

ROAD SAFETY COMMITTEE

Inquiry into federal-state road funding arrangements

Melbourne — 22 March 2010

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Professor J. Stanley, senior research fellow in sustainable land transport, Bus Industry Confederation.

The CHAIR — Thank you very much for being here today to assist the Road Safety Committee with its inquiry into federal-state road funding arrangements. As you can see, we are recording the evidence taken today. You will get a copy of the Hansard transcript which you can correct as appropriate. Could you start off by introducing yourself, and we will ask questions as we go.

Prof. STANLEY — I am Professor John Stanley. I am from the Institute of Transport Logistics and Studies in Sydney, and I am presenting on behalf of the Bus Industry Confederation, which is the peak body for the bus industry in Australia. I have prepared a submission and a set of PowerPoint overheads, and with your leave I will go through those and give you a run-down.

The CHAIR — Sure.

Mr KOCH — On those grounds, John, you can speak for both New South Wales and Victoria.

Prof. STANLEY — Absolutely. And Queensland!

Overheads shown.

Prof. STANLEY — The focus of my presentation is a report that I co-authored for the peak public transport bodies in Australia which is called *Moving People — Solutions for a Growing Australia*. This report was given to the federal Minister for Infrastructure, Transport, Regional Development and Local Government, Anthony Albanese, two weeks ago in Canberra. I am happy to make copies of it available to you. It sets out a national policy framework for land transport in Australia, and I want to talk about your funding issues in the context of that report. What I intend to do is summarise in the first half a dozen slides or so the content of this report and then talk about some of the major issues or implications in terms of what I think that is saying for where we are going with road funding in Australia.

The three principal goals that any transport programs really need to address can be summed up pretty simply as economic competitiveness, environmental sustainability — and in the current context the main focus around that is greenhouse gas emissions — and thirdly, social inclusion. In a sense that is the triple bottom line that all transport programs need to be addressing. That is not just in Victoria; that is in Australia, that is internationally. If you look at the goals that any country around the world sets down for its transport programs, these are the sorts of things you will see. They may give different relative emphasis to those three goals, but they are the common platforms that you will see that all transport programs around the world are intending to achieve.

The graph on this slide shows you in billions of dollars but more importantly as a percentage of GDP, which is the line that starts off high up on the left-hand side and then declines, the investment in transport in Australia from 1963 to 2008. You can see along the bottom that for the first 10 years or so it was running at around 3 per cent of GDP. By the 1990s it was running at more like 1.5 per cent. In other words, in terms of the relative size of the economy, the amount we have been investing in transport has about halved over those three decades. You will see there was a significant recovery back in the first decade of the 2000s, but that has nowhere near closed the gap. It has got us back to something like 2.5 per cent of GDP, but after a period of three decades of decline in investment share you would expect to see some problems in our transport systems. These are the sorts of critical issues that we are seeing around the country now in terms of our land transport systems. They are not all due to the declining trend in infrastructure, but that is certainly a contributing factor.

In terms of congestion costs, the Bureau of Infrastructure, Transport and Regional Economics in Canberra has estimated that congestion costs us \$10 billion a year in Australia. That is expected to double by 2020. The Victorian figure is \$3 billion, again doubling by 2020. That is about 1 per cent of GDP; that is a huge cost. Greenhouse gas emissions from road transport or transport more generally are the third biggest sector in terms of greenhouse gas emissions in Australia. It is one of the fastest growing, and most of those emissions are from road transport. Many people have limited capacity to engage in the opportunities that our society makes available because they do not have good mobility options. In other words, they are transport excluded.

Road injuries are increasing. We have been making some progress in cutting our road toll but nationally it is around about 1450. But if you are look at what is happening to serious injuries, they are growing, and they are growing quite fast. So we are about 30 000 per annum at the moment, but we were down to 20 000. You can see we are going through quite a substantial increase in the number of serious injuries.

You have to be careful about how you say this, but obesity is a growing concern. It is a serious problem in our community now, and it is quite extensive in terms of the number of people who are confronting those sorts of problems and the consequences, like type 2 diabetes and so on.

Energy security is the next point. At the moment Australia is 50 per cent self-sufficient in oil. By 2020 we expect to be well down on that figure.

We have some serious issues that we need to address in our transport sector, and you cannot consider what to do with road funding in the absence of those issues. They really provide the context that you need to have in mind when thinking about road funding. This document, the Moving People strategy, sets out a seven-point action plan to tackle those problems. The virtues, if you like, of this action plan are that most of the things we have listed there will tackle more than one of those problems; if you like, it is a virtuous approach.

I guess coming from the public transport sector you would expect me to say, first, improved investment in public transport. That is a cry that you see in the papers every day; I am not Robinson Crusoe in suggesting we need to be doing a lot more for our public transport systems. Not only do we have congestion on the road network, but anybody who travels on a public transport services in the peak, whether it is tram, train or bus, will see the same sorts of problems.

