



HOUSE OF REPRESENTATIVES

STANDING COMMITTEE ON COMMUNICATIONS, TRANSPORT AND MICROECONOMIC REFORM

Reference: Inquiry into federal road funding

CANBERRA

Wednesday, 25 June 1997

OFFICIAL HANSARD REPORT

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HOUSE OF REPRESENTATIVES
STANDING COMMITTEE ON COMMUNICATIONS, TRANSPORT AND
MICROECONOMIC REFORM

Members:

Mr Vaile (Chair)

Mr Albanese	Mr Peter Morris
Mr Ross Cameron	Mr Neville
Mrs Crosio	Mr Randall
Mr Hardgrave	Mr Tanner
Mr Lindsay	Mr Wakelin
Mr McArthur	Mr Willis
Mr McDougall	

The Commonwealth, under its roads program, provides funds to the States and Territories for the National Highway and Roads of National Importance. The Committee is asked to:

1. Review the Commonwealth role in road funding and identify the most effective means of fulfilling that role;
2. Assess the adequacy and extent of the National Highway as currently declared in meeting the objective of providing a national road system that meets the needs of industry and the community;
3. Assess the level of funding required to adequately fulfil the Commonwealth role. This should take into account the current condition of the asset, depreciation and maintenance requirements, as well as new investment required to meet demand growth, changes in technology (especially increased weight limits for heavy vehicles) and community expectations of road standards;
4. Examine whether current administrative arrangements have an adequate performance focus, promote effective and efficient use of funds and adoption by States and Territories of best practice, and provide an effective Commonwealth/State interface; and
5. Assess the scope to supplement Government funding through innovative arrangements for private sector involvement in the provision and maintenance of roads infrastructure and the scope for pricing of road services to reflect full resource costs.

In undertaking this review the Committee is to take into account the National Commission of Audit principles of clarifying the roles and responsibilities of Governments with the overriding objective of improving the outcome to clients and achieving value for money for the taxpayer.

WITNESSES

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Mr Lindsay

Mr Wakelin

Mr McDougall

Mr Willis

The committee met at 8.54 a.m.

Mr Vaile took the chair.

CHAIR—I declare open this public hearing of the House of Representatives Standing Committee on Communications, Transport and Microeconomic Reform inquiry into federal road funding. The Canberra hearings will be held today, tomorrow and Friday and they will complete the committee's 14-day program of hearings and inspections covering all states and territories.

The hearing today will allow the committee to hear evidence from the Department of Transport and Regional Development, which will provide a national perspective to the issue of road funding and add to the state and territory-based evidence already presented to the committee. The committee is also pleased to be able to consider the evidence to be offered today by the Bureau of Transport and Communications Economics, ARRB Transport Research Ltd and Environment Australia.

The committee is investigating the underlying principles for funding Australia's national road system. I should emphasise at this point that, in addressing the terms of reference, the inquiry should not be seen as a forum for advocating the funding of specific road projects.

On behalf of the committee I welcome everyone appearing before the committee today. Before proceeding, I wish to advise all witnesses that, although the committee does not require evidence to be given under oath, committee hearings are legal proceedings of the parliament and warrant the same respect as proceedings of the House itself. However, the giving of false or misleading evidence is a serious matter and may be regarded as a contempt of the parliament.

HRAST, Mr Andrew Peter, Director, Road Policy, Roads Branch, Department of Transport and Regional Development, GPO Box 594, Canberra, Australian Capital Territory

O'NEILL, Mr Barry James, Senior Officer, Roads Branch, Department of Transport and Regional Development, GPO Box 594, Canberra, Australian Capital Territory

POTTER, Mr Neville Arthur, Assistant Secretary, Roads, Department of Transport and Regional Development, GPO Box 594, Canberra, Australian Capital Territory

CHAIR—I welcome representatives from the Department of Transport and Regional Development. Thank you very much for coming along this morning. The committee has received a quite comprehensive submission from the Department of Transport and Regional Development. Would you like to make a brief opening statement?

Mr Potter—Yes, Mr Chairman. The inquiry arose essentially from the National Commission of Audit recommendation that the Commonwealth examine its specific purpose payments to the states to identify where there was blurring of roles and duplication between levels of government, and particularly any avenues for cost shifting. I would like to quickly go over the key points of our submission and tie them back to the commission of audit findings, and then raise two new issues that have arisen since we appeared last.

The department does believe the Commonwealth has a role in road funding, because only the Commonwealth can take a national perspective on providing an efficient national road network. The committee received a number of submissions on the bridges over the Murray, which is a classic example of the states taking decisions according to state priorities. Having neglected these bridges, the states now call for Commonwealth assistance to solve the problem. While years of neglect is no firm basis by itself for Commonwealth intervention, it is interesting that the Commonwealth has previously funded several of those bridges under other road programs, and the Commonwealth does fund bridges on the national highway.

As regards extending the national highway network, our submission did mention a number of roads which, based on freight volumes and their contribution to the economy, warrant inclusion in the network. There are also some worthwhile calls to extend the national highway to ports and major freight terminals. There is also a regional road network below the national highway level which we believe warrants Commonwealth funding because of its impact on the national economy.

But to extend the national highway program in a geographic or functional sense without additional funding will just dilute the existing funding and worsen the existing cuts that have already been made to the program. An infrastructure program like the roads program needs continuity and certainty of funding with, ideally, a funding link to the use made of the roads. While it is not perfect, the closest measure of demand is the amount of fuel consumed in the transport task and by private motor vehicles. Consequently, fuel excise is seen by many as a source of road funding, and that is a view widely held in the community. It is recognised by all states except one with their fuel levies or fuel franchise fees to fund roads.

We are strongly of the view that funding that varies on an annual basis is not the way to fund the provision of long-lived infrastructure. The Commonwealth cannot plan for a national network without

certainty of funding. We think this is the essence of the states' criticism that the Commonwealth has no long-term vision for the national highway. That was one of the key issues we raised in our initial briefing: whether the role of the Commonwealth is just to provide grants in each of the states or is it to manage a national highway system. Greater certainty of funding will also increase opportunities to encourage private sector involvement in providing road infrastructure.

An important issue with the private sector is the revenue stream that will reimburse the private operator or the private sector contractor. Unless the risk of operating the road is borne by the private operator, the project will not attract the ordinary business tax advantages and will not attract investors, and the project will effectively be a grant to the private operator from the public sector. In other words, we would use the private sector to build roads rather than the states.

The most obvious way of providing a revenue stream that carries the risk of operating the road is a toll. It is current Commonwealth policy that tolls are not imposed on the national highway but, in practice, there are few national highway sections suitable for tolling. However, tolling would appear to be one method of bringing forward the construction of very expensive urban projects, and under tolling we would include shadow tolling as well.

We noted the comments of some states that the Commonwealth spends too much time second-guessing the states in planning issues but we reject the suggestion that the Commonwealth should just accept state views of what projects should receive Commonwealth funds. If the Commonwealth does not project its own strategy, then there is no point in having a national highway program. The Commonwealth should just untie the funds and include them in the general financial assistance grants to the states.

This would, however, be inconsistent with the National Commission of Audit's model for special specific purpose payments, which was that the Commonwealth should retain a role where there was a risk that a state may under or over provide services in areas where other states will share the benefits or costs. The commission, in fact, cited interstate roads as examples of where the Commonwealth does have a role.

The states have also criticised the Commonwealth's administrative arrangements for the national highway program, but there is a fundamental difference of view between the states and the Commonwealth here. The states regard the federal road funding as their money and they see any Commonwealth conditions or requirements as an imposition and obstruction to their operations.

Our view is that the funds have been made available by the Commonwealth to achieve the best national outcome. The department is accountable through the minister and the parliament for its performance in achieving that result, and this approach is also in line with the National Commission of Audit's recommendations. Nevertheless, we are exploring with the states how we can streamline administration where possible, consistent with the requirement of ensuring that expenditure is accounted for. We have mentioned that we are proposing to initiate a trial with one state of revised administrative arrangements.

There have also been calls for an independent authority with the power to decide where Commonwealth road investment should be spent. Such a body would make decisions on purely economic grounds, avoiding the perceived disadvantages of the current political decision making process. There are

benefits from such an economically pure approach, but we recognise road funding is a political process. In countries where this approach has been tried, such as in New Zealand, there are moves to inject other than purely economic considerations back into the decision making.

To turn to two issues that have arisen since our submission, one is the GST debate and its impacts on road funding, and the other is the proposal to increase heavy vehicle mass limits and the need to upgrade some bridges to capture the benefits of that increase.

First, the renewed debate about the introduction of a broad based consumption tax to replace existing indirect taxes, including fuel excise, raises a number of issues from a road funding perspective. There will no longer be any connection between road user taxes—that is, excise—and road funding. Replacement of excise with a GST at the 10 to 25 per cent rate, which has been talked about, will significantly reduce fuel prices by up to 35c a litre. This will significantly increase fuel usage and greenhouse gas emissions.

As the GST is a consumption tax, businesses will be entitled to an exemption or a deduction for the GST on inputs to their business. This means that vehicles used for commercial purposes will not pay the GST on fuel and, in that case, there would no longer be any direct road user charge in the tax system on a major proportion of users, including heavy trucks. So we have prepared a short discussion paper. We are not suggesting or proposing anything. It is just a short paper canvassing these issues, which we would like to leave with the committee if that is acceptable.

CHAIR—Yes, thank you.

Mr Potter—Turning to the second issue of the increased mass limits, the National Road Transport Commission has recommended an increase in the mass limits for heavy vehicles fitted with road-friendly suspensions. Although these suspensions are pavement friendly, there is considerable scope for them damaging some types of bridges—and I can explain that later if the committee is interested.

The Commonwealth is interested in increasing the mass limits because of the estimated benefits to the economy—up to \$1.3 billion per annum increase in GDP. To assess the possible cost of bridge upgrading that that may require, the Commonwealth has agreed to fund a survey of bridges to be carried out by the NRTC. Funding for the survey is sourced from Commonwealth assistance to the states and local governments so that all three tiers of government are contributing equally to it. The NRTC has been asked to identify the key freight routes that would deliver the most benefit from increased mass limits and the results of that survey should be available by the end of the year.

Finally, we have prepared some comments in response to a question from the first hearing about the report of the House of Representatives Standing Committee on Transport and Microeconomic Reform, *Driving the road dollar further*, which we would like to leave with the committee as well. That concludes my remarks.

CHAIR—Thank you very much, Mr Potter. In your statement you mentioned different means of assessing the economic benefits of different projects. Are benefit-cost ratios for road projects comparable between states? That is, are the states using comparable systems of analysing the benefits of their projects

that they pick up? Does the department require states and territories to follow AustRoads guidelines or some other standard in the development of benefit-cost ratios?

Mr Potter—The department requires the states to use the AustRoads guidelines and that was a step forward in itself. The states and the Commonwealth got together through AustRoads and produced these guidelines, but that is not the end of the story. The guidelines essentially provide a broad framework and methodology but there can be variations in terms of the inputs into the calculations and how various factors are measured, how vehicles are counted, et cetera. The values that are ascribed to various factors can vary as well. Those are the sorts of things we look at when we receive the BCRs from the states.

CHAIR—What limitations, if any, are there with those current arrangements, as far as using the benefit-cost analysis?

Mr Potter—Using the AustRoads methodology or benefit-cost ratios in particular?

CHAIR—Benefit-cost ratios in general.

Mr Potter—From our point of view, the AustRoads methodology, in particular, covers a range of factors in practice, although in practical terms the essential thing that is being measured is time saved and vehicle operating cost savings. Although such things as safety and accidents and lives saved, et cetera, are measured, as I said, they tend to be subordinate to the impact of time savings.

On that basis, the BCR calculations that are used for road investments do not cover regional development impacts and they do not necessarily cover network impacts and they obviously do not cover the community sorts of expectations as well.

CHAIR—In evidence from both the state government and a couple of other organisations in Victoria, the Victorians were running the line that they pay 27 per cent of the total fuel excise yet receive only 16 per cent of the total amount allocated to road funding from the Commonwealth. How does the department respond to that accusation?

Mr Potter—The Commonwealth, under the terms of the agreement between the states and the Commonwealth in 1992, assumed responsibility for the national highway and other roads of 'national importance', I think was the expression. On that basis, the Commonwealth role is to fund the national highway essentially. The national highway in large measure in Victoria is complete. Their share of funding has declined for that reason.

Mr PETER MORRIS—To the best of your knowledge, do states relate their expenditure on roads to the areas in which they collect their fuel franchise levy?

Mr Potter—States like Victoria do, yes. Western Australia does as well.

Mr PETER MORRIS—So where they collect their revenue from is where they spend—

Mr Potter—Do you mean in terms of their own state roads?

Mr PETER MORRIS—Yes. In other words, do they do in their own states with their expenditure what they are asking the Commonwealth government to do?

Mr Potter—As I understand it the Victorian government does attempt to do that. They have a special provision for rural roads to cover that, and the New South Wales government does as well.

Mr PETER MORRIS—The mass of money would be collected in metropolitan Melbourne.

Mr Potter—Yes.

Mr PETER MORRIS—Thank you.

Mr HARDGRAVE—As you said in your opening remarks, states certainly comment on the apparent duplication of planning and point to some of the delays which the federal department causes. Their allegations seem to imply that there is a deal of delay on technical aspects. Are you looking at the technical aspects of the types of roads being constructed or rather the routes and the logic behind the construction of the road?

Mr Potter—Those criticisms particularly relate to Queensland. The situation there is unique because a lot of the project proposals that we get, or we did get in the past, from Queensland were not on the Commonwealth's agreed program. They would submit programs on spec, basically, ones that were not in the queue, as it were. That was a delay in itself, and the projects more or less came out of the blue.

Secondly, some of the proposals we received were defective. With some of them we did not really find out what the proposal was until we actually went there and spoke to the people on the ground and saw the particular project. Obviously, that causes delays.

Also, the way the act is drafted, the whole focus of the act and the Audit Act and things that bear on it relate to the administration of the funds and project administration. Particularly where projects have been formulated in the states and come to us more or less on spec, we come into the process at quite a late stage. Therefore, it is difficult to inject some sort of Commonwealth priority or input into the project at that stage. I mentioned earlier on at a hearing we had here that we are trying to move further up the planning tree to get involved more in the planning stage so that when the actual project proposal reach us, there has been a lot of preparatory work done and any input that we want to make or need to make has already been made in that initial planning process.

