** — I want to speak about the ANCAP ratings. To what extent are ANCAP ratings considered by consumers when purchasing new vehicles? This is getting a little bit off the subject. We were talking about AusRAP, but this is complementary to it.

**Mr JONES** — That is something that I cannot answer for you. We have a separate vehicle engineering team that contributed to our submission. I am not personally involved in ANCAP or its results, but if you like I can arrange for a person to speak to the committee about ANCAP and answer those sorts of questions.

Mr TILLEY — Sure. One of the executive officers will take that on notice. We will pursue it.

**Mr JONES** — It is my pleasure to help with that.

**Mr TILLEY** — Terrific. We were principally talking about AusRAP. Apart from safety does the AusRAP star rating system afford any other opportunities when it comes to the driver?

Mr JONES — I am not sure that it does. It is about being transparent about road safety. It is multipurpose. It is trying to take some complex concepts and present them in a way in which anyone can understand them. As we said at the start, information is available at present about the standard of a road for drivers. It could be more readily available if it was more widely adopted, integrated into advice and updated more frequently. The other side of it is advocacy or lobbying to try to put pressure on governments or bureaucracies to draw attention to road safety issues. I suspect we are using it as much as we can to try to put the road safety debate and investment in infrastructure on the table for everyone to see. We are trying to be as transparent about it by basing it in facts and on methodologies that are internationally accepted. I am not sure what else we could possibly do, but I am happy to take suggestions.

**Mr TILLEY** — Where is the carrot for the motoring public through better, safer infrastructure and a better vehicle fleet? You want governments to invest in this and to have data and a whole range of things. Where are the benefits to the motoring public, putting aside safety? Safety is paramount, of course — that is what this inquiry is looking at — but is there anything else you might see?

Mr JONES — I was representing one of the elements because there needs to be investment in safer drivers through learner driver programs as well as reminding people about the road rules and educating them, so there is a personal responsibility for the driver to be safe as well as educating them about safe vehicles and the like, which goes to your question about ANCAP. This is the other aspect.

We want to get to a situation where a driver who makes an honest mistake, even if they are in a safe vehicle and are otherwise driving safely and they leave the road or leave their lane, is not injured or killed or does not kill or injure another person. That is where we want to get to. We are not saying that AusRAP is the only thing that is required, but it is one of a suite of activities which our organisation is trying to do through raising awareness of infrastructure standards. We are also actively engaged in supporting the ANCAP program and putting our own educators, at our own cost, into schools and community groups to educate people and refresh their knowledge about road safety. That whole suite is required to ensure that the driving experience is safe — as safe as it possibly can be.

Mr TILLEY — There is a significant investment in roads, and we are seeing a significant reduction in fatalities and serious injuries on our roads, particularly in Victoria's jurisdiction; that is currently the status quo. However, if you look at it on a national basis, for example, at the Stuart Highway — I lived in the Northern Territory and travelled the road between Threeways and Darwin quite frequently — you can see the change they have made to the speed limit, but their fatalities and serious injuries are considerably less than they are on the Hume Freeway.

Mr JONES — Yes, and they have many complex issues in the Northern Territory, with the drivers themselves as well as the vehicles they are driving and the speeds and the standards of the roads. The AusRAP work highlights the differences between the states and territories over infrastructure standards, but some of the other work we are involved in also highlights the crash rates and the fatality rates of the different places as well. The Northern Territory is outstanding in that way — outstanding through being significantly different, not good.

**Mr TILLEY** — This is not necessarily part of this inquiry, but if national highways or state highways such as those in the state of Victoria meet a significantly higher standard in safety, should consideration be given to changing the speed limits? Do you have a view on this? You can say whether it is the view of the group you represent, the RACV, or your own view.