Whilst the focus of what I am talking about is moving people, we clearly need to have as well a significant program targeting freight, both capacity investment and efficiency improvements — things like making better use of high-productivity vehicles.

I want to focus on road pricing reform in my presentation shortly. I will not go into the detail now, but I think that is the lynchpin for going forward with these processes.

We have to make sure that everybody in our community has reasonable transport options and reasonable mobility options so that they are able to do most of the things they want to do most of the time. We have significant evidence that that does improve people's wellbeing. We need more compact walking and cycling-friendly urban settlements; sometimes that is called transit-oriented development but you will probably all be aware of the discussion in the *Age* in Melbourne over the last week or so. The general thrust in Australia for our cities needs to be much more focused on more compact walking and cycling-friendly settlements.

We have to do a lot to improve vehicle fuel efficiency. If you look at what happens at the level of the individual vehicle, whilst our individual vehicles have been getting slightly more fuel efficient, we have been buying larger cars. The consequence of that over a long period of time is that we have not really been making any net improvements in terms of the efficiency with which we use our vehicle fleet. We have to make substantially more progress in that area, particularly to reduce our greenhouse gas emissions. I think the answer to that is not the voluntary approach we have to targets at the moment but to go down the path of mandatory fuel efficiency targets.

The CHAIR — That would also affect, I suppose, the wear and tear on roads. The heavier the vehicle — —

Prof. STANLEY — The issue of fuel efficiency would apply across the board, but the area in which we need to do most is cars rather than trucks. Most of the chassis in our trucks are imported, so we are actually using pretty much best practice European technology there. That is not true of cars; in the cars we have a much higher local production scale and our local production tends to be of larger vehicles where the fuel economy is pretty poor in general. More fuel-efficient vehicles are probably going to drive smaller vehicles, which will help in terms of road damage, but the primary focus of that is in fact to cut greenhouse gas emissions.

Mr KOCH — When you are talking from the point of view of vehicles, what sort of fuel usage are you looking at for vehicles? I know our larger vehicles are probably running at 8.5 to 10, or somewhere in there. What sort of fuel efficiencies are you looking for in person transport?

Prof. STANLEY — We need to be getting down to the European levels, and I think that is within about five years time. We are talking about more like 5.0 there. We have to be down to around about 5.0 litres per 100 kilometres. I am mainly interested here in greenhouse gas emissions and the current average greenhouse gas emissions from the Australian car fleet is about 230 grams per kilometre. The European target at the moment is 130 then 90, and that is the kind of scale we have to be talking about.

Mr KOCH — That is the target. What is the reality?

Prof. STANLEY — The reality will be more than that.

Mr KOCH — Obviously. Do we know what that is?

Prof. STANLEY — I do not know the answer to that.

Mr KOCH — In Europe?

Prof. STANLEY — I do not know their current average fleet target. But we need to be trying to replicate what Europe is achieving if we are going to make any substantial progress in terms of fuel economy and greenhouse gas emissions.

Mr KOCH — In saying that, you have quoted our usage. What is our target?

Prof. STANLEY — Our target?

Mr KOCH — We do not have one?

Prof. STANLEY — Our target at the moment is voluntary agreements to reduce our emissions, but they will get us nowhere near the point where the Europeans are. There is a graph in this report which shows the actual targets for Australia compared to Europe.

Mr KOCH — Thank you.

Mr LANGDON — I refer to the second point in your seven-point plan — freight capacity investment and efficiency improvements. Are you just talking about road freight or are you talking about rail freight as well?

Prof. STANLEY — No, the lot.

Mr KOCH — Air freight? The whole works.

Prof. STANLEY — If you look at the problems that I talked about here, these go across the board. In terms of trying to look for solutions to these, we need to do two things in terms of freight: we need to actually improve the performance of our road freight sector, and we need to get some more diversion across from road to rail than we have achieved in the last 5 to 10 years. We have not achieved very much at all in that regard. Things like intermodal hubs are really important, but until we get our pricing right it is going to be very hard to achieve that. I will talk about that a bit more.

Mr LANGDON — Again the issue comes back to the point that a lot of people I know would like less and less put into road freight and all put into rail freight. They believe rail freight should take up everything.

Prof. STANLEY — That is certainly not going to happen. You cannot move the distribution task around our cities by trains. You can perform the trunk task by trains and you can do a lot more going into things like the ports by trains. That is where I believe intermodal hubs on the edges of our cities can play a much bigger role than they do now. But the market at the moment for the road-rail balance is completely by bad distorted pricing. Until the freight sector is made to properly account for the costs that it creates, then you are not going to get the right signals being given to freight movement, and as I say, I will talk about that again shortly.

The significance of these issues I have talked about is such that we think the federal government needs to take a much more active role in this space at the moment, and there is no doubt that the federal government agrees with that position. They have already got the Building Australia fund in place where they are allocating some money at the moment, not as much as they had originally intended because of the global financial crisis but there is an increased federal interest in this area. You will have seen the COAG communiqué resolution in December where they are looking to a much bigger involvement of the federal government in our cities, working in partnership with the states.