Mr HARDGRAVE—So essentially the state's allegation is true.

Mr Potter—Queensland talked about some projects taking 11 months, but that is very much an exception, those sorts of things. Those projects were ones where the proposals we had were defective.

Mr HARDGRAVE—There has been an improvement in the technical standard of Queensland road

construction over the last 10 or 15 years. Do you say the Commonwealth can claim credit for that?

Mr Potter—My experience does not go back that far.

Mr Hrast—I might add something on that. I will just go through a New South Wales example as I am more familiar with that than the Queensland one. New South Wales initially put up a proposal for the duplication of the Lake George section of the Federal Highway at a cost of \$210 million. Our technical people, over a number of months, then had numerous discussions with New South Wales and they brought the cost down to \$130 million. That is a very significant saving. The state reaction is, 'The feds are paying so we will go for the gold plated version'.

Mr HARDGRAVE—I also want to register my annoyance that part of the verbal submission this morning and this written paper that is being put forward is just premature speculation by the department. It disturbs me greatly that they would want to waste so much time putting together a paper about some GST. Certainly, the front page of the paper which I have seen and the verbal submission this morning are not a fair or reasonable use of this committee's time.

CHAIR—Before we go any further, we need to make a decision as to whether we are going to incorporate the discussion paper that is being presented on that issue.

Mr PETER MORRIS—I think the officers would not be performing their duties if they had not brought that to the attention of the committee and they would be getting blasted from some of us if they had not. I have not seen it—

Mr HARDGRAVE—Pure speculation.

CHAIR—Is there any objection at this stage to the incorporation of that discussion paper in the evidence?

Mr HARDGRAVE—Yes, I object to it.

Mrs CROSIO—Well we are going to have a problem, because I do not.

Mr PETER MORRIS—We have not seen it.

Mr HARDGRAVE—I just think it is very mischievous of this department—

CHAIR—We will need to attend to it later on when we will have a discussion on whether we incorporate it.

Mr Potter—If I can just say in our defence: we are not proposing anything; we are just canvassing some of the issues.

CHAIR—And I accept that.

Mr McDOUGALL—I would like you to take us down the strategic planning area and also the question of the national highway where we have had some evidence that some people see that the Commonwealth's role should be rather than talking national highway talking roads of national economic importance. Could I seek a comment from you on the department's feelings as to the difference between those two?

Mr Potter—In terms of definition?

Mr McDOUGALL—Yes.

Mr Potter—I mentioned in the opening remarks that there is a network, which underlies the national highway, of roads that could be claimed to have a national economic impact. It would not necessarily form part of the highway. So, to that extent, I would agree with what you are expressing.

Mr McDOUGALL—Are you saying you feel it is time now to get off the direction of the national highway and get on to the direction of the Commonwealth funding of roads of economic importance?

Mr Potter—That is essentially what the government has done with the roads of national importance category that they introduced after the last election. It is to broaden the base of Commonwealth assistance in that direction.

Mr McDOUGALL—We have had submissions when we were in Queensland, in Townsville, in regard to the proposal to put a new road to the port with a combination of rail. There was some discussion through those hearings as to who was responsible for that proposed link. Would it be a Commonwealth role through either roads of economic importance or roads of national importance; was it the responsibility of the state and the port authority; or was it the responsibility of the majority of the users of that road as it would be a specialty road?

Mr Potter—This is in terms of the Korea Zinc?

Mr McDOUGALL—Well, a combination of four or five different major users would use that link. Therefore, where would you see that sort of project would fall in relation to financial responsibility?

Mr Potter—It is an area we are looking at. The connection to the port is not part of the national highway, so it is not a Commonwealth responsibility in that formal sense. But that would be the kind of proposal which I was talking about that could be of national economic significance.

Mr Hrast—The arrangements for roads of national importance allows us to move away from the sole funding, as we have on the national highway, by the Commonwealth to joint funding arrangements. It allows us the opportunity for joint funding with a state, with a council or with a private company to build a road such as that. It allows us to establish those sorts of arrangements that suit particular locations.

Mr McDOUGALL—On the basis that you say that you do not see it as a road that would be an area of Commonwealth responsibility, is it not the Commonwealth—

Mr Potter—I did not actually say that. It is not part of the national highway at the moment.

Mr McDOUGALL—You say it is not part of the national highway, but isn't part of the importance of economic benefit of the national highway to deliver the transport system, not just to the city or to the outskirts of the city, but to the other modes of transport such as the port?

Mr Potter—Yes. It could qualify to be funded under the national highway if the national highway was extended to the port, in that sense, or it could be funded as a road of national importance under that program.

Mr McDOUGALL—How does the department see the potential of using private sector funding in regard to contributions where there is a road to be built? We had an indication from one of the major mining industries that, no, they did not want to put any dollars in, but a neighbour to them said, yes, they were prepared to do so. What sort of policy has the Commonwealth got in relation to commercial contributions towards roads of national importance or of economic benefit?

Mr Potter—I think the roads of national importance criteria certainly allow for a shared funding. In cases where that was feasible in terms of mining developments or something like that, that would be something we would explore as well. It is not impossible and it is something from the department's point of view we would seek to advocate.

Mr WILLIS—I would like to indicate that I think the discussion papers are a useful contribution to our considerations. Firstly, is the department satisfied with the definition of the national highway as it currently exists. I recall there was a decision taken by the previous government to extend that definition some years ago. Does the department regard that definition now as optimal?

Mr Potter—I would have to say no. We did canvass in our submission quite a number of other roads that we thought had a good case to be included as part of the national highway. I think, too, the national highway has become rather inflexible. We think there perhaps should be scope for bits to be decommissioned if they are no longer serving their function. Generally, the highway could be approached more flexibly. That should sum it up.

Mr WILLIS—You make a funding assessment in the submission of \$950 million for the national highway and \$200 million for the roads of national importance. Was that based on the national highway definition as it currently exists?

Mr Potter—Yes.

Mr WILLIS—If you were to expand the national highway definition, how would you propose that that be funded?

Mr Potter—The amount of money available would have to be expanded as well. That is the short answer.

Mr WILLIS—You do not see a possibility of diminishing current untied payments to the states to pay for it?

Mr Potter—That is one possibility, yes, if we are moving onto a shared basis like the roads of national importance. That is possible. That is not the government's policy.

Mr WILLIS—In terms of the assessment that you have made of what the requirements are, they are well above what the current funding is. What are the implications of maintaining the current levels of funding in real terms rather than those which you suggest are appropriate?

Mr Potter—I think it means that projects will get done, carried out and funded later rather than sooner. There will be a delay in starting new roads.

Mr WILLIS—But what is it that gets cut back? Is it maintenance or new construction?

Mr Potter—In relation to maintenance, the government is seeking a 20 per cent improvement and reducing the funding by that amount over four years, so there are some cuts to maintenance there. But essentially, it would fall on new construction.

Mr WILLIS—What are the implications of that? You have made an assessment of what is required by the national interest. What are the implications for the national interest of continuous levels of funding which are well below what you assess as being appropriate?

Mr Potter—It means that worthwhile projects and improvements that could be made will be made later rather than sooner.

Mr WILLIS—To take you to the question of strategy and planning, the states have all indicated to us that they consider the current arrangements are unsatisfactory because they do not know what the Commonwealth strategy is. They all seem to be rather concerned to have a strategy in place. Your submission talks about the need for such a strategy and a five-year plan and you say that such a plan is inhibited by annual funding.

First of all, I certainly accept—and I speak for myself—that there would be great benefit to everyone from having a strategic plan set out, but I do not accept necessarily that annual funding inhibits that. Annual funding can be undertaken on the basis of a five-year plan or any period plan. Obviously, if funding is less than what is required to meet that plan, then the plan will be affected to that degree, but it does not stop the planning taking place. Do you have any comment to make on that?

Mr Potter—Not the planning, but it certainly inhibits the private sector being involved with the Commonwealth, if the Commonwealth cannot guarantee that even a proportion of road funding will continue over a multi-year period.

Mr WILLIS—I presume within any allocation it could ensure that it at least met that obligation to the private sector. Also you talk about a five-year plan and it looks like a static five-year plan—you reassess

it every five years.

Mr Potter—Not necessarily.

Mr WILLIS—I think you say ‘requiring publication at five-year intervals of a strategic plan.’ Would it not be better to have a rolling plan?

Mr Potter—Yes.

Mr WILLIS—It seems to me that, rather than have a five-year plan, it would make more sense to have a four-year plan which fits in with the forward estimates and, therefore, you have a plan and funding for the current budget year and the three years thereafter which all go together. I would have thought that this would considerably strengthen the position of the department when it comes to budget considerations each year. You have a plan, you have funding based on that plan and, if there is to be cutbacks in the funding, then obviously that has implications for the plan. It seems like a much more solid basis to the department’s forward estimates and their continuance than there would be without such a plan.

Mr Potter—I agree. We are thinking that maybe five years is too short. Maybe 10 years or even 20 years, perhaps. But I certainly agree, too, that a four-year, obviously much more focused and definitive program, would be very worthwhile. In fact, that is what we are doing with the Pacific Highway. There is a 10-year strategy and a three-year rolling program.

Mr Hrast—I think what we were talking about in our submission was a longer term strategic focus, rather than the four-year works program focus. It is a long-term view. As with the Pacific Highway, we have a 10-year vision of the Pacific Highway. That is what we do not have at the moment.

Mr WILLIS—What I am disagreeing with you on is the statement that ‘annual funding inhibits planning’. I do not think that is necessarily true. Obviously, if you have not got absolute certainty, then you may not be able to deliver on the plan, but it does not stop you planning. From the government’s point of view, there is always a concern about lack of flexibility in budgets and if everyone is locked up then you cannot do anything come budget time.

I think that is something that departments have to bear in mind as well, but it does not stop planning. I would have thought a plan—particularly one that is focused on a four-year basis in the forward estimates—shores up the department’s position very much at budget time.

Mr Potter—It would be very helpful if even part of the allocation could be guaranteed on a multi-year basis, not necessarily the whole 100 per cent of the program.

Mr RANDALL—Mr Potter, could you go back earlier to your opening statement where you gave a sort of a formula about commercial transport on roads and its funding criteria. Could you tell us again how you arrived at that?

Mr Potter—I am sorry. I do not understand the question.

Mr RANDALL—I am trying to get the set of rules that you gave earlier in your opening statement regarding how you justified the funding.

Mr Potter—Are you talking about fuel excise? Was it in that context?

Mr RANDALL—Can you just read it to me again?

Mr Hrast—This is not perfect, but it says that the closest measure of demand is the amount of fuel consumed in the transport task and by private motorists.

Mr RANDALL—Yes, that is right. Correct me if I am wrong, but, given that sort of approach and the fact that we could be looking at roads other than the national highway, how do you justify strategic roads, that is, some of the roads that we might have looked at, for example between Mount Isa and Cloncurry, or roads going to mining projects that are important for the national interest?

Mr Potter—How would you justify?

Mr RANDALL—Where do you go with that formula, given the fact that you are basing it on excise on the roads? I would appreciate just any comment.

Mr Potter—If you wanted to link that to fuel excise, obviously there is a heavy demand for use on that road by road trains carrying the ore. Under that criteria there is a strong case, but in terms of economic benefits, there is presumably a stronger case as well.

Mr RANDALL—It is hard to justify on that basis if you do not have a large volume of traffic, but you have valuable cargo, for want of a better term. I just make that comment.

Mr Potter—Yes. We said it is not perfect. Obviously, with heavy vehicles that are fuel efficient, that is one of the imperfections.

Mr RANDALL—Is it just anecdotal or can you provide some research which says that cheaper fuel does generate greater emissions?

Mr Potter—We would have to take that on notice.

Mr RANDALL—I would not mind knowing where we could source that. Finally, are there any instances from Western Australia—which is my state—on defective submissions or on-spec type submissions?

Mr Potter—There have been some examples recently of cost increases that we have taken up with the Western Australians.

Mr RANDALL—I also share my colleague Mr Hardgrave's concern, which has been passed on to me by state authorities, that they wish the federal department would get out of their face, let them get on with the job of building roads and doing their own planning. They believe there is a fair overlap from the federal

bureaucracy on them. I just make that point and I am sure you will disagree with me. For example, there is a cast of thousands here today; it is a large bureaucracy.

Mr Potter—As we try and move more into the planning phase of projects, that will reduce the need to get involved in the detail at a later stage as happens at the moment. That is our strategy.

Mr WAKELIN—This question has probably already been answered, but I need to ask it again. I will ask it the other way around. By raising fuel prices, how much do we lower the consumption and what empirical evidence do we have?

Mr Potter—There is evidence. I just cannot give you the figures. I am sure that is something the Bureau of Transport and Communications Economics would be able to advise on. If they cannot, we will give you the figures separately.

Mr WAKELIN—In terms of regional and urban interests in the greenhouse issue, would you accept that it is difficult because there is a significant difference between the square mile of a CBD and a population base of 1,000 out in the middle of Australia?

Mr Potter—In terms of greenhouse gas emissions, there is no difference on an individual motorist or vehicle basis where it is.

Mr WAKELIN—I had not quite finished my question: in terms of the cost to the individual and the equity of charging those people, if they live in the metropolitan area as opposed to the rural area, and therefore their contribution to polluter pays.

Mr Potter—In terms of the greenhouse gas emission, I do not think there would be much difference between rural and urban. But in urban areas with the ambient pollution and the noxious gases which tend to collect at a lower level, which is a function of congestion as well, I think there would be a stronger case for some sort of differentiation.

Mr LINDSAY—Evidence given by some of the state authorities talked about delays in dealing with your department and significant problems of project approval. Yet there was conflicting evidence given by other state authorities which said they are very happy with the service from the Commonwealth. By and large, the concerns came from—I was going to say the developing states—the larger states. Is the approval process that you people go through necessary or is it just duplicating what the state does? In fact, shouldn't your department just be a strategic thinker and planner and stay out of the nuts and bolts of what is the radius of this curve or that curve?