Mr JONES — I have worked in country areas and more remote areas than some of the places we are talking about here today as well, and I know how sensitive people are in rural communities to the issue of speed limits. If you are frequently driving long distances between towns, a minor change in speed limit can have a significant impact on your day. It can add half an hour to a trip to Mildura from Melbourne, which means you are driving for longer and you are more fatigued and there is less you can achieve in the day et cetera. I know it is a very sensitive issue. People have to be aware of and adjust their driving behaviour to the standard of the road. If there was a length of road of very, very low standard, the bottom of 1 star, then perhaps we would need to be looking at other changes to improve safety such as lower speeds, more warning signs and the like on those particular roads. If we can get a road network to at least a 3-star standard, then there should be no reason why the speeds that we have at the present cannot be safely travelled by responsible motorists in a quality vehicle because this would be at a point where if you do make a mistake, as I spoke about before, you will not be at risk of dying and the chances of severe injury will be dramatically reduced.

Mr TILLEY — If you take, for example, the Hume Freeway between the border of New South Wales and outside Melbourne, we are looking at achieving a significantly higher rating. Is the potential there for a trial? We take on board and talk about other parts of the world; we talk about the European experience, where significant parts of their road network are capable of doing that. What about in our backyard? Do you have a view, say, about the Hume Freeway? Could the government look at doing something along certain sections of that freeway?

Mr JONES — Are you suggesting a higher speed limit for that road — from 110 to 120 or 130?

Mr TILLEY — I am.

Mr JONES — I think we have to balance some risks that come from the drivers as well as risks that we cannot control. I am not sure that our drivers are trained to a level to handle much higher speeds consistently across the board, with the spectrum of drivers out there. Then you have the issue of the speed differential between vehicles. But the other is what we cannot control, such as animals on the road. I recognise there is a tricky balance here with a driver's ability to stop. If a kangaroo hops onto the road somewhere along that long route, could a driver respond at 130? Would they have much chance at 110? Personally I do not know, but those risks go up.

**Mr TILLEY** — It is significantly hypothetical, is it not? I spent many hundreds of hours working the Hume Freeway in the highway patrol, and I do not recall many incidents of brown cows and kangaroos on the Hume Freeway.

**Mr JONES** — I do not drive as much as you do.

**Mr TILLEY** — I am doing 60 000-plus kilometres a year.

**Mr JONES** — It is three times what I do and on roads I do not drive along. I do not know what the experience is like. But I remain concerned about the ability of the full spectrum of drivers to handle higher speeds like that, even if the infrastructure was lifted to that level. I would have to defer to other experts on the driver behaviour, the psychology and the physics of it to give me advice on that.

**Mr TILLEY** — Yes. I was just trying to explore the issue a little.

Mr JONES — Sure. I appreciate that fully. That is the role of the committee.

**Mr ELSBURY** — We have AusRAP and we have black spots. What are the benefits of AusRAP over the national and state-based black spot programs?

Mr JONES — The black spot programs look at the actual crash history at specific locations, typically spots like intersections and the like, though it can be lengths of roads. But they are responding to where crashes have occurred; they have a crash history. AusRAP is relatively predictive in nature — that is, it is looking at elements of road infrastructure that research has shown increase the risk of a crash. Rather than it being responsive and waiting for more people to be injured or die in a particular area, it is saying, 'There's a higher risk on roads with these features, and we might expect that there could be crashes or fatalities on those roads. With the safer roads investment plan, these are the things we could do to try to prevent that situation occurring so they never become black spots'.

We recognise that as crash rates continue downwards — and when you start looking at bigger road networks, especially rural road networks, often you will not get things occurring at black spots, because the crashes are scattered along lengths of road — they will not meet the criteria for the black spot programs. AusRAP actually looks at the features of the road and says, 'There are trees on the side of the road, so over time you are likely to have run-off road crashes scattered along this road, with poor outcomes through injury or death because of the features of the road and the features of the roadside'.

The DEPUTY CHAIR — David, we thank you very much for your very comprehensive presentation and for answering all our questions. You will receive a copy of the transcript in about two weeks. You are welcome to correct any factual or typographical errors. We thank you again for coming.

**Mr JONES** — Thank you. It was my pleasure.

Witness withdrew.