We believe that there are three particular areas that the federal government needs to focus on. We do not have a national transport policy, and you cannot go pursuing these problems if they are national problems in the absence of a national transport policy. This document sets forward an approach that we think will do that.

The federal government needs to provide some strategic funding support, particularly for major capital initiatives to support some of the outcomes that I will talk about shortly. The federal government has also got some specific policy responsibilities in some areas, and emissions are a matter that comes directly under federal government control because of the Motor Vehicle Standards Act under which those things are set, but also road pricing will need federal leadership.

The CHAIR — Just on the emissions, some would suggest that the policy of providing the bulk of the funding to have your car converted to LPG somehow contributes towards lessening the emissions.

Prof. STANLEY — It does, but it is pretty marginal in terms of the overall scheme of things. If you look at the sorts of things we have to do, say over the next 20 or 30 years, to achieve the sorts of reductions in greenhouse gases that international countries like the UK, Canada and so on, are talking about, then it is much more dramatic than that. We are talking about an 80 per cent or 90 per cent reduction in emissions over the next 30 years. Gas is a useful interim measure but it is not going to take us anywhere near that sort of scale of change.

The CHAIR — So the governor in California, Arnold Schwarzenegger, insists on driving his Hummer and says that there must be a way of making Hummers a lot more efficient.

Prof. STANLEY — I wish him luck. If you think about this as a process, I have talked about four or five critical problems on the left-hand side. If you go to the right-hand side, there are a few common strands that need to run through our land transport policies if we are going to solve those problems. There are three things. We have really got to reduce the need to travel, not the number of trips but perhaps the distance we actually have to travel to undertake those trips. That is about the way we organise our cities, for example, the way we organise our regional towns, so that you do not have to travel as far to undertake the sorts of activities you need to undertake.

We need to encourage travel by what I have called 'lower-impact means'. In other words, that means a bigger role for public transport, walking, cycling but also for car sharing. If you want a really cheap way to achieve a lot of these objectives, then increase our car occupancy rate by about 10 per cent. A 10 per cent increase in our car occupancy is about the same as doubling public transport use and it is in fact going down, not going up, in terms of all these sorts of consequences. That is something to really think about. What can we do to improve our car occupancy, which at the moment averages something like 1.2 or 1.2 and a bit, which is really abysmal? It is going down. It is less than that in the morning peak at more like about 1.14 — that is, for every eight cars that go past, one has got a second person in it.

The CHAIR — Car-pooling is a very important issue. What sort of advice would you give in terms of incentive to increase that rate?

Prof. STANLEY — I think there are two things. There are some practical things you can do on the road. An example would be high-occupancy vehicle lanes, which we have tried in the past and simply not policed. It was done on Hoddle Street, for example, where it just creates basically an easier run for anybody who wants to go in.

The CHAIR — A dedicated lane?

Prof. STANLEY — Dedicated lanes for cars with two or more or three or more people in them, depending on where you want to draw the line. Unless you police those and police them vigorously, it is a waste of time. I also think the motoring organisations need to run publicity campaigns, awareness campaigns on this with their members to alert them to the fact that this is a serious issue. There are a range of ways we can go about tackling it, and one of them, which has probably got a really low cost to everybody, is just to try to make sure that, say, for every fifth trip you make somebody else who would otherwise have gone on their own travels with you, and that makes a big difference.

The CHAIR — We are trying to set this up in Geelong where we would have a database controlled by local government or whoever that people can tap into.

Prof. STANLEY — Of people who are prepared to car-pool?

The CHAIR — Prepared to car-pool, but it just did not go anywhere.

Prof. STANLEY — No. I think there is a scale threshold.

Mr KOCH — There is no incentive; that is the unfortunate thing.

Prof. STANLEY — No, that is right; there is no real pay off.

Mr KOCH — There should be something in registration if people are carrying two versus one, or there should be a carrot.

Prof. STANLEY — As long as it is an incentive you can police.

Mr KOCH — Yes.

Prof. STANLEY — That is right, and I think that is the way you can actually do it. The critical fulcrum, if you like, for connecting these problems on the one hand with solutions on the other to me is road pricing reform. I will now go on with that.

Mr LANGDON — On the issue of car-pooling, it used to be seen on American sitcoms where in the past car-pooling was part of their natural way of life. Do Americans still do that as much as they did?

Prof. STANLEY — No. I think they have got the same problems we have got. There is a very low car occupancy rate. When you are in certain places it is the sort of thing that employers can encourage and there will be particular cities that do it really well, but as a general rule car-pooling has not delivered anywhere near as much as it has got the potential to deliver.