Mr Potter—That is the direction we are trying to move in. Perhaps I need to expand on this a bit more. The types of proposals we get from those states, particularly Queensland, tend to be very small scale. They might even deal with just one overtaking lane for \$½ million or something like that. We have spent a lot of time and worked very hard with Queensland to move away from that very small-scale approach. If you look at our Queensland program it is twice the size in terms of it being two pages long, whereas the other states would have a list of projects of only one page. That sort of demonstrates that the Queensland approach

is to do quite small-scale projects. We have agreed with Queensland that we will move away from that small detailed approach to a more corridor approach. So, as we do in the Northern Territory, we will look at a whole corridor and we will agree on a strategy for a whole corridor and fund that, rather than funding individual projects one after the other, which tends to generate all that sort of paperwork, et cetera, and lots of approvals.

Mr LINDSAY—Just out of left field for a moment on vehicle identification systems, meaning a system to identify a vehicle on a toll road: there seems to be more than one system developing in the country. Are you in favour of a uniform system for the country and how would you suggest that could be achieved?

Mr Potter—I hate to be equivocal, but the answer is yes and no. I do not think there should be one system, because that would stifle initiative and innovation. But there should be enough of a standard approach to generate economies of scale, export opportunities and things like that, but without cutting off expansion or development of new ideas. Having said that, there is an area of the department that is working on intelligent transport systems like that with the industry and with the Australian Automobile Association as well. I can give you information on what is happening there.

Mr LINDSAY—Do you think it is a process that should be led by the Commonwealth?

Mr Potter—My view is yes, and the Commonwealth is taking a strong role in that. As I said, we can supply the details of that.

Mr LINDSAY—Right. Back into centre field now. You gave us some evidence this morning about GST. The government's position is that tax reform and the reasons why there should be tax reforms in the country are on the agenda at this stage. The process is not yet on the agenda at all. The government has an open mind as to what might or might not happen. Your paper that you gave us this morning is basically suggesting that fuel prices—

CHAIR—Peter, we have not tabled that paper as evidence yet so we cannot refer to it. You can refer to comments that the department made.

Mr LINDSAY—Okay. Thanks, Mr Chairman.

CHAIR—The witness has referred to the general concept and the impact on road funding, so you can refer to that in your questioning.

Mr LINDSAY—I am just suffering because I have got the thing in front of me and I cannot talk about it.

CHAIR—Let us not refer to this as evidence, if that is okay. Deal with the concept of what the witness might think about fuel excise.

Mr PETER MORRIS—It is not okay with me, Mr Chairman. If you have a public hearing you have a public hearing. If you are going to ask everybody to leave the room you cannot have the public hearing. You have the audit office, the Department of Transport and other departments sitting here. We are all mature

enough as politicians to be able to phrase our questions in language that—

CHAIR—Mr Lindsay is about to do that.

Mr PETER MORRIS—Yes, but he is asking for it to be not recorded, as I understand it.

CHAIR—No. He is going to ask his question. Go ahead with your question, Mr Lindsay.

Mr LINDSAY—It is likely that you might suggest that the price of fuel should not be significantly reduced. Mr Randall and Mr Wakelin were talking about that. You would be likely to suggest that because of the effect of greenhouse gas emissions, et cetera. Would you be prepared to advocate that the fuel excise component currently on fuel should be re-named as some kind of a road improvement payment so that the source of funds out of the sale of petrol keeps flowing but is more focused into the road area?

Mr Potter—No. We have just presented a discussion paper. We are not advocating anything, suggesting anything or drawing any inferences specifically.

CHAIR—Just off the back of that, a more specific question might be: would the department advocate fully blown hypothecation of any road user tax, as Mr Lindsay is suggesting, as a fuel tax?

Mr Potter—I do not think I would like to venture into that area.

Mr LINDSAY—It is only about road funding. Perhaps we should.

Mr Potter—I have really brought those things to the committee's attention for the purposes of the committee.

CHAIR—With regard to the ALTD act, what amount of fuel excise is paid directly into the trust fund?

Mr Potter—None.

CHAIR—I thought I read somewhere in the submission that there was a requirement under that act that a proportion of fuel excise be paid into a trust fund.

Mr Potter—Yes, for that part of the act the government decided, for fiscal reasons, that it would appropriate the money available for road funding each year for the national highway and pay that into the fund. That is done by that mechanism.

CHAIR—When did that change?

Mr Hrast—There was a gradual change over a period of time rather than a formal decision saying 'stop doing that'. Fuel excise is always paid into consolidated revenue and then a notional proportion, if you like, is used to fund our ALTD program. It is only paid into the trust fund as the funds are required.

CHAIR—Do you have any further questions, Mr Lindsay?

Mr LINDSAY—I think I should stop there, Mr Chairman. Mr Morris is saying I should stop.

Mr PETER MORRIS—You cannot ask departmental officers to determine your policy for you. They can provide you with information but it is not their role to provide policy. Mr Cameron, you make the decision.

Mr ROSS CAMERON—Is this thrust and parry?

Mr PETER MORRIS—No, it is a bit of a sharing.

CHAIR—Mr Cameron has the call.

Mr ROSS CAMERON—It was not 100 per cent clear to me, from the discussions, what the department is saying. Clearly, there is a relationship between the cost of petrol and the amount of road usage. But is the department saying that its view is for high fuel prices? If we introduce some broad based consumption tax which wipes out the fuel excise, you are going to have dramatic reduction in the cost of fuel. Is the principal problem that you are highlighting a financing problem or an environmental problem?

Mr Potter—It is those things and it is also a demand problem and a road supply problem. If the price of fuel falls, then the demand for travel and transport will increase as well, which will increase the demand for roads. So it is multifaceted.

Mr ROSS CAMERON—So basically what you are saying is that, if you are going to allow it to come down, you have to accept that there are going to be these environmental consequences. Also, you are going to have to find additional funds to meet the additional demand for road usage.

Mr Potter—Yes, unless you can suppress or control demand in some way.

Mr ROSS CAMERON—So the department's view, from a policy standpoint, is that maintaining current prices of fuel is desirable?

Mr Potter—No, I am not saying that at all. In fact, we are not putting forward a policy position. We are really just bringing forward certain observations and facts.

Mr ROSS CAMERON—There is discussion that the national highway system is, arguably, approaching completion some time in the next decade and so, perhaps, we ought to be looking at roads of national significance. Don't you run the risk of going further down the food chain, if you like, into the minutiae of having to pick winners in individual states and regions? Is the Commonwealth in a position to be able to better pick a road of national significance than, for example, a state road authority?

Mr Potter—What we have tried to put forward in our submission is that it is a cooperative thing with the states and the more we get involved in planning issues, then the more this nationally significant network

will be easily identified and emerge.

Mr ROSS CAMERON—If we have this discussion which Mr Hrast raised about the duplication of the road along Lake George, do you not have the problem, every single time, that the more the Commonwealth is prescriptive or seen to be sponsoring a particular piece of road, and the more Commonwealth calls the tune about where the dollar is going to go, the states will say, ‘Let’s screw these guys for every cent we can get for this piece of road. We know they’re going to do this piece of road. We don’t have the flexibility to spend the money somewhere else, so let’s get the Rolls Royce road’? Aren’t they going to say that every time?

Mr Potter—No, because the roads of national importance program is on a shared funding basis. To the extent that local councils may have to put their own money in—and states governments certainly do have to put their own money in—that will act as a brake on those sorts of dependencies or pressures.

Mr ROSS CAMERON—So why did it happen on the Lake George one, to virtually double the cost of the road?

Mr Potter—I am not sure. The Commonwealth funds the national highway 100 per cent. While that allows a clearer definition, it does also allow scope for the states to try that. I should say that a similar thing happened in Queensland, at Yandina, when the state proposed a very expensive and disruptive solution to the works that were going to happen there.

Mr ROSS CAMERON—Where we have got a situation where we have put our hand up, some might say, ‘You guys are mugs if you are putting your hand up.’ We do not actually administer the contracts; the state road authorities administer the contracts. We put up our hands and say that we are going to fund the cost of this network, but we do not have the capability to actually run the contracts, select tenderers, ensure we get best price, go through the different possible engineering solutions. How do we know that we are not getting absolutely slugged for the national highway system?

Mr Potter—That is why we need to review exactly what the states are proposing. That is one answer. If you put it to the states, I am sure they would say that their professional integrity and engineering experience would also—

Mr ROSS CAMERON—I am glad we did not have to rely on it for Lake George, where we are just about to shell out another \$130 million on the basis of their integrity.

Mr PETER MORRIS—With respect to that section of your submission which deals with the role of the department in the evaluation of projects in relation to the Commonwealth tax rebate scheme, which is replacing the former infrastructure bond arrangements, can you tell us a bit about what the role of the department with respect to those arrangements is likely to be?

Mr Potter—Yes. The department will chair a group of departments reviewing applications, and that group will formulate recommendations for the government. Once the decision has been made, the tax office will implement the scheme from there on.

Mr PETER MORRIS—My recollection is that what is proposed is a cap on the amount of money that is available by way of rebate.

Mr Potter—Yes.

Mr PETER MORRIS—Roads will compete along with rail, I think—

Mr Potter—Yes.

Mr PETER MORRIS—As infrastructure projects for access to that rebate. Will you be the senior department providing advice, or will you provide advice along with other departments? Who will have the carriage of that in going forward as final advice to government?

Mr Potter—The Department of Transport and Regional Development.

Mr PETER MORRIS—How will you prioritise projects? What sorts of criteria are in mind? Have you got as far as that yet?

Mr Potter—No.

Mr PETER MORRIS—It is dangerous to assume, but if we were to contemplate it is likely that the benefit-cost ratio would be a major factor?

Mr Potter—Yes, definitely.

Mr PETER MORRIS—You would be taking the BCA into account there?

Mr Potter—Yes.

Mr PETER MORRIS—It would be extremely difficult to take political considerations into account, though, wouldn't it? You don't have to answer that.

Mr Potter—That is something for the government.

Mr PETER MORRIS—Yes, it is something for the members around the table to work out. I want to turn back to a couple of other reports and their recommendations but before doing that I will say that a number of the questions this morning have been about your relationship with the states and the state rail authorities, and we have heard that ad nauseam. In the case of the Townsville project, is it a fact that no work whatsoever had been done on an assessment of the physical characteristics of that proposed project, the new port linkage road?

Mr Potter—By the fiscal characteristics—

Mr PETER MORRIS—No, that no evaluation has been done on the physical characteristics of that.

We saw a green surface. Is there bedrock beneath the surface? If there is bedrock, how far below is the bedrock? Is it feasible to construct a road across that kind of terrain? What kinds of bridges are involved? Has any of that kind of information been evaluated, do you know?

Mr LINDSAY—The state is doing the EIS.

Mr Potter—Yes, there is a planning study at the moment.

Mr PETER MORRIS—So no study has been done?

Mr Hrast—Not complete. We are involved with Queensland on that planning study.

Mr PETER MORRIS—I am just putting it to you because expectations were raised when that was put to the members of the committee.

Mr Potter—I do not think it is right to say that this planning study is the first time that it has been looked at. There have been other—

Mr PETER MORRIS—The advice provided to me by one of your state colleagues was that no work whatsoever had been done on the physical evaluation of that project. No-one knew whether you could build a road or whether you could not build a road, how many bridges you would need, how long the bridges would be, or anything else. I am just trying to make the point that, if that has not been done, it means that you cannot come in as a department and do your evaluation and assessment until that basic information is available, and then go on with the process.

Mr Potter—That is right. We are working with the Queenslanders on that planning study.

Mr PETER MORRIS—You always work with the Queenslanders. It is a love affair!

Mr Potter—We do.

Mr PETER MORRIS—It is a bit of a love affair, I noticed. All this charade goes on when we are around but after we are gone it is different. In those private discussions you have at officer to officer level—and Mr Potter is smiling and nodding his head; *Hansard* cannot record that unless I say it—

Mr Potter—I am just joining in the general response, Mr Chairman.

Mr PETER MORRIS—In those private discussions that you have on an officer to officer basis, what is the reaction of your state colleagues to the proposal that we ought to follow what the Commissioner of Audit said, that is, ‘Get right out of the picture and just transfer specific purpose road grants across to the states into the general revenue grant category and let them administer the whole process themselves?’ Why be half-pregnant?

Mr Potter—I think the Victorian department is the only one which expressed those views to us.

Mr PETER MORRIS—No, we have had it put to us. It is a fairly fundamental sort of question, this whole inquiry. Is there a role for the Commonwealth or is there not? And if there is a role for the Commonwealth, what should that role be? One view was put to us in the hearings we have had around Australia and in the submissions from the state road authorities. Is that public view consistent with the officer to officer view? You talk to all of them.

Mr Potter—The Victorians are the only ones who have expressed those kinds of views.

Mr PETER MORRIS—What, opt out? Get the feds out? ‘Just give us the money.’

Mr Potter—Yes, untie the grants.

Mr PETER MORRIS—So the states still want you in there?

Mr Potter—When you are talking about the states—

Mr PETER MORRIS—The state road authorities.

Mr Potter—Yes.

Mr PETER MORRIS—I would like to move on to the report, and the relationship that you have with the audit office. Is that also a love affair?

Mr Potter—I do not think love comes into it. I am lost for an answer. It is just a normal, professional relationship. I am not sure what your question is.

Mr PETER MORRIS—I realise that, but if you want to elaborate, please proceed.

Mr Potter—No, I do not think I want to elaborate.

Mr PETER MORRIS—Let us go to the report that was done by the audit office into the administration, the Efficiency Audit Review of the National Highways. I think audit officers are present. When we looked at that relationship, there were several areas of contention. I mention them because they run contrary to what the states are putting to us, and they are important, in my view, in the context of the inquiry. One of those was a more rigorous matching of payments to the reporting of progress.

Mr Potter—I am not sure of the situation before the audit report, but certainly now we pay on a monthly basis. We pay against reported expenditure in the previous month, and on estimated expenditure for the next month.

Mr PETER MORRIS—Incentives to reduce costs? There was a system at the time where they could have a retention if a bigger work was approved. If the job was done for less than that, the State Road Authority retained that saving and was able to use it elsewhere.

Mr Potter—We have moved more and more from a basis of fixed state allocations, where you can operate in a system like that, to moving money around. If a state is underspending, then we will move money to another state that requires it. So the sort of scheme you are talking about, I think, would work predominantly in a situation where there was a fixed allocation each year to a state.

But having said that, if a state does achieve economies, and that often happens, then they will propose, and we will discuss and very often agree, funding additional works in that state from those cost savings. To that extent, the incentive is still there.

Mr PETER MORRIS—The improved accountability of state authorities are all matters that were raised by the audit office and obviously are still an issue.

Mr Potter—The way we administer the program now, on a monthly basis, on individual project reporting of expenditure, I think we would meet that.

Mr PETER MORRIS—And the improved project progress monitoring and quality systems?

Mr Potter—Again, we get a monthly report from the states on progress. They will raise any difficulties, et cetera. If there are problems, usually they are publicly known, as well. Also, there is that mechanism.

Mr PETER MORRIS—Mr Chairman, I am raising these questions, even though they go back a few years, because they are questions of considerable concern to the audit office. The audit office will be before us later in the course of the inquiry. They are matters that run contrary to what the state submissions are putting to us. They are virtually saying, ‘Just give us the money and let us do what we like with it,’ and that is why I think these questions are important to the course of the inquiry.

I am looking at the bottom of page 3 of your submission, which has a table on national highway expenditure and a break-up between new construction and maintenance. Generally we have been told that the crisis problem in road construction and maintenance is in the area of maintenance. Most of what you have been saying and most of the pressure that has been put to the committee is for more and more construction. From a national viewpoint, is it not maintenance that is the major priority, and should we not be looking more to overcoming the problem of availability of funds for that maintenance task rather than adding more and more construction to it?

Mr Potter—It is certainly a very important part. As you would know, in the United States it has been a problem because they have concentrated more on construction than on maintenance and that has caught up with them. My view is that they are equally important; I would not place one above the other.

Mr Hrast—BTCE assessed the maintenance needs for the national highway up to, I think, 2015 at about \$300 million to \$350 million a year. That is where our \$325 million came from—we just took the mid point of that. The current funding for maintenance of the national highway is, I think, \$330 million, so it is around that level.

Mr Potter—But the BTCE figures did kick up in about the year 2005. The requirement would increase significantly at that time, which would reflect the maturing stock of the roads.

Mr PETER MORRIS—The general submission put to us in the past, across the nation generally, is that the massive task that is waiting to be done—it is in a crisis situation—is maintenance of the existing system. That is what I am looking at. That is also extremely important to us and where the share of available funds, resources, is going to. Can we leave that for you to expand on a little by way of a note, looking across the national picture? That table indicates that you have got roads of national importance coming in and, as my colleague from Parramatta was making the point, you are adding more and more projects. Is the Commonwealth at risk of diluting the priority of the road system by adding bits here and bits there?

Mr Potter—Certainly if the level of funding is kept at current levels the answer is yes.

Mr PETER MORRIS—So we need to address that more, particularly on the maintenance task, as we go through. In the other areas, the recommendations that came forward from the inquiry into driving the road dollar further referred to methods of improving the technology for road maintenance. I will not take up the time of the committee going through all of them now, given the time, but can I, Chairman, just mention those recommendations to the department now and see if we can follow this by way of a note coming back. They go to the efficiency of the maintenance of roads, to new technology in the maintenance of roads and to the recycling of materials and research into the efficacy of various recycling methods for road materials. They are all important to how much road we get to our dollar.

As to the last ones that I wanted to ask, Mr Chairman, the relationship with the audit office has settled down, so that is okay. Obviously, we will ask Audit about that when we see them, as well. To look across the picture generally on indirect taxes on fuel, are you able to tell us whether, in those nations where they have a value added tax or a consumption tax, generally they have a form of fuel excise or a fuel tax as well? My understanding is that they all do.

Mr Potter—Yes. New Zealand is the particular case we drew to the committee's attention in that paper we have submitted.

Mr TANNER—I notice that in your submission on the national highway corridor strategies you say that on the outskirts of Melbourne a major deviation of the Hume Highway will need to be considered in the medium term. What exactly is that likely to entail?

Mr Potter—The current Hume Highway, where it goes through Broadmeadows, is particularly congested. We are planning with the Victorians for a new alignment, largely to the west, which will meet up with the extension of the Western Ring Road that we have just started funding this financial year. I think Mahoneys Road is where the new alignment will come; it will start at Craigieburn.

Mr TANNER—Would that end up going back into the Sydney Road alignment, or that would stay with the—

Mr Potter—By the Sydney Road do you mean the current Hume Highway?

Mr TANNER—Yes.

Mr Potter—No. It is a completely new alignment from Craigieburn down to—

Mr TANNER—So in a sense it just becomes a different feeder for the Western Ring Road?

Mr Potter—Yes, avoiding the congestion.

Mr TANNER—In other words, the idea is to siphon off a proportion of the traffic at an earlier stage?

Mr Potter—Yes.

Mr TANNER—My second question is a bit off the track. Intelligent transport systems were mentioned a little while ago, I think by Mr Cameron. I am just wondering whether the department has had any role at all in the question of a cooperative research centre being established with respect to intelligent transport systems. Have you expressed any view on that, been involved in any discussions, put forward any propositions at all?

Mr Potter—The department has. In fact, the government is funding \$120,000 for a research purpose along those lines. We can give you all the details of that.

Mr TANNER—What exactly does that \$120,000 cover? I know there is \$120,000 with respect to ITS; I am not aware that that has got any direct link with the proposition about the establishment of a CRC.

Mr Potter—I do not know whether there is a centre, but there is a research program that the ITS people are working on. As I said, it involves the AAA and various industry players as well. We do not handle it in my branch, but I can certainly find out the details and provide them.

Mr TANNER—I would be interested to know. From the point of view of the roads issue, which is obviously pretty central to ITS possibilities, is the department, your division, keen to see some action on the CRC front?

Mr Potter—In terms of an actual centre, I do not know, but certainly in terms of providing those sorts of facilities and improvements on the highways, yes, we are. In fact, we are funding \$5 million next financial year, 1997-98, for some improvements along those lines on the F3 north of Sydney.

Mr McDOUGALL—I come back to what I started on about strategic planning. During the inquiry, around the states, we saw various levels of strategic planning by state governments both in regard to their national highway, in relation to roads of national importance, and in relation to rural roads. To me there is a very big question about who is responsible to pull together the strategic planning of road construction and maintenance in Australia so that the nation is going down one track in relation to this question and we are not going down a series of tracks set to varying degrees by state governments. Do you believe there is a need for a national strategic plan? If so, who is going to do it?

Mr Potter—Our submission did point to this, so I would agree with that statement that a national strategic plan is needed. But I would not see it covering the whole gamut of roads right down to the smallest local road, obviously. What we have tried to focus on is the national highway and that nationally significant network underneath that which will, however, include local roads from time to time and regional roads as well.

We are working with Queensland, in particular, on a 20-year vision for the national highway, especially, and that network underneath it. We are quite keen to work with Western Australia on a similar basis and with all the other states as well, to produce that vision.

Mr McDOUGALL—You have singled out Queensland and Western Australia. Does that mean they are keen to do it and the others are resisting?

Mr Potter—No, I would not read that into it. What it does reflect is that there is a lot of demand in Western Australia and Queensland and they are, as someone said, developing states. That is the reason.

Mr McDOUGALL—Do you see it as one of your department's roles to carry out that strategic planning process?

Mr Potter—Yes.

Mr McDOUGALL—What level of strategic planning are you doing in your department in regards to tying together all the modes of transport on the same principle a la air, sea and rail?

Mr Potter—Most of our efforts focus on rail. The ALTD Act does allow for the money that is provided for the Australian Land Transport Development Fund to be allocated to road and/or rail, so we are conscious of that. It is a roads program and the people we deal with in the states, by and large, are the road authorities, so it does have a large road focus. But as we move more and more into the planning stages we are looking more and more at alternative modes, rail in particular, shipping to some degree, and air to a lesser degree. We are moving to a more strategic focus and that will inevitably put a larger emphasis on intermodal issues.

Mr McDOUGALL—I will just return to Mr Morris's point. He was talking about the value of road maintenance as opposed to the road capital expenditure. You said that that is where the Americans got themselves into trouble. Do you see that intermodal operation in planning as a way of overcoming that dilemma that you have between capital and maintenance levels? In other words, are we putting too much dependency in Australia on roads and not enough dependency on strategic planning to integrate other modes of transport?

Mr Potter—We have argued in our submission that yes, we need to put a greater emphasis on intermodal strategic planning. The key area where it emerges is in urban areas.

CHAIR—Your submission notes that given the Commonwealth's primary rationale for its involvement in road funding is to achieve national goals, it would be consistent for the Commonwealth to

have a say in the allocation of untied funds to meet its objectives. How could such an expanded role be achieved given that untied funds may be spent on any activity? Would there be value in retying the untied funds? Is it possible to retie the untied funds?

Mr Potter—To take the last question first, the answer is yes, but that is not the situation and we have to work with government policy, obviously. I revert back to the emphasis we are putting more and more on planning, working with the states on strategies for planning, et cetera, which will obviously go beyond the national highway and pick up local roads and regional roads which are funded by the states through the untied funds. That is how we would influence it.

CHAIR—In relation to increased mass limits your submission notes:

. . . a strategy needs to be developed to deal with the impact on the road system.

To what extent will the national highway system in state, territory and local government roads require upgrading to cope with increased mass limits?

Mr Potter—As I mentioned, it is essentially on the bridges. It is not the pavements so much that are affected. With the national highway bridges, we do not think there is a great problem there. Some expenditure will be required but it would be in the tens of millions of dollars. The greatest impact, from what we understand, will be on local regional roads and then on state roads.

Mr PETER MORRIS—That is quite a vexing issue. Representation is coming from local government about the increase in mass limits. A lot of that seems to be centred around new suspension systems and more road friendly sensors, which I can see a deal of merit in, but is it the reality that the road cannot distinguish between what are the new suspension systems and what are the old suspension systems, so when you raise the mass limits it applies to all vehicles, regardless of the suspension system in use?

Mr Potter—That is quite correct. Unlike B-doubles, where it is immediately obvious that it is a B-double, you cannot tell just by looking at a vehicle that it has this road friendly suspension, that is correct.

Mr PETER MORRIS—All vehicles have access to it. What I am worried about, Chairman—and you have a personal concern about this as well—is how much regard we need to give to the danger that local government envisages as mass limits are raised, so any other information would certainly be helpful, would it not?

Mr Potter—The NRTC has done some work on this, and we can provide that to the committee.

CHAIR—We have just about reached the time we have allocated for this session of the hearing. I thank representatives from the Department of Transport and Regional Development for giving their evidence this morning. There were a number of questions taken on notice and if you could respond to those as soon as possible that would be very helpful. We will send a proof copy of the evidence as soon as it is available. Thanks very much, gentlemen.

[10.36 a.m.]

DOBES, Dr Leo, Research Manager, Land and Environment Branch, Bureau of Transport and Communications Economics, PO Box 501, Canberra, Australian Capital Territory

GARGETT, Dr David Ross, Research Leader, Bureau of Transport and Communications Economics, PO Box 501, Canberra, Australian Capital Territory

HARVEY, Dr Mark Oliver, Research Leader, Land and Environment Branch, Bureau of Transport and Communications Economics, PO Box 501, Canberra, Australian Capital Territory

CHAIR—I welcome representatives from the Bureau of Transport and Communications Economics. We have received your submission to the inquiry. Would you like to make a brief opening statement?

Dr Dobes—Thank you, Mr Chairman. I will make it brief to allow more time for questions, if that is what the committee would prefer. I would like to start off by thanking you for the opportunity to appear before the committee. The submission that we gave the committee in February essentially outlined our approach, the data needs, and what we could probably provide to the committee by about mid this year.

I would like to report to the committee that work is well under way, particularly in three areas. One is bridges. Our consultant has managed to give us some quite interesting information on costs of upgrading bridges in terms of scenarios of future mass limit increases. We now have an algorithm for overtaking lanes. That may not sound very exciting. It means that we have an extra option, in terms of cost-benefit analysis, in looking to see whether it is worth upgrading the national highway system and so on.

Finally, we are close to completion in terms of preparing the data which a number of the states have provided to us for the analysis itself. On the other hand, however, we have a very innovative new method of forecasting demand along the major corridors. Unfortunately, we have run into some data problems there and that work is a little behind.

We do not think we can give the committee projections of demand or our projected cost for upgrading the national highway system, if necessary, until some time in August. We regret that. It is just the way research proceeds, unfortunately. On that score too, I would like to mention that we cannot complete that work on freight until well into next year. It is just too difficult and there is not enough data.

I would like to mention to the committee that we will be discussing our results with the states, before we provide them to the committee, to make sure that we have their view on our results and that a sanity check—as we call it—is in place before we provide the data. We call it a sanity check. I am not sure if that is the technical term, but that is what we call it.

Mr PETER MORRIS—Not sanitary.

Dr Dobes—No, sanity. It is just to make sure that our results are not inconsistent with what the states might expect us to be getting, because they have better knowledge of their roads, obviously.

Finally, I would like to mention that Dr Gargett is the person whose team is really doing most of the demand projections—in other words, seeing how many passengers and so on are going to be using major corridors. Dr Harvey is the one in charge of modelling upgrades of roads: the cost-benefit analysis.

CHAIR—Thank you. Your submission notes that the BTCE is undertaking a study into current and future bridge adequacy. I know you have just mentioned that. On what basis are you assessing adequacy, and when will this research be available?

Dr Dobes—The research is available now, Mr Chairman. Dr Harvey can explain the adequacy side of it.

Dr Harvey—We have recently received the working paper from the consultants. It is purely an engineering rather than an economic approach. It is based on the characteristics of the bridge: its age, its type, and those sorts of things. When the probability of failure reaches an unacceptable level, the consultants believe the bridge may need replacing.

CHAIR—And the availability?

Dr Dobes—It is here, Mr Chairman. This is not the final draft that I have in front of me. I think it either is being delivered or is now in the department. We would prefer though, if it suits the committee, not to present this as evidence but to present it separately so that we can make further use of it in our own reporting, for our own work.

CHAIR—When is a final draft likely to be available?

Dr Dobes—This week sometime, I think.

Dr Harvey—I have got to get back to them on a few comments.

CHAIR—Okay. Maybe, when that is available—

Dr Dobes—We will make a copy available to the committee.

CHAIR—Your submission notes that a benefit-cost ratio in excess of one should be regarded as sufficient condition for a project to be justified in economic terms. Would you like to elaborate on that? Also, is benefit-cost analysis the most appropriate tool to rank road projects for Commonwealth funding?

Dr Dobes—That is a big question, Mr Chairman. I will try to answer—

CHAIR—Take as long as you like.