Pricing reform, I think, is the key to this. I will talk about this in the next line. What you want a pricing system to do is to give the right signals to road users when they make their travel choices so that they are confronted with the costs that those choices create. Those costs we often call 'externalities'. Externalities are costs that the motorist does not incur him or herself but they pass on to the wider community. Congestion costs, for example: every additional car on the road in the morning peak adds about \$1 in the really congested parts of the network to the total cost of all cars moving but the individual motorist per kilometre probably only incurs about 10 cents of that. There is an added cost to the wider network. The same thing applies with accidents, the same thing applies with greenhouse gas emissions. Unless motorists are confronted with those costs and have to take them into account in their travel choices, then you will not get the right sort of solutions to our land transport problems that I have talked about.

The effective pricing system that I want to talk to you about makes users accountable for their costs. By so doing it will give you a much more efficient use of our road space. I want you to think about this. In school holiday time the actual traffic volume on the road does not drop by more than about 5 per cent or 6 per cent. It is not a lot, but congestion almost disappears. Why is that so? Because the supply curve, if you like, of road space, or the cost curve, is almost vertical. When you are in really congested conditions every extra car adds massive costs on to the rest. If you can get a small reduction in traffic of 4 per cent or 5 per cent so that you do not encourage more to come back on the road when it is going more freely, that will give you about three-quarters of your congestion cost savings. A small reduction in traffic, if you can sustain it, will deliver you massive benefits in congestion reduction. If you could cut traffic by about 4 per cent or 5 per cent, it would be worth probably \$2 billion a year in Melbourne.

A better road pricing system will give price signals for when to invest and where to invest. We do not have that at the moment. Really importantly, it will provide revenue to fund capacity expansion, both road and on public transport. Those of you who are familiar with the London congestion pricing scheme would be aware that two of the reasons it was successful were that they designated the money — hypothecated it - to go into transport but more particularly they improved public transport before they put in place the congestion charging system.

People did not see this as another tax: it was a price that was used to improve public transport services. They could see the connection between the congestion tax and better conditions on their road network.

And what happens at the moment with Australia's road pricing system? At the moment the only specific price for road use in Australia is the road damage charge paid by heavy vehicles. I spent nine years as deputy chair of the National Road Transport Commission from 1990 to 1999. We introduced that charging system in Australia whereby, depending on the number of axles they had, trucks paid differential registration charges, and because of their size that correlates with axles they consume different amounts of fuel so they would therefore pay higher fuel charges, fuel taxes, and that is the only link at the moment in our road system between pricing and use in any way, and it is only in fact for road damage.

If you think about all the costs for trucks on our roads: they contribute to road damage, they pay for that; they contribute to congestion, they do not pay for that; they contribute to greenhouse gas emissions, those are not charged for at the moment; they contribute to accidents, a little bit of that is paid for by insurance, not all of it. At the moment most of the external costs of road use, and I have just used heavy vehicles as an example but the same applies to cars as well, are ignored. They are not priced in our current funding system, and there is no connection between our current pricing and the investment decisions that we make.

What I want to suggest to you is that this is the way forward. We should get rid of excise charges, we should get rid of registration, and we should replace them with use-based charges, which I have said should be set on marginal social costs. What are marginal social costs? They are the costs that road users cause the community when they use the road at different places and at different times of day. So, for example, if you want to use Punt Road in the peak hour on a Monday or Tuesday morning, you would pay a very high price. If you wanted to travel out in Benambra or somewhere mid-week, you would pay next to nothing. The Dutch are leaders in this sort of approach at the moment. The Dutch are using GPS technology and are a couple of years away from implementing this sort of system I am talking about.

The CHAIR — It is Big Brother.

Prof. STANLEY — I think the Dutch are good. I like the Dutch; they try things. With the GPS technology they will actually be tracking vehicle use by place and time and the price you pay for road use will be dependent on how much you use your vehicle, where you use it, when you use it and the characteristics of the vehicle — whether it is a low-emission vehicle or a high-emission vehicle. I think this is starting in 2012 for trucks and 2013 for cars. Have a good look at that; I think it is a really exciting development.

The next step, once you have got that charging system in place, is to make sure that you hypothecate adequate revenue to fund your road maintenance program but also road improvement and alternatives, in particular better public transport, so people have a choice. For example, if you think about low-income people being confronted by this sort of charging system, some of them will hurt a bit. You need to make sure that you do not have a regressive pricing system here that disadvantages low-income people who have no choice other than to use their car by making sure there are decent public transport services in place to give them an opportunity.

Mr KOCH — I think that is half the battle.

Prof. STANLEY — It is an important part of this process. Again, I think that is one of the key lessons we learnt from London: that you have really got to hypothecate the revenue and make sure it is used to give people a decent alternative.

Mr WELLER — With your GPS — that will not charge you when you are on a toll road?

Prof. STANLEY — You would set it up so it didn't.

Mr WELLER — It would be the same as when you are in Benambra: it would be free.