Dr Dobes—I do not want to tie myself up.

CHAIR—In terms of this inquiry, it is an important issue.

Dr Dobes—Understood, Mr Chairman. The BCR of greater than one is often used, and it is a nice shorthand for saying that the benefits are greater than the costs. But, in general, a net present value should be preferred. There are theoretical circumstances where that is not true. I might let Dr Harvey answer that, if the committee wants to go to that sort of detail. To put it very simply, it is the difference between seeing whether something might be profitable, which is the BCR—in other words, that the benefits are greater than the costs—and seeing how much profit you are making, which is benefits minus costs, or the net present value.

If you know how much profit you are making, that is much more important information, because you can rank projects in terms of the amount of profit—or the amount of benefit to the community, in this case—and work it out that way. That gives you a much better measure than just a BCR. I am not sure if I have made myself clear there, but that is a much better way of doing it from an economic point of view, because it gives you exact information. It also allows you to take into account various other sorts of things and to make comparisons with other projects in a much better way.

Mr LINDSAY—How many people are in your branch?

Dr Dobes—I cannot give you an accurate measure, because a number of them are part-timers and so on, but it varies between about 12 and 15. It goes up and down. They are not all working on this particular project.

Mr LINDSAY—Does the work that you do in fact feed into and affect Commonwealth funding decisions?

Dr Dobes—It certainly feeds in, in the sense that our information is publicly available. So at any number of points—going from cabinet down to the department, or, for example, to the states—that information is always available publicly. Whether it actually affects decisions, we just do not know, and we do not have any means of determining that. We would hope that it would.

Mr LINDSAY—In your mission statement, or whatever it is, what is it that you see yourself as doing?

Dr Dobes—Our mission statement—if that is the correct name for it—is that we do provide policy relevant research, which is of primary interest to the department and to the portfolio—the minister—and also of public interest, in other words to inform public policy debate. That would be our key role.

Mr LINDSAY—Do you think your work is more used by the Commonwealth than the states, or can't you say that?

Dr Dobes—I do not think I would like to generalise on that, because that depends on the issue. Sometimes things are of more interest to the states. For example, about two years ago now, we did fairly detailed modelling on congestion costs in the capital cities. In terms of state-Commonwealth responsibilities, that is probably of more interest to the states than to the Commonwealth at this time. That is a good example of where it is more important to the states than to the Commonwealth. On the other hand, the work we are doing now, which is relevant to this committee, is probably of greater relevance to the Commonwealth

immediately, but it is also relevant to the states. It is hard to generalise.

Mr McDOUGALL—I am particularly interested in this inquiry in relation to not what is existing today but where we are going in the future. We have taken evidence around Australia, particularly in relation to the question of what roads should be built. Should they be built just continuing to upgrade the national highway because it is the national highway, or should the Commonwealth be more involved in building roads of national economic importance which may involve, under the heading of roads of national importance or the national highway, better integrating modes of transport in relation to achieving strategic economic outcomes for the nation?

In your work that you have done to date, how much have you looked at broadening the question in regard to the long-term benefits of economic benefit to Australia, to the export income and to the question of getting a better inter-reaction between the modes of transport?

Dr Dobes—That is a very broad question. I will try and answer that, but if I forget any point that you have asked me, please remind me and I will come back to it. This is where benefit cost analysis comes into its own in the sense that you can compare between different modes. There is often a tendency amongst people who deal with roads to focus only on the roads and look at BCRs or net present values on roads only, but obviously when you are doing benefit cost analysis, you need to look at all the options.

One option might be to look at roads versus rail versus sea or whatever else there is. Another option might be to take time into account—in other words, do nothing for the time being and wait. We have explained in our submission that the time value is important. That would be important to do, and our analysis allows decision makers to take that into account in terms of the information we present.

In terms of looking at all of the different modes and looking more broadly, the demand analysis that Dr Gargett's team is working on is using quite a different technique to what has ever been used in the past. We are not just looking at the number of cars that might use a particular road.

If you think of anything—telecommunications or roads or anything—you have this sort of S-curve, as it is called, where things start off slowly and then they increase very rapidly and then they tail off at the end: almost like growing trees or anything like that—it is a biological parallel. You can apply that in terms of the different modes. You might have one corridor, for example, where air travel is rapidly increasing and people are using the roads less. You get one going up and the other one coming down.

We are actually using that sort of modelling to try and project into the future what the share of each mode would be along each corridor. There, we are already taking into account the different sorts of modes. As I say, this has not been done before in Australia as far as we are aware, and we are trying to do that. I am not sure if I have covered everything there, but I can come back to it. I think you also mentioned export income and so on?

Mr McDOUGALL—That is right.

Dr Dobes—Perhaps we can come back to that later. In terms of benefit cost analysis, it is—if I may

put it this way—a common misconception that one would separately or on top of the benefit cost analysis take into account so-called benefits in terms of export income. In a system like Australia's where you have a free exchange rate where you can buy foreign exchange at any time, in general there is no greater value to get any foreign exchange to getting some sort of profit or benefit domestically. We would not include that separately in that regard.

Mr McDOUGALL—To expand that a little further, we got some varying input from the states in regard to their own strategic planning, both in a road sense and in an intermodal sense. When you do your modelling you have got to depend upon information coming to you from the states, who are supposedly doing the strategic planning. Do you feel you are getting enough information? Do you feel the states are actually looking at it in a positive way, or are they simply still being driven by the sense of that public demand that says, 'We need that road upgraded' and is based more on emotion than on the reality of what is needed?

Dr Dobes—I find that very difficult to answer. We have not asked the states for that sort of analysis. We are not doing what might be called a meta-analysis—in other words, looking at what the states have done and then commenting on that. We have simply asked the states for primary data on their road systems, and that is all we are doing at this stage. We hope, in cooperation with the states if that is possible, to do a similar exercise for the rail sector in the coming year. My understanding is that the states would generally do that multimodal sort of analysis within major cities; that is just my general, informal understanding of what they have done. What we are doing is the non-urban component. That is where we are focusing.

Mr LINDSAY—Does primary data from the states include a measure called road roughness, or does it not get to that sophistication?

Dr Dobes—Yes, it would. I am not exactly sure what each of the states has provided but that would be an important one for us in our modelling.

Mr McDOUGALL—Within your program do you look at the environmental impact of the development of roads with regard to this question?

Dr Dobes—The environmental impact?

Mr McDOUGALL—The environmental impact of building of roads, of growth of roads through a given area, what environmental impact that will have. How can you do that? Are you getting sufficient data from the states in relation to their long-term planning to be able to get enough information to make a comment on environmental impact that is going to be meaningful?

Dr Dobes—That is a vexed question. We have not asked the states for environmental type data, for a number of reasons. One is that a lot of that environmental data does not exist at the moment. I am thinking here in terms of, say, linear habitats along roads. I know that the CSIRO is doing some work in that regard at the moment, but at present there is not even enough information to even think about costing that effect in terms of roads. We just do not know what is out there—we do not know what sorts of species inhabit the sides of roads, both in flora and fauna, or anything like that—so we have not asked the states to do that. I can come back and explain a possible means of using that information once it is available.

There is another source of information which we think we have a fair bit of; that is in terms of emissions and so on. But that is probably not a major effect in non-urban areas. We would tend to disregard that because it does not affect the order of magnitude of our figures. We have what we would term a strategic model, not an absolutely micro type of model for each section.

Mr McDOUGALL—I assume that there you are talking about air emissions.

Dr Dobes—Yes, I am.

Mr McDOUGALL—What about environmental impact through the water system, which would have more impact in a non-urban area than the air emissions might have?

Dr Dobes—Yes, certainly. The difficulty is knowing, for example, between here and Goulburn, how much water run-off gets into the Murray-Darling system and what it does all the way downstream. That information is just not available to us. I doubt if the states, particularly for the Murray-Darling system, would have enough of that information to be able to give it to us in an integrated way. But, as I said, the CSIRO is doing work on that and we hope to be able to tap into that later.

Mr McDOUGALL—When do you think that will be?

Dr Dobes—That all depends on priorities, resources available and so on. May I just mention one possible method of taking that into account, because it is extremely difficult, as you would know, to value environmental effects. It is almost impossible. One possibility would be, instead of trying to value environmental effects when you are looking at roads, to assume that the environment can be maintained at the current level, whatever it is. It might be very degraded or it might be a pristine environment of some sort.

If you assume that you are trying not to let it deteriorate any further, you can work out the cost of doing that. Lake George is a good example. For example, you have those pans along the side of the road to collect any oil that is spilled and so on. You know what the cost was of putting that in place, to maintain that environment at its current level. It is not quite a cost-benefit analysis—you do not know what the benefits are—but you know how much it will cost to maintain that environment in its current state. You could do something like that and could very easily be incorporated into our model. My only problem, as I said, is resources, both money and people, but that will all depend on priorities set by the government.

Mr RANDALL—Just let me meander a bit. I suppose the first question is this: do you have an opinion or have you stated anything previously on the term of reference we have about whether the Commonwealth government has a role in road funding? Should we just divest it all to the states?

Dr Dobes—This is really not a question that we get into in the bureau.

Mr RANDALL—No, I just asked if you had an opinion, that was all.

Dr Dobes—I do not have a personal opinion.

Mr RANDALL—Fair enough. I have got a bit of a passion for an inland road and one that has been suggested is a road that links from Western Australia through to Queensland, where the real road making would take place between Laverton in Western Australia and Winton. When you do your modelling and benefit-cost ratios, et cetera, do you look at those sorts of things?

Dr Dobes—It is in two parts. We could look at such a thing. We have not been asked to look at it. As I said before, it depends on the priorities. For example, at the moment we have been asked to look at a particular road, the road between Tumut and Canberra. So we are doing that sort of work and we have the capability to do that sort of work. We certainly have not looked at the one you have mentioned.

Mr RANDALL—At this stage I am just trying to find out more about you, actually, if you do not mind. The other thing is: when you are doing this modelling, do you look at specific roads? I have mentioned one previously, the road between Cloncurry and Mount Isa, which this committee has had a fair bit of input to.

Dr Dobes—In terms of the modelling we are doing at the moment, yes, we are looking at very specific roads—the national highway system, some of the RONIs and any other roads that the states have provided information on to us.

Mr RANDALL—Have you had a look at that one at all?

Dr Dobes—I do not think so.

Dr Harvey—No. Queensland has not provided us with data. We have used an old database which has only got the national highways in it. As it is not a national highway in Queensland it will not be looked at.

Mr RANDALL—Fair enough. You would have to be invited to do something like that, wouldn't you?

Dr Harvey—Yes.

Dr Dobes—We would depend on being given the data by the state. As Dr Harvey has mentioned, Queensland is one of the two states that have not provided us with recent data.

CHAIR—Is there any particular reason why they have not?

Dr Dobes—In terms of Queensland I am really not sure. That is an honest answer—I just cannot divine the reason.

CHAIR—Which is the other state?

Dr Dobes—Victoria. There I think the reason is that VicRoads would incur some considerable expense, of about \$100,000, and prefer to be paid.

Mr RANDALL—To follow on with specific little tasks: would you be looking at things like improving the problem of road trauma by looking at overtaking lanes and things like that?

Dr Dobes—That would certainly enter into it, in the sense that there is a rough per kilometre accident cost that might be avoided if one upgraded the road, which we could use. That would certainly be included in the analysis, yes, but only in a very, very rough way. It is very difficult to do that sort of analysis in a precise way using a strategic model of the sort that we are running.

Mr RANDALL—Mr Chairman, could you bear with me for one question, probably a bit out of whack. Tell me if it is. There has been a fair bit of public discussion on truck drivers driving with the aid of drugs to help them get across the country, and so on. Have you got any thoughts on that, or is that something you could look at?

Dr Dobes—I do not want to sound cocky, but in terms of economics, some economists would say that you could look at just about anything. In terms of the BTCE, no, we do not look at that. I would suggest that perhaps the Federal Office of Road Safety might be a better source of information. They have large programs and are right into various aspects of road safety. They would probably be the better ones to ask about that.

Mr RANDALL—Have you seen this discussion paper?

Dr Dobes—Which discussion paper?

Mr RANDALL—Regarding the broad based consumption tax.

Dr Dobes—The one the department presented beforehand?

Mr RANDALL—Yes.

Dr Dobes—No. I have not seen it.

Mr WAKELIN—I will start with the international experience in terms of funding models. The US and Canada have lower prices for fuel and yet they seem to be able to fund a significant highway system. What do we learn from overseas about funding programs generally? Is there anything in particular that stands out? The US and Canada have a similar land mass and, in the case of Canada, they have a similar population to ours.

Dr Dobes—I am not sure because we have not done a study of overseas countries in terms of funding.

Mr WAKELIN—There is nothing there at all that we are looking at in any way?

Dr Dobes—I can only state what I would call the general principle here, and that is that it would be very difficult to do such a thing because of different taxation regimes and different methods of allocating money. It would be a very difficult comparison to make, particularly if you tried to tie it straight into—

Mr WAKELIN—I would not expect perfection in the art, but I was just wondering whether there was a general principle. For example, with tollways, obviously, there are Commonwealth, states and provincial issues. There is nothing that comes to mind that you would like to comment on?

Dr Dobes—No.

Mr WAKELIN—My next question concerns fuel price and consumption models. Do we have very much on that? I guess, once again, we go to the international experience. It would have to be international because we have only got one model, or fairly marginal models, for what might happen in our country in terms of the fuel price and fuel consumption?

Dr Dobes—I guess that you are asking me about the relationship between the price of fuel and the amount being consumed?

Mr WAKELIN—Yes.

Dr Dobes—We tend to use two different sorts of elasticities, if I can just use that term for a minute. I will explain what it means in a second. One is minus 0.1—that is a short-term elasticity, as we call it—and the other is minus 0.2 which is a longer term elasticity. That means that if the price of fuel, for example, goes up 10 per cent, in the short term usage would go down by only one per cent. It is very inelastic, which is one reason it tends to become a source of taxation.

That is actually based on very detailed modelling which was carried out for us during our greenhouse work a couple of years ago using a technique called conjoint analysis. Rather than just looking at econometric evidence which may be fairly partial, Professor David Hensher of the Institute of Transport Studies at Sydney University did very detailed household surveys in all of the major capital cities to find out how people might be affected in terms of price changes, taking into account all of their circumstances, including their budgets, the number of cars they had in the household, the distances they drove, and everything else. We are fairly confident of those figures.

Mr WAKELIN—I have a great concern because I come from regional Australia. I note that the experts, or those who measure these things, even on our CPI do not measure such things for regional Australia; our CPI is measured only in metropolitan Australia. There is no modelling done on regional Australia.

Dr Dobes—No. And you are quite right to point out that there may well be a different effect in the regions from the cities.

Mr WAKELIN—There are two things that flow on from this elasticity in the long-term and short-term argument. In terms of road-rail, you would know far better than I about the fuel usage modelling that is done on a road-rail comparison. We have an inquiry, and you probably know that we are about to embark on rail itself. Can you give us a quick comment on road-rail in terms of that elasticity? Is there much there that stands out in terms of price? It is longer term and difficult to say but, for example, there are passenger services in Sydney or Melbourne. You do not tend to use freight and, once again, we would be back to same

old issue and we would not have rural measurement at all on fuel price and fuel consumption on the road-rail.

Dr Dobes—That one is extremely difficult to answer for the reason that with passenger vehicles, for example, the effect is directly on the consumer in terms of their travel, whereas in terms of rail the effect is more on the producer, and then a bit of that might get passed down to the consumer.

Mr WAKELIN—And we have got this subsidisation issue of the state rail system. On the regional tenor of my general comments in terms of environmental impact, not necessarily greenhouse, would you agree that there would probably be some contribution? In terms of the CBD versus the rest of Australia, there is obviously a cost for emission control in the general costs of vehicles et cetera, and with the argument about leaded or unleaded fuel there are a whole lot of precedents there. What sort of work do we do there in terms of understanding regional-urban? Is it the same difficulty we ran into in the previous issue of the impact?

Dr Dobes—Very much, and it is not really just a matter of the economics of it. There are the health effects to take into account. There is a huge area of uncertainty where we do not know what they are, so to cost them is almost impossible. Where the effects are negligible, and they might be in rural Australia, it is very difficult to even measure what effect emissions have or whether they are dispersed—

Mr WAKELIN—Can I just quickly point out—and I had this debate in the House—that Port Pirie has obviously got a lead smelter. It may be a little insignificant compared to the leaded fuel argument, but that is the sort of thing that is quite difficult to measure. I am just supporting your point, that is all.

In terms of funding generally, in terms of the Commonwealth-state relationship, some states have what they call state fuel franchise or taxes or whatever—by any other name, a rose. With the general funding approach with that particular state—obviously Queensland, and other states have variable rates—do we notice very much difference in the way that roads are funded in the Commonwealth-state funding mix? In others words we have zero in Queensland, we have up to 11c in South Australia—you would know it better than I. Do we see much emerging from the way states tax their fuel and the way it then comes back to the roads—where there is zero tax and where there is other tax and in relation to Commonwealth input?

Dr Dobes—I really cannot give you a proper answer on that because the information is so difficult to get. We have tried to get it from ABS. ABS only gets aggregated data. We cannot even really work out how much feeds down to municipal levels. The NRTC I understand has other data, but that is really done on a survey basis and that also has flaws in it. So, it is very difficult to—

Mr WAKELIN—No, I understand that, but in terms of an impact of funding, it seems to me that if you are getting 11c in one state and nothing in another state, someone is doing something different. It may then relate to the way the Commonwealth funds roads in that particular state.

Dr Dobes—It may or may not, I am not sure what the hypothecation arrangements are in each of the states, if any, or where that money goes. I really cannot answer that question, I am sorry.

Mr WAKELIN—To me it seems a significant point. Some states have no tax; some states have

significant tax, then the way even that tax finds its way back to the roads I guess is part of the earlier question of data collection which you have been asked to do.

Mr PETER MORRIS—Can you just elaborate on the factors affecting the elasticity of demand for motor fuel?

Dr Dobes—In the short term or the long term?

Mr PETER MORRIS—What are the factors of principal effect: is it the level of the economy, economic activity or the price of fuel?

Dr Dobes—There would certainly be income effects; the level of the economy would certainly have some influence. It is essentially anything that affects the demand for fuel. So you could take into account substitutes for road use—the availability of rail travel compared to being able to use your car.

Mr PETER MORRIS—For most of Australia that is not available.

Dr Dobes—No. But in terms of population, for example, something like 80 per cent or 90 per cent of the Australian population live in cities. They may have access to buses; they may have access to some other form of transport. If the question is what affects the elasticity, I am saying that is one thing that will affect it. To a consumer who does not have those substitutes available, he may actually have a much lower elasticity—be much more inelastic. It is a factor which affects the elasticity but it will differ between different consumers. This is an average measure.

Mr PETER MORRIS—It is a very mottled picture across Australia, when you look at the cities. You are saying that the factors that affect it are the price of the product and the standard level of income, the deployment of alternative facilities—

Dr Dobes—Alternative roads, for example, would be very important. You would have cross-elasticities there.

Mr PETER MORRIS—What is the major one? Is the major one the level of economic activity? Is there not a correlation between the performance of the economy and the consumption of fuel? I am pretty sure that has been established.

Dr Dobes—That would affect the quantities.

Dr Gargett—We have done only one very simple aggregate model of fuel use, and that is what it comes up with: it comes up with the same elasticity that was found in the very detailed work of minus 0.1 on the price, and I forget what elasticity it comes up with on income. You can get a fairly good tracking of national—

Mr PETER MORRIS—That is the gross consumption of fuel?

Dr Gargett—Of fuel, yes.

Mr PETER MORRIS—Let us go back one step. The other material I read says that the demand for motor fuel is highly sensitive to even minor differences in price. This is reflected from service station A to service station B. How do you mesh those things together? How do we take those into account?

Dr Dobes—That is exactly what we are talking about. We are talking about the price elasticity of demand for fuel.

Mr PETER MORRIS—I am taking two sectors: one is the gross consumption or usage of fuel, the absolute; the other is, you are saying, pretty inelastic and has some factors that affect it. This is all leading on to road user charges. Location by location, the demand for fuel is highly sensitive, even down to 1c or 2c differentials. Is that correct?

Dr Dobes—I assume it would be, in the short term; but then there might be longer term effects which may change that, which may make you less sensitive—but only in the very longer term—where, for example, manufacturers of cars produce cars which are more fuel efficient, so that the effect is ameliorated. But that would be at least a five-year time period.

Mr PETER MORRIS—To be very blunt, the most common thing I hear on Canberra radio is the price of petrol. Every morning there is a bulletin telling me at what service station to get it. Do you not hear any of that?

Dr Dobes—Yes.

Dr Harvey—I think we have to distinguish between the demand for fuel as a whole, as compared with the individual service stations. That is quite different.

Mr PETER MORRIS—I have made that point. You gave me an answer on that. But that seems to fly in the face of the high sensitivity. What is an appropriate road user charge, in light of all your experience? You are El Supremo: we have made you Prime Minister and you are going to put in a road user charge. What is the optimum type of road user charge?

Dr Dobes—That would have to be worked out; that would differ in different parts of a city, depending on the congestion in that particular part.

Mr PETER MORRIS—Do not dodge the question; you are the experts; we are asking you. You are the fount of all knowledge on the subject: BTCE is the best in Australia.

Dr Dobes—I am not trying to dodge the question. I am really trying to find a way of answering it, because we seem to be talking about several different things here. People are sensitive to the price of fuel. If it goes up one or two cents they will complain. But that does not necessarily mean they will reduce their usage of it, because it might have a higher priority in their lives than, for example, going to a restaurant. That is to say, the demand for fuel is fairly inelastic to a change in price. They will complain about it, but in

effect they will not reduce their usage of it; it is inelastic. I think that is how you square the two that you get. On radio, people complain; but in fact the amount they use will not be reduced.

Mr PETER MORRIS—What is the most appropriate form of fuel user charge?

Dr Dobes—This is a difficult question.

Mr PETER MORRIS—You have to relate that to road user charges.

Dr Dobes—It is a very blunt instrument to use fuel as a source of optimum usage of roads, if that is the question that you are asking.

Mr PETER MORRIS—I am asking a simple question. You are Prime Minister and you have to implement a fair and efficient system of road user charges: what should they be?

Dr Dobes—I will let Dr Harvey answer in a moment, but essentially you would not have one system across the whole country; you would distinguish between different areas. So, in the cities—

Mr PETER MORRIS—Do you want to think about it and write back to us when you have had more time, rather than answer off the cuff?

Dr Dobes—No. I would prefer, if I may, to clarify it here, because we would not be sure what you are asking about exactly. I am saying that, in the cities, congestion effects might be more important, and so you would charge on that basis to get an efficient road user charging system. In the country, it might be some quite different system.

Mr RANDALL—Even within the city itself, it would be different.

Dr Dobes—That is quite right. That is the bit a lot of people miss. They think you can have a uniform charge across the city which would be an efficient road user charge; but in fact it would not be efficient, because congestion is higher in the CBD or wherever and the charge should be higher there to reflect that extra congestion.

Dr Harvey—The basic principle is that you start with short run, marginal costs, which will be the cost of damage caused by trucks to the roads, plus congestion. In the cities, you will have a fair bit of congestion, and so you will have fairly high charges there. In country areas, where there is very little congestion, the charges will be a lot lower. That may not be enough to cover the whole costs of roads. Then, the most efficient way to do it from an economic point of view is to charge on the basis of ability to pay, and also to access charge. Therefore, you will have registration charges which segment the market, to try and cause the least distortion in the market. Do you see what I mean?

Mr PETER MORRIS—I do not know necessarily what you mean, because it is a—

CHAIR—It is a very critical issue in this inquiry. What you have just highlighted in a roundabout

sort of fashion is that the charging of fuel excise is not an efficient or equitable road user charge, because the impact on roads is greater in the city—where an individual motorist might pay less excise overall in the 12-month period—than in a regional centre, where the impact on the roads is less.

Dr Harvey—From an economic point of view, there ought to be congestion charges in urban areas. But I might point out that, because the demand for fuel is so inelastic—

CHAIR—I am sorry to interrupt, but I want to draw this point out. On that basis, that is also adding weight to the fact that a fuel excise is not an efficient or an equitable road user charge, if you have to charge a congestion charge as well.

Dr Harvey—In the city. It is efficient from the point of view that it is desirable to tax inelastic goods, because it causes less distortion to demand.

Dr Dobes—That is from a revenue-raising point of view in taxation theory.

Mr PETER MORRIS—And from an equity point of view?

Dr Dobes—Would you use a fuel tax of any sort to introduce equity? Would you not use an income tax, for example?

Mr PETER MORRIS—There is a major equity point of view because, in many areas of Australia, they do not have any alternative, so it becomes a tax. In the metropolitan areas, there are alternatives: you can get a bus or a train. But, in country Australia, there ain't no alternative; and, for much of metropolitan Australia, there ain't no alternative: you must have a vehicle. Those people then carry a greater burden. Mr Chairman, the time that is involved and the complexity of this question is very important, to my mind. I would certainly appreciate a few brief papers setting this out.

Dr Dobes—We can certainly do that. I will also mention that the Industry Commission did do a review of fuel taxes in 1986. They have a very nice summary in the back of all these issues.

Mr PETER MORRIS—The Industry Commission is a bit tainted, though, is it not?

Dr Dobes—No, not necessarily. I hope I have not tainted myself here!

Mr PETER MORRIS—No; that is why we are asking BTCE rather than the Industry Commission.

Dr Dobes—The arguments that they put are very clear and very well written, and they really explain the situation from an economic point of view very well. Can we provide that, with any additional comment of our own? I think that would be the most helpful.

Mr PETER MORRIS—We would appreciate a little bit of your own from BTCE. That would be useful to us.

Mr McDOUGALL—Could you make some further comment on this? It has been suggested to us in some quarters that the price of fuel has a major impact on road usage. It is slightly different from the question of tax or an excise on fuel. I would like to know if you have found a direct correlation between usage and prices of fuel.

Dr Dobes—We will certainly address those matters.

Mr PETER MORRIS—I would like to make reference to the inaccuracy of information you are gathering, as covered in your submission, and the problems you have with the states. Environmentally speaking, you did not make any mention of noise, so I want to ask about that later. Noise abatement measures are a considerable expense, particularly in those major roads in the metropolitan areas. That is measurable. You make the point that the information being gathered from the states varies widely.

At pages 1485 to 1486 of our brief, you stated that one lesson learned by the BTCE from its work for the National Transport Planning Taskforce is that information provided as data by the states can vary widely in quality, with significant gaps, errors, data missing—all the things listed in that section. That is of considerable importance to us. I have read through this submission and I wonder whether there is something you can add to that, and also on the work you may have done on maintenance.

Dr Dobes—Maintenance of roads?

Mr PETER MORRIS—Yes. Transport answered that earlier and said that you had done work on maintenance of road systems and the cost of maintenance. You have estimated a figure there of \$350 million per year for the maintenance task. Is that across just the national highway system or across all roads?

Dr Dobes—It was the national highway system and, I think, one or two other roads.

Mr PETER MORRIS—And the Pacific Highway, yes. This inquiry is covering all roads in Australia. There is a vast network of lightly skinned country roads, regional roads, where the task of those roads has rapidly changed from carrying just the local horse and buggy or car to, now, with the latest technology, the biggest truck that you can run, going up through those systems. Bridges also come into it. There is an enormous task in that area. Is there any work done on that?

Dr Dobes—No, because the data is not there. The model is quite capable of churning out anything if the data is there.

Mr PETER MORRIS—That \$350 million requested for the maintenance task is vastly greater than the \$325 million or \$350 million across that total sealed road system?

Dr Dobes—Obviously, if you look at the whole system, yes.

Dr Harvey—Also, in the case of local governments, they have got virtually no information at all. They probably know how long their roads are but that is about it.

Mr RANDALL—In Western Australia it is different. They have actually gathered that data.

Mr McDOUGALL—I am surprised that the states do not have the data other than just straight kilometres of road, but that is what you are saying.

Dr Harvey—I said ‘local government’. It gets better as you go up; the states are better.

Mr McDOUGALL—In the work that you have done in relation to bridges, have you modelled that on the principle of just replacing the existing bridges, or have you modelled it on the basis of doing it through an alternative plan? We went down and had a look at the bridges over the Murray. You could, I suppose, go through the exercise there and make a decision that you were going to replace all the bridges, just for the sake of the fact that there are bridges there. In your modelling what did you do? Did you do it on the basis of replacing them, or on a strategic basis of taking some out and just remaining with others for specific purposes?