Prof. STANLEY — You would be paying a toll. Except you would still be paying the externality costs. The toll really only pays for the cost of the road, but there is still, for example, greenhouse gas emissions. If we had in place the carbon pollution reduction scheme, you would be paying whatever the price of carbon is and that would take into account your greenhouse gas price. There would probably also be a price for accidents that is

not necessarily covered because the tolls do not cover any accident costs imposed on other people. Most of it, though, would be the toll.

The CHAIR — They have come on in leaps and bounds. The last time we were in Europe there were a lot of problems in relation to privacy and civil liberties in terms of accessing some of that information, getting the database out of a black box in the vehicle, so they have come on in leaps and bounds if they are willing to go down that path.

Prof. STANLEY — The Dutch have put a lot of focus on the back office systems you need to have in place to protect those sorts of concerns.

The CHAIR — Even in terms of their speeding — they could obviously detect if they were speeding.

Prof. STANLEY — The Dutch stuff is really well documented in terms of reports that are available on internet. If you are interested to follow that up, you can find a lot of the reports on how they have tackled these privacy issues and so on. I think that if you are going to go down this path, there is a lot to be said for an independent commission to recommend on appropriations and to actually make some proposals about where we ought to be spending our transport money. I think at the moment our focus in our transport system is very short term.

I did a report a couple of years ago for the Australian Davos Connection called *ADC Infrastructure 21 — From Incrementalism to Transformational Change*. It was an infrastructure development plan. I ran this conference for the Australian Davos Connection and wrote the major chapter in it. One of the things we found there — we found it in transport, we found it in energy, we found it in water — was this: we in Australia are really bad at strategic planning in the way that we look after our functional areas. We are really poor at having a long-term view and sustaining an approach to tackling problems from a long-term point of view. I think one of the benefits of commissions, as distinct from government departments, is that they are able to take a long-term view. They do not get caught up so much in the day-to-day of fighting fires, and they are able to engage much more with the wider community than departments can. Community engagement — and this stuff depends a lot on community engagement — is difficult for government departments to do.

I suspect if you are going to go down this sort of path, as I think you should, then there is probably a subtext that in terms of institutional arrangements there is going to need to be an independent commission, probably at a national level, to put in place the pricing arrangements. But it is something to think about at the state level as well: what is the right institutional arrangement to deliver this kind of reform? I think the RACV is interested in these kind of questions as well.

The CHAIR — As you probably heard over the news this morning, there is a lot of debate about whether police pursuits should occur because of those deaths. I suppose one of the ways of possibly alleviating that problem is to switch the cars off by remote through the GPS. I think the Holden Caprice actually has that technology whereby if it is stolen and it is reported, the engine is switched off by remote. So there are a lot of opportunities here, aren't there?

Prof. STANLEY — This is a radical change, make no question. When we put this out or gave it to Minister Albanese two weeks ago I think I did 14 radio interviews, and they all wanted to talk about road pricing. This is a radical change. But if we were to do it, it would be up with what I regard as world best practice, and at the moment that is the Dutch approach.

A number of places, Manchester is one you are probably familiar with, tried to follow London in terms of congestion pricing and were not successful. This is much wider than congestion pricing; it is not only congestion, it is road damage, it is greenhouse gas emissions and it is any excess accident costs that are in the system as well. It would completely change the way we charge for road use, but in my view it would give you that 4 or 5 per cent reduction in volumes you need. For example, if you try to build roads as your way of solving congestion, you will not solve congestion. All you will do is generate additional traffic and there will come a point sometime in the future where you are back where you started.

Mr KOCH — Does the Dutch model make it affordable for the road user or the road builder?

Prof. STANLEY — No, the Dutch proposal will mean that some people will have increased costs, but some will have reduced costs, and if you go down — —

Mr KOCH — What is the end take?

Prof. STANLEY — The end take? They have made it revenue neutral. I personally do not think these things should be revenue neutral. I think if you make them revenue neutral, you are in fact taking out one of the potential levers of policy that you have got at your disposal. In my view, the main reason for going down this path is not to be revenue neutral in the revenue-raising sense but to make people accountable for their costs. If you look at the scale of costs at the moment, the scale of costs is bigger than the scale of revenues we are generating through our users and charges by a factor of about two.

If you put a price on all those things I have talked about, and I have done this before, congestion and all those sorts of things, you come up with a number between \$30 billion and \$40 billion. If you look at the amount of money that you raise from road users through excise, registration and those sort of things, it is about half that. So I think this system really should increase the total take on road users. It is going to make it hard to do politically, but I think the path through that is to make sure we have a really decent community conversation about it before we go too far ahead. That needs to start soon. We have talked about congestion pricing for 50 years. We are getting closer to it, but we still have not done it in this sort of community. I think we still have got to have a decent community discussion about the whys, the hows and what we are going to do with the revenue. I think that last step is really important.