Dr Dobes—The consultants that we used were the ones who did the work for the NRTC in the first place. There is a limited amount of data that they had. If I am correct—Dr Harvey might correct me—we only looked at replacing the bridges, because that is the only data that we had. It was the only way we could model this.

Mr McDOUGALL—But the cost-benefit analysis of that might be completely different if you were looking at the cost of replacement of the bridges.

Dr Dobes—Absolutely right. We are always constrained by the data that we have.

Dr Harvey—You cannot just look at the bridges by themselves. It is all the roads that lead up to them.

Mr PETER MORRIS—Could we ask for a copy of that greenhouse paper that BTCE has got?

Dr Dobes—How many copies would you like? It is a good door-stopper.

CHAIR—Three. I thank the representatives from the Bureau of Transport and Communications Economics for appearing today. There were a number of questions on notice; I am sure that you got a note of those. We would appreciate a response on those at your convenience. The secretariat will give you a proof copy of the evidence as soon as it is available.

[11.25 a.m.]

JOHNSTON, Dr Ian Ronald, Managing Director, ARRB Transport Research Ltd, 500 Burwood Highway, Vermont South, Victoria 3133

McLEAN, Dr John Robert, Research Director, ARRB Transport Research Ltd, 500 Burwood Highway, Vermont South, Victoria 3133

CHAIR—Welcome, gentlemen. Thanks very much for taking time to appear before the committee this morning. We have received your submission. Would you like to make a brief opening statement?

Dr Johnston—There are two or three things I think I ought to say by way of introduction, which are not directly on the submission but just to paint a little bit of a background of the organisation. ARRB Transport Research Ltd is a public company limited by guarantee. We have got 10 members and they are all three levels of government. We are actually owned by Commonwealth DOT, six states, two territories and ALGA on behalf of local government. Yet we operate fully commercially, so we do not get any grants. We have a special relationship with AustRoads, because AustRoads is essentially made up of the same people that own us. We are the main suppliers for what is called the national strategic research program, which is a program that AustRoads funds. For example, in the current financial year we have got, I think, 30 separate research projects. These are projects which are designed to try and add value to some of the big issues that are facing, particularly, the roads industry.

In the earlier days we used to be the Australian Road Research Board, but as we have had to commercialise we have started to get into airports, rail and the land side of marine ports as well, so we had to get away from a name with just ‘roads’ in it. I thought that might be useful background.

This national strategic research program is around 25 per cent of our revenue. In the sorts of areas that are of interest to this inquiry, we not only have some fairly fundamental research going on but also have developed a lot of technology for the collection of pavement condition data and traffic congestion data. In fact, our submission is really all about the data issue, which is the one that the committee secretary asked us to focus on.

CHAIR—Your submission refers to information requirements associated with the adoption of an asset management approach in the management of roads. In general terms, what additional information would need to be provided to the Department of Transport and Regional Development for it to introduce such an approach with the national highway system? Would the information deficit, if one exists, preclude the introduction of an asset management approach in the short term?

Dr McLean—I think you can work up to different levels. The states hold the data that is required for a basic asset management approach. They have basic inventories under pavement systems; they have very good data on pavement condition and reasonable data on road usage—the three things you really need to develop an asset management approach. But at the moment they really lack integration and there is no national consistency. I think about the only thing they agree on is NAASRA roughness. At least in terms of ride quality there is uniformity, but on everything else they differ. The difficulty, if you were running with

the existing data, would be aggregating up at the Commonwealth level.

CHAIR—Your submission notes that the main deficiency of road management information systems currently used in Australia is their lack of integration. Do you mean a lack of system integration between states and territories, or a lack of integration between the individual systems within the states?

Dr McLean—Both.

CHAIR—How do we overcome this?

Dr McLean—I think at the moment things like pavement management systems are being used very much to allocate annual maintenance budgets, rather than a strategic look at maintenance needs being taken. Once you get that strategic focus, the need to integrate the databases will follow.

CHAIR—The department has a view that there should be a centralising of road data within a body such as ARB. Would that fit within ARB's charter?

Dr Johnston—Anything we get paid for fits in our charter now. We are actually moving on towards a data management approach in a whole lot of areas, though there is nothing as broad as trying to capture the thing right across the system. At present, for example, in PMS applications we actually do offer a service not only to state authorities but also to local government to go out and collect the pavement condition data. At the moment we tend to simply supply it to them, but it is quite feasible for us to manage it as data sets and to add value to the analysis of it.

Mr McDOUGALL—As we have gone around with this inquiry I am starting to learn of all these organisations that belong to all the state governments. It seems to be about planning and research and about coordinating effort. It is getting a bit bewildering to work out who is doing what. I honestly have the opinion that everybody is doing everything based on an engineering philosophy about how to build and maintain roads. All the research into roads, and where we are going in the future is in relation to that engineering philosophy. The question that bothers me more is: where are we going in the future with the funding of roads? What roads will we need? Where are they going to be strategically? How are the states working together to do their planning process to get the best end result? How much work are we doing in regard to the planning between the modes of transport to get the best end result?

It seems to be driven by the idea that we have got a national highway system and by hook or by crook we have to maintain that in its current form. That seems to be the priority, and we will throw in a couple of roads of national importance if there is enough pressure around. But it seems to be fixing the past. What are we doing about the future? I have to ask you this question because you have got the word 'research' in there. Dr Johnston, when you first spoke you mentioned your organisation doing some work on other intermodal forms of transport—

Dr Johnston—Most of the work we are doing on other forms of transport, unfortunately, is within that transport mode. For example, in airports, we are working at several levels. At one level we do a runway—a runway is a short thick road—so, we are providing the same kind of help to airport authorities on

how best to maintain their internal assets.

At another level we are working on things like taxi congestion around airport terminals. So they are very operational research type issues. Most of it is not actually multimodal research. We have been talking to the federal department about the need for that kind of integrative research across the modes. I am not aware of any projects that we have been commissioned to do in the last couple of years on that. Unfortunately, it is a commercial operation and we get to do only the research that somebody commissions us to do.

Mr McDOUGALL—You are saying that you are still just getting the work based on your individual clients' needs?

Dr Johnston—Absolutely.

Mr McDOUGALL—And that is not reflecting a broader base of what there is overall. Can I preface this by just pointing out a few facts. Brisbane got a new airport, a new seaport, and a new road which went past both. It got a new road into the airport but it did not get a new road into the seaport. It got a new railway into the seaport which was finished in November 1994 but which has never been used. Who is responsible for the strategic planning and intermodal—

Dr Johnston—Do you mean across the nation as a whole?

Mr McDOUGALL—Across the nation. What everybody is saying is, 'We do our own little bit and if there isn't somebody there, who should be there doing it, and who has the capability to do it?'

Dr Johnston—I believe that we have the capability, particularly, if we partner people like BTCE or someone who specialises at the economic analysis end. There are a few university groups—a couple in Sydney and one in Adelaide. We can collectively work on these things but, at the moment, they are not being commissioned.

One of the suggestions we have made which has so far not been picked up is that, given our origins and our ownership, the focus was on roads. As we have had to commercialise, most of the work that we do of national importance is still funded by AustRoads. It seems to me, if you think about the ATC system, it is SCOT that really ought to have a national strategic transport research program that addresses these very issues, that drives it from there, that identifies what the national issues are and gets someone working on them. At the moment it is AustRoads defining what the national road research issues are, and that tends to drive some of the key projects we do. One way of doing it is to get the research agenda set in an intermodal sense.

Mr McDOUGALL—If that was to take place, what sort of impact would that have on the current strategic plans of the Commonwealth government and the state government strategic plans in the construction of roads, in your opinion?

Dr Johnston—I underline that this is very much my personal opinion. At the Commonwealth level, because transport is all integrated in the one department, it ought to have a major effect, although there are

still very much modal divisions and it may require that kind of structural change to remove those modal boundaries inside the department. At the state level it is a real mixture. Some states have reverted to the old model; where they had an integrated transport department they have reverted to a road system. So there are different developments all around the country, some of which encourage one to think that the integration is going to happen and some of which think it is moving away from that.

Mr McDUGALL—What I am saying is this: I do not want to see us going down the track where we are going to spend billions of dollars in the future on roads when we really should be spending it in other places to get the same end result and get a better economy of scale out of the question. Hopefully, if we are looking at the future funding of roads in this inquiry, we can have some information and some direction in relation to those other areas so that those recommendations can be made to push in a certain direction. But if it is not feasible and it is not able to be done, what do we need to do to be able to achieve that goal?

Dr Johnston—I can just repeat the point from a national research point of view. It means the national research agenda has to be set—not just by the roads sector, which is where it is set at the moment.

Mr WAKELIN—I am following on from Mr McDougall to a degree, but in a couple of other areas: information systems, international practice, OECD, and the breakdown on your submission. I think they have suggested adding environment and a couple of other socioeconomic issues. I will just make one comment at the beginning and then perhaps lead into two points.

We seem to be building roads the same way we have always done it in many ways. That is my impression, and I would appreciate a comment on that. I then come to the heading of life cycle costing of pavement stereotypes, and how that information is collected, and action versus road design features with the comment about improving road safety. In terms of the research effort, are we doing it the same way we always did it, or are we not? And can you just make a couple of comments on this pavement stereotype and the accident versus road design features?

Dr McLean—I would say we are not doing it the way we always have done it.

Mr WAKELIN—Good.

Dr McLean—In fact, the way we construct our rural arterials is fairly unique to Australia, South Africa and New Zealand, and it gives fantastic value for the dollar. But, as the traffic volumes get higher, it becomes an inappropriate technology. Increasingly, in the metropolitan areas, the road agencies are adopting what I would regard as the best of Northern Hemisphere practices. We have actually in some cases leapfrogged ahead, certainly of North American practices. So I think we are building roads that are appropriate to the circumstances.

This work on the life cycle costing of pavement stereotypes has been part of that driver. Instead of saying, 'We will build a heavy duty asphalt pavement,' for example, 'because that is what we have always built in this situation,' instead they have commissioned analyses to say, 'Over the total cost of this pavement, providing it and maintaining it, what is the best option?'

Mr WAKELIN—Would you like to make a comment on the accident road designs as well in terms of improved best practice?

Dr McLean—The best development that has come in there in terms of rural arterials is the practice of part-sealing the shoulders. That has led to a 30 to 40 per cent accident reduction where it has been appropriately applied.

Mr WAKELIN—They are the key words, ‘where it has been appropriately applied.’ What I wanted to come to in conclusion, Mr Chairman, was to say that research is a wonderful thing but there is a lot of evidence around that not everybody applies it. You made the point very strongly about commercially driven, but it is those who are motivated to do it. So, therefore, it is designing a system of funding or whatever else that will really say to people, ‘Get best practice applied in an appropriate way.’ Can you make some comments about the best and the worst of Australian road design; those who are actually doing it and those who are not?

Dr Johnston—I can start that the other way around. We spend probably close to 15 per cent of our expenditure on what we call technology transfer. As far as we are concerned, good research is not good research unless the practitioners know what it is teaching them for practice. In terms of running seminars or workshops, this is particularly true for local government because local government is not a purchaser of research, but they are a big purchaser of technology transfer. They do not want to pay for a study but they do want to pay to find out what people know.

We run a lot of workshops and seminars and we produce a lot of manuals of best practice—for example, in unsealed road maintenance. Where a local government has tended to piggyback on the state road authorities’ technologies, the state road authorities really do not look after unsealed roads. We have produced a manual of unsealed road maintenance which has been an enormous seller at local government level. We have a separate technology transfer division to try and do that.

Mr WAKELIN—What I am asking is a bit difficult because they are your clients.

Dr Johnston—The second thing is, what is the score card around the traps? I was ducking that a bit for fairly obvious reasons.

Mr WAKELIN—Anyway, Mr Chairman, you see where I am coming from. Would you say there is variability?

Dr Johnston—Absolutely.

CHAIR—Your submission notes that the results of the analysis of the life cycle costs of infrastructure remain contentious within the pavement engineering profession. Would you elaborate on that a little?

Dr McLean—This was put in as an example of inadequacies in the current data systems. For virtually any road it is extremely difficult to trace the maintenance history. With the alternative pavement types, particularly for heavily trafficked situations, the options are very cost competitive. So what comes down to

the lowest cost option for a given situation is often the future maintenance requirements. Whatever analysis is done, the asphalt industry will argue that the assumptions made on maintenance of an asphalt pavement are unduly high, for Portland Cement concrete unduly low, and then the cement and concrete association will argue the exact opposite. There really is inadequate data to be able to take a back bearing on maintenance costs that convinces all players.

Mr PETER MORRIS—As to the research into road technologies, methods of maintenance and so on, how much of that is carried out by the private sector?

Dr Johnston—Very, very little.

Mr PETER MORRIS—Who are the major beneficiaries of road expenditure? Well, the short answer is the private sector.

Dr Johnston—In a direct sense the construction and maintenance—

Mr PETER MORRIS—So there is virtually no input by the private sector—who build most of the roads—into better ways of building roads or materials used?

Dr McLean—In terms of building roads, there has been a small amount of research funding from the materials suppliers.

Mr PETER MORRIS—Twenty grand, 100 grand?

Dr Johnston—It is not big money. Yes, it is of that order.

Mr PETER MORRIS—And there is about \$6 billion a year expenditure on roads.

Dr Johnston—From the asphalt industry, as an industry group, and even less from the cement and concrete industries.

Mr PETER MORRIS—So virtually all the research that is being done into the use of materials in the construction and maintenance of roads and the use of differing technologies and techniques is by you?

Dr Johnston—A lot of the oil companies are doing some of their own bitumen research to get a competitive edge on a better product that they can then sell. A lot of the oil companies run their own laboratories.

Mr PETER MORRIS—I just find this a massive deficiency, because they all run the campaign like the motorists' associations. I do not think they put a zac into road research. They are all into spending more money, but who spends money on how to do it better?

Dr McLean—Essentially the road agencies.

Mr PETER MORRIS—The road authorities?

Dr Johnston—Yes. There is no doubt that the private sector at the moment is still sitting back expecting governments, in one form or another, to pay for the key research. That will need to change as the privatisation of infrastructure continues to move and as the road authorities continue to outsource a lot of the maintenance regimes. We expect, as we look ahead, that industry will begin to pick some of that stuff up, but it is a very, very slow process of change.