Mr WELLER — Wouldn't it be a good start to spend the 38 cents that we collect rather than the 13 cents we are currently distributing?

Prof. STANLEY — At the moment excise is not a price for road use; it is a tax primarily. The only people for whom it is a price are trucks, where I think 21 cents a litre of the excise is a charge for road use for heavy trucks and the rest gets rebated through the tax system, so trucks do not pay 38 cents, they pay 21 cents.

Mr WELLER — I understand that, but the government is not distributing all that it collects.

Prof. STANLEY — It is not, and it has never pretended that it is going to. You would know the analogy as well as I do: we do not put all the beer excise back into improving hotels. Essentially it is a tax. This really says throw all that stuff away, let us start again at trying to estimate how much we should be spending on our transport networks. All those costs I have talked about say to me that we are not spending enough, that we need to be spending more on our roads and we need to be spending more on our public transport system. Let us put in place a set of charges that will generate the revenue to do that, to tell us where that revenue should be spent. Excise is a very blunt instrument; it does not actually give you the right signals to do that. What would it do? This is what I think would happen if we implemented this pricing system. For cars, travelling in regional areas would be cheaper. If you think about those externalities — —

Mr LEANE — It seems a bit unfair.

Prof. STANLEY — If you think about those externalities, they are most focused in our cities.

Mr TILLEY — Good reason to do it.

Mr LANGDON — You've got two people's attention.

Prof. STANLEY — Regional travel by car would be cheaper; metro travel by car would be more expensive, particularly in congested conditions. Public transport services would be improved and you would get better use. The cost of truck movement would increase. At the moment I think that is the right sort of signal that trucks need to be getting, because we have got fairly low capacity utilisation. If you look at capacity utilisation of trucks in and out of the ports, it is pretty poor.

Mr KOCH — So is that going to make your vegetables dearer in the metropolitan area — —

Prof. STANLEY — It will in the short term.

Mr KOCH — And cheaper in the rural areas?

Prof. STANLEY — It would a bit in the short term. Yes, it would a bit, but the sort of thing it would do is it would lead to a rationalisation of a lot of our distribution systems. If you look at what has happened since the mid-1980s, the amount of tonnage moved on our road system has grown at about the same rate as gross domestic product.

Mr KOCH — That is what you took off the rail.

Prof. STANLEY — Just a minute. The tonnage moved on road has grown about the same as the economy. The tonne kilometres has grown about half as fast again. In other words, we are moving a given tonne much further than we did 20 years ago. It cannot be efficient. It is just about the way we organise our distribution and logistics processes. I think this sort of charging system would push a significant change in the distribution systems that exist around our city. That would lead you to some economies there. You would have a situation where increased investment levels could be funded.

The other fairly radical thing I want to suggest to you is we get away from funding modes. We do not fund roads, we do not fund public transport: we fund outcomes. Those outcomes might be delivered through road investment and through public transport investment, but the primary focus should be down the right-hand column. Road funding should be based on programs to manage congestion, improve the environment, improve mobility and access, improve safety and health, and give us better energy security. If they do not do those things, we do not want to do it. Those are the five things we need to be doing with our transport programs. Investment in, firstly, roads, and secondly, public transport is a blunt instrument in itself as to do this you really need to focus on these outcomes and make sure we have transport programs in place that deliver those outcomes. Fund those programs, but this is where the focus ought to be. Rather than funding arterial roads and local roads as your primary basis, if you like, for funding, set it up in terms of the outcomes you want the system to deliver. You will get much more efficient solutions.

What do I think we should do? I think it is time the Victorian government started restructuring its transport programs based on those intended outcomes, not on modes. Modes are the next layer down. They are not the top layer. The Victorian government should seek to drive the reform of road pricing and funding arrangements through COAG. There is some slow progress happening there at the moment. I believe it is clearly going to need a major community consultation. All the projects that get put forward by organisations, like VicRoads and the Department of Transport, should be tested against these outcomes down the right-hand side. That has got to be the major focus at all times and not whether they are a road or public transport. It is the outcomes they are going to achieve. I suggest to you that the sooner we start this fairly radical way of re-looking at our transport system, then the sooner these vital indicators of performance are going to turn around. At the moment they are going down. Air pollution is getting better, the road toll is getting better; all of the other indicators are going down.

The CHAIR — Just in relation to that, Professor Clarke from La Trobe, who assisted in the Henry tax review, did not suggest that the excise should be removed.

Prof. STANLEY — He wanted to increase it, I think.

The CHAIR — He did.

Prof. STANLEY — I think that is a practical short-term solution. I do not think it is the right way to go because excise is a blunt instrument. You can see what the Dutch are doing now. The technology is there to be much more precise and targeted than using excise. Exercise is a very blunt instrument to try to get a link between road charges and the costs that are caused.

Mr KOCH — Politically, is it saleable?

Prof. STANLEY — Tomorrow, no. If you start the conversation tomorrow, in two to three years time I think, yes. I would be very interested to see what Ken Henry says in the report he gave Wayne Swan, the federal Treasurer, in December. I would be surprised if he does not come out in favour of road pricing reform. I would be very surprised. He gave a speech on Friday to the conference on the economics of infrastructure where he talked about road pricing. I think there are some hints there. I would be surprised if we do not see some movement in that direction. It will not be tomorrow, but I think we need to start with a serious community discussion about how we improve the way we price our use of roads, how do we better connect that to the

investment programs we are going to undertake, because it is a really weak link at the moment. How do we quarantine it and make sure there is a fund flow going forward to give us the sort of funding levels we need, because we have not had it for the last 30 years? We have underinvested. The evidence is there for that. I think this way of going about it is probably the sort of radical transformation we need. It is getting away from incrementalism. Incrementalism is not going to solve these problems.

Mr TILLEY — An observation with your presentation is that we talk about practices throughout Europe and America and things like that. But in reality in Australia we are seeing, for example, take the example of the manufacturer of the hybrid motor vehicle where we have a combination of generation and unleaded fuel. What we are seeing and experiencing throughout Europe is your smaller diesel turbo engines which are achieving those reductions in CO₂ emissions. How do we achieve that through the manufacturers' gates in this country? How do we encourage manufacturers to put those types of vehicles throughout Australia?

Prof. STANLEY — What I would do is I would say to the industry, 'In five years time we expect you to be achieving European standards'. If you say that to them, they are on notice that they need to be delivering the sort of vehicles that Europe will be delivering in five years time. One of the ways they can do that is, I think, in terms of the federal government which puts a substantial amount of money into assisting the motor vehicle industry. That money should be tied to those kinds of outcomes. I think there was a mistake made at the first round of Infrastructure Australia funding in that the sorts of outcomes that I have talked about here were not specifically required as a condition of that funding. I would have thought that any money the federal government gives to assist the motor vehicle industry ought to be predicated on, 'Within five years time that is where you have to be'. Five years gives people enough time to start to think about adjustment.

Mr WELLER — You are saying that we should be suggesting that in five years time the design of a car should be that it only uses X amount of grams of carbon per kilometre?

Prof. STANLEY — Correct. The European standards in five years time are the ones we should adopt. We should be saying that now.

Mr WELLER — So if their target in five years time is 90, are you saying we should adopt that now?

Prof. STANLEY — Yes, for our future target.

Mr TILLEY — If we are truly serious, the hybrid motor vehicles that are on the market today that are coming out of the manufacturer should be a combination of diesel, not unleaded?

Prof. STANLEY — Sure. Diesel has a good performance. I mean, I do not think you should specify how people meet these targets. I think it is up to the manufacturers to decide the best way to meet the targets. Their obligation, though, should be to meet the targets. At the moment we do not really nearly go hard enough in that space.

Mr KOCH — That will come back to affordability. We will see second-hand cars in Australia probably appreciate, not further depreciate, in the short term.

Prof. STANLEY — That would be an issue for a couple of years.

Mr KOCH — It will take us longer to get that new technology onto the roads?

Prof. STANLEY — It will. It will probably mean the average life of a car will extend for a few years. I think at the moment it is 12 years.

Mr KOCH — I think it is 10½

Prof. STANLEY — Is it 10½? Yes, you would expect that to blow out a little bit. That is probably an unintended but an expected consequence in the short term, but you would run over that within five or six years.

Mr LEANE — Do you have any examples of federal money being put into state bus networks in recent times?

Prof. STANLEY — There are lots around the world. There are some good examples, for example, in Canada and also in the USA. Good examples in Canada would be some of the bus rapid transit initiatives there which involve federal money.

Mr LEANE — As far as our federal government is concerned, are there any recent examples, or none at all?

Prof. STANLEY — No.

Mr LEANE — You can look at even at Melbourne metropolitan orbital bus networks, the SmartBus networks, which have been implemented in the last couple of years. The thing about buses that people do not realise is that it is actually quite a big investment to put in an extra lane on those routes and also the electronics and technology that are used to get bus priority at the lights. It is an interesting thing that there has never been any federal money towards this.

Prof. STANLEY — The Bus Industry Confederation is saying to the federal government, 'We want you to be putting some money into the capital side and into things like bus rapid transit'. I am actually also a director of VicUrban. We have a development called Aurora, which some of you may know about, in the northern suburbs of Melbourne. We would like to see bus rapid transit from the rail line going out to Aurora. Aurora is basically a cutting-edge environmental development in Melbourne. It is a 6-star development. It is really national and cutting-edge in terms of its sustainability. But there is pretty poor public transport. So the industry is saying, 'We are wanting to see bus rapid transit'. My view would be that the federal government ought to be approached to be stumping up some of the capital for that sort of that initiative. I do not think the federal government should be funding the operational side of public transport. I think their support ought to be going in on the capital side, as it has done on the regional rail project. There is 3 point something billion dollars there.

The CHAIR — It is 4.2.

Prof. STANLEY — I think they are only giving 3 point something, are they not — 3.6 or 3.8?

The CHAIR — Provided by the state.

Mr LEANE — Why is that? Are buses like the poor cousin of the public transport network?

Prof. STANLEY — It has been for a long time, but it is interesting if you look at the availability of public transport to people, buses are far and away the closest to the population. In terms of rail lines and tram lines, the number of people who live within walking distance of those is minuscule in Melbourne, whereas the number who live within walking distance of bus routes is 80-plus per cent.

Mr LANGDON — However, the public does not see buses nearly as clearly as train lines.

Prof. STANLEY — They do not, that is true. But it is interesting, when I was playing buses a few years ago, the government, through the MOTC program, which we worked very closely on with them for a number of years, increased funding by 26 per cent in terms of kilometres, so there was a 26 per cent increase in kilometres travelled over three years by buses, and that led to a patronage growth of 28 per cent, which is almost unheard of. It was a massive growth in patronage because the services are now getting to the level where you can actually do most things most of the time. It is still poor in some outer parts of Melbourne, but it is getting a lot better.

Mr TILLEY — I refer to some of your commentary on the road freight task. The realities are, in the absence of having a mass amount of rail infrastructure throughout the country, we are going to need road freight —

Prof. STANLEY — Correct.

Mr TILLEY — For a substantial period of time in the future.

Prof. STANLEY — No doubt.

Mr TILLEY — You were talking about innovation again, and you were talking about road user charging and those types of things. Every year innovation is changing. If with axle weights we can find a way through

innovation that reduces the impact on pavement, how would that model of road user charges work if we substantially reduced the road pavement damage?

Prof. STANLEY — When I was deputy chair of the National Road Transport Commission we implemented or started the performance-based standards system, and the logic of the performance-based standards system is that if you can improve the technology of the vehicles such that the road damage reduces, then your price reduces. Your road charges should be lower, so if you can — —

Mr TILLEY — So you are telling me that was the underpinning reason for performance-based standards?

Prof. STANLEY — Performance-based standards were to try and encourage innovation, and that meant you could come up with some different sorts of vehicle configurations than what we had been used to. Quite often that would in fact mean an increase in the price you paid, because you are wanting to do things that you could not currently do, but if that innovation led to a reduction in the wear on the road, then the logic would be that you should pay less. I for one think that we need to see bigger, more efficient trucks on our network, and we need to be designing roads and allocating road space for those vehicles. It might well be that buses and trucks in some cases could share bus lanes. At certain times of the day you would need to keep bus lanes for buses only, but in the off peak, for example, when bus frequencies might be relatively low, the possibility of some trucks using those lanes as well is something that is well worth having a look at. I do not know what the safety consequences would be. The community would need to be comforted on that, but we need to think about those sorts of things and how we make better use of what is very scarce road space.

Mr KOCH — But why are you not endeavouring to get more freight on rail? If you are talking greenhouse gas, two engines dragging 2000 and 3000 tonnes versus trucks dragging 50, what is your incentive to grow the size of trucks and put more freight on the road?

Prof. STANLEY — I think we have to do both. I do not think it is either-or. I think rail has to carry a much bigger share of the trunk part, but if you think about things moving around Melbourne, the final stage in the distribution process is not going to be performed by rail.

Mr KOCH — No, but it does not need bigger trucks.

Prof. STANLEY — That does not need bigger trucks either, that is true. But there are situations where you cannot perform the task by rail. Think of some of the agricultural movements in country areas, to get the roads up to the standards that they need to be to carry bigger loads and get bigger vehicles moving them. I think it is a case of horses for courses. I talked earlier on about intermodal hubs. I think intermodal hubs are the key to getting a bigger role for rail freight, and I think the pricing that I talked about would tilt the price equation much more in favour of freight going through those hubs, so stuff going into the ports, for example, and coming from the ports, would be much more channelled through those hubs than it is at the moment where it is using much more road. But there will be other cases where road is the right way to go and higher productivity vehicles I think are going to be part of the answer. In some cases that will need separate infrastructure. In all cases that will need infrastructure where the road standards and bridge standards can cope with the loads.

Mr TILLEY — With that in mind, in the United States they have a drive-on, drive-off heavy vehicles off the rail service. Would that be a possible practice that could be seen in Australia at some stage?

Prof. STANLEY — I do not know enough about the technology of rail to answer that, but it sounds sensible to me.

The CHAIR — Any further questions?

Mr KOCH — Only to say that it is a good initiative that has been put before the committee today in relation to funding, and that is one that we are obviously looking to, to try to move the funding to accommodate the growth in vehicle movements and also the other productivity gains that we have to get, and I think today's presentation has been very good.

Prof. STANLEY — Thank you very much, and thank you for your time.

The CHAIR — Thanks for your time.

Committee adjourned.