Mr PETER MORRIS—It is a free ride, isn't it? It has been a free ride for the industry for decades, for the road construction and road maintenance industry in the private sector. In the *Driving the road dollar further* report, recommendation 10 is that the Australian Road Research Board—which is yourselves, now with a changed name—establish an ongoing project to evaluate road material recycling techniques and their role in improving the efficiency of road construction and maintenance. Transport have told us of a major research undertaken on behalf of AustRoads on ways to improve the effectiveness of pavement recycling technologies, and that there is widespread interest in it and a number of workshops. What can you tell us about that?

Dr McLean—We have brought the wrong people up, but I do know a bit about it.

Mr PETER MORRIS—Can you give us a note on it then?

Dr Johnston—We would be happy to do that. John can give you a bit of an outline, but it would be much better if we can give you a note on it.

CHAIR—Take it on notice and send us back some information.

Mr PETER MORRIS—That is a recommendation from a previous inquiry and it is important.

Dr Johnston—There have been several projects on different things, for example, use of scrap rubber in bitumen and other forms of recycling.

Dr McLean—Recycling the asphalt surface—

Mr PETER MORRIS—I think that information is important.

Dr Johnston—We can certainly give you a short report on that.

Mr PETER MORRIS—We all get the chant: 'Give us more money'. But we do not hear from them about how we can make better use of the money.

CHAIR—We will finish this section of the hearing this morning and thank the representatives of ARRB for making the trip up here. With those questions that have been taken on notice, if you could provide us with that information it would be very helpful.

[11.49 a.m.]

BUTTERWORTH, Mr Robert, Head, Environment Priorities and Coordination Group, Environment Australia, GPO Box 787, Canberra, Australian Capital Territory

HOOY, Mr Theo, Director, Bioregional Planning Section, Biodiversity Group, Environment Australia, GPO Box 787, Canberra, Australian Capital Territory

ROSS, Mr Andrew, Director, Intergovernment Unit, Environment Priorities and Coordination Group, Environment Australia, GPO Box 787, Canberra, Australian Capital Territory

CHAIR—Welcome. The committee has received your submission to this inquiry. Would you like to make a short opening statement?

Mr Butterworth—It is important to flag that we see our role as promoting a sustainable, natural and cultural environment in harmony with the nation's social and economic goals. We see our role very much in achieving a balance between environment, social and economic. I think that is an important point for the committee to note.

Our role in Commonwealth road funding is essentially through our legislative responsibilities. I might just flag those for you. The Environment Protection (Impact of Proposals) Act 1974 requires our organisation to assess and advise upon the environmental impacts of national highways projects directly funded by the Commonwealth or requiring a Commonwealth decision. Road project proposals or, for that matter, any other significant Commonwealth activity can also trigger provisions of the Australian Heritage Commission Act 1975 and/or the Endangered Species Protection Act 1992. Those acts can require the assessment of environmental impacts.

Environment Australia also administers nationally agreed strategies which could have an impact on road construction. Perhaps a good example of that is the greenhouse response strategy. Another might be the national strategy for the conservation of biological diversity. It is also relevant to note that the Natural Heritage Trust may have some relevance here too. The national vegetation initiative, which is an element of the trust, will also provide an impetus for the adoption of consistent standards and practices for roadside vegetation management.

CHAIR—Thank you. Your organisation is a subdivision or division of the Department of the Environment, Sport and Territories?

Mr Butterworth—I am here to represent Environment Australia, which are those aspects of DEST which relate to the environment.

CHAIR—But you are departmental officers?

Mr Butterworth—That is right.

CHAIR—In the process that takes place when the department of transport is negotiating with the states in approving funding for upgrading projects on the national highway, what communication takes place between the department of transport and Environment Australia?

Mr Butterworth—I might ask Mr Ross to answer that question. It relates to how we go through the approval processes.

Mr Ross—The allocation of the grants is determined by the department of transport and then a project will go ahead. The environmental assessment, in the first instance, will probably be done at the state level. But at the same time as that is going on, if the transport minister determines that the project comes within the scope of the Commonwealth act, the minister will designate the project for consideration by the Commonwealth minister. The process is that the work that is then done by the state, together with papers from the transport department, will be put to our department for consideration. At that stage, our department will advise our minister on what level of assessment is necessary for the project.

CHAIR—In your view, would you see that the states would have a different environmental perspective on road construction than the Commonwealth?

Mr Butterworth—We work pretty closely with the states. In fact, a lot of our procedures are intended to avoid any duplication or tension. We try, where possible, to use state processes for Commonwealth purposes and we have accreditation arrangements and the like. We are looking to streamline those constantly, both to improve the timeliness of the decisions, but also the efficiency of them so that we are not covering the same ground.

Mr Ross—The procedures for environmental impact assessment of road projects are fairly well established nationally. Basically, these arrangements with the states work pretty well.

CHAIR—We have had discussions this morning with the Bureau of Transport and Communications Economics about the effect on fuel consumption of either varying the cost of fuel or varying the impost of tax on the cost of fuel, and the subsequent effect on the environment. Have you a view as to whether there is a direct correlation—for example, if there were a lowering of the cost for fuel, would consumption dramatically increase and have an impact on the environment?

Mr Butterworth—I do not have the figures, but my understanding is that that effect, in the medium term, can be quite large. You can get quite a change in behaviour in fuel use from a change in the price of fuel. Generally, we would see potential to use user charges, economic instruments, across-the-board in the environment. There is greater potential for that, particularly in transport.

CHAIR—So your view as far as those charges are concerned would be more from the perspective of control and usage, rather than as a revenue base?

Mr Butterworth—From our perspective, to the degree to which they have promise, it relates to their internalising the externality of road transport use. That might relate to greenhouse gas emissions in an urban context. It might relate to congestion.

Mr McDOUGALL—In relation to the states, each state obviously has its own environment protection act, covering water, air and noise, but to some degree how well they work is questionable, particularly in relation to noise. Sometimes the public question whether state governments comply with the acts which they ask everybody else to comply with. Are you satisfied that, when a state makes a decision to build a road, or upgrade a national highway or a national road of importance, those criteria are met that satisfy the Commonwealth government, as well as them saying that they satisfy their own demands?

Mr Butterworth—Where it is a project that attracts Commonwealth interest, where we have legislative responsibility, and where we are using state government assessment procedures, we are satisfied with those procedures.

Mr McDOUGALL—Can I be a little bit specific? I will take Queensland for argument's sake. Under their new environment protection act, which was passed a couple of years ago, they have in operation a procedure for air and water pollution, but they have yet to put down a policy paper for noise. How does the Commonwealth then, in relation to funding, check the state in relation to a new project which they build, which the Commonwealth funds and, if the state has not got a policy position in relation to how they are going to control noise, how do you make a judgment?

Mr Butterworth—We would probably have to look at whether that issue has come up in any of the assessments we have made. But I suspect noise may not be a requirement for the sorts of things that we are guarding on the nation's behalf. With things like the protection of endangered species, it is hard to see a relevance there in relation to noise. I do not know in relation to heritage whether that would be a relevant criteria. That is something we can take on notice.

Mr McDOUGALL—I will be specific and say that maybe the human is an endangered species too and that we have a tendency to build national highways and RONIs through urban areas. There have been quite a few of those built lately. We are now being asked by state governments to fund noise barriers to those urban areas, usually after the road is constructed. I would like to think that we in the federal government have a policy in relation to that: who pays and what standards are set to meet that criteria?

Mr Butterworth—I am happy to take that on notice and do some more work on that.

Mr McDOUGALL—Thank you very much.

Mr WILLIS—I refer to the part of your submission where you say:

. . . Environment Australia would support the introduction of electronic road pricing and other user pays approaches to shift the burden of road funding towards those that impose the greatest cost.

Is this meant to be additional to existing fuel excise and, if so, what are we exactly discussing here?

Mr Butterworth—It could be either, I guess, as an addition or a replacement.

Mr WILLIS—What would be the point of it as a replacement? Is it already a road user charge as it

stands?

Mr Butterworth—It is just a question of whether the existing fuel excise is precisely targeted at the externality that you are trying to address. In relation to roads in urban centres, one of the major externalities is congestion. Fuel excise is not very well calibrated to addressing congestion, only in a very broad way. So it would depend on your policy objective whether you would see it being in addition, or as a replacement to it.

Mr WILLIS—Does this mean that you would be supporting an electronic toll system on urban freeways which have been built as part of the national highway system or by state arterial roads?

Mr Butterworth—In general, without locking into specific proposals, we would see great scope for innovative use of new technology to more precisely have the user pays principle applied, that where people are generating externality, be it greenhouse gas emissions, congestion, urban pollution, that if we can more precisely relate the charge to those emissions, that yields both an improvement from an economic perspective because the real cost of that activity is being borne by the person responsible, and also it yields genuine and broad based environmental benefits.

Mr WILLIS—Where electronic tolling is being introduced as in Melbourne, in relation to the Citylink project the toll is not related to any environmental factors so much as it is to getting an appropriate return on the investment by the investors. So it is a commercially determined toll rather than any environmentally determined toll. Are you talking here about an additional environmental benefit from the use of tolled private roads, because there are no tolls on the national highway or other roads built with taxpayers' dollars?

Mr Butterworth—If your objective is to address a general problem in a city, ideally the solution would need to apply on all roads rather than just privately built ones. I take your point that it is perhaps a little inequitable to address an externality simply on the basis of a road being in private ownership as opposed to public ownership.

Mr WILLIS—Yes, that is my point. Also, in relation to proposals about a change in the tax mix, just to pursue the point raised by the chairman before, would you expect that reductions in fuel taxes would lead to an increased emission of greenhouse gases?

Mr Butterworth—The best evidence we have of the price responsiveness is in relation to leaded petrol. My understanding is that the differential that was introduced on leaded petrol did achieve quite a substantial change in consumption. Since greenhouse gas emissions, in some sense, are precisely related to the amount of fuel burnt, I would expect that relationship to apply with a change in sign. If a reduction in fuel price was implemented, one would expect there would be an increase in the use of fuel. It would be significant.

Mr WILLIS—Has the department done any real analysis of this sort of impact?

Mr Butterworth—I am not sure of the origins of that work. Andrew, have you any further detail on

that?

Mr Ross—On the leaded petrol excise increase, it was simply examining statistics on car registrations, or at least on the car fleets in use. That was something you can do in a specific case like that. As far as the general modelling work goes, on the impacts, I am not aware and we can find that out for you.

Mr WILLIS—You do refer in your submission to this BTCE report on transport and greenhouse. I am not aware of this publication. Does this contain analysis of a relationship between fuel prices and greenhouse gas emissions?

Mr Butterworth—I believe it does. I have some extracts here which I am happy to share with you. I am not quite sure I can find the relevant figures quickly. We can examine that document for you and get back to you.

CHAIR—The committee is going to be in receipt of a copy of that report anyway.

Mr Butterworth—I am not familiar enough with it to find it quickly.

Mr ROSS CAMERON—Just taking up Mr Willis's point there on the level of demand for road use, cost of fuel and the greenhouse impact, would it be Environment Australia's view that were we, for example, to introduce a broadly based consumption tax that it ought not to buy out the fuel excise tax?

Mr Butterworth—You are asking me to address a policy question there which I—

Mr ROSS CAMERON—So you prefer not to express a view about it.

CHAIR—It is a question of policy.

Mr ROSS CAMERON—I perhaps have not quite got it clear. I know it is probably my naivety, but it was my understanding that—

Mr PETER MORRIS—You can't keep using that excuse.

Mr ROSS CAMERON—That is what the professionals in the departments were meant to do—to give policy. I appreciate we are not the executive, but I had the understanding that these guys were experts and that what we were paying them to do was to put their professional reputation on the line and give us an opinion. But if that is not the case, then I am happy to stand corrected.

You would see the current approach—that might be called unsophisticated and fairly heavy-handed—to using fuel to raise revenue basically for the government, using the purchase of petrol to raise revenue in an unhypothecated way and in a way which is completely insensitive to environmental externalities, as being, I presume, counterproductive to the objective of sustainable ecology?

Mr Butterworth—I do not think I could agree with that in those terms. The general point we were

making is both from an economic and from an environmental perspective. There is merit in relating externalities—be they greenhouse, congestion, whatever—and pricing those externalities into the thing that is causing the externalities, the behaviour that is causing the externality. There is both economic merit and environmental merit in doing that as a general policy. Governments have to balance a whole range of objectives in the way they design taxation systems and their programs.

Mr ROSS CAMERON—Mr Willis's point, as I understand it, is that road users are already paying. Even if you take into account the uncoded and unpriced externalities, they are probably already paying substantially more than their environmental impact through current petrol excise. So the only way to move that agenda forward, it seems to me, is to cost the externalities and put additional charges on road users by some mechanism on cost congestion and pollution and other things. How do you move that forward, unless you say there has got to be a reform of the way in which the charges that are currently exacted from road users are somehow redirected?

Mr Butterworth—I think you are asking me to address a political issue about how governments assess their competing objectives. I am not really in a position to do that.

Mr ROSS CAMERON—I am not asking how we assess the competing objectives. As you point out to us, one of the goals of the national highway system is to encourage a sustainable ecological approach, and you say you encourage the general principle of user pays and full cost recovery over the life cycle of an asset, including externalities. So that is your broad recommendation. Right now we have got a situation where we slug road users very heavily, all the revenue goes straight into consolidated revenue and then some nominal amount comes back, which is tagged for road funding which then goes in untied grants to the states or to the national highway system. Aren't you arguing for a pretty fundamental reform of the way that we raise and allocate revenue from roads and road use?

Mr Butterworth—I think we are arguing for a constant review of the way in which we impose those charges and structure our approach to road transport charging. One of the things that we are, I guess, a little excited about is that there are some technologies coming along, in fact in existence, that can be applied to this problem. We are seeing them applied for private road tolls. I make the simple observation that that same technology would have quite a good application if the Commonwealth or state government chose to use it to more precisely charge users for their occupation of the roads.

Mr ROSS CAMERON—Great. My last point is that that would then seem to contradict the earlier statement by my colleague Mr Morris that perhaps the private sector is not contributing anything and is having a free ride when, in fact, it is really their technology which we are able to piggyback and apply to the use of public roads.

Mr PETER MORRIS—Point of order.

Mr ROSS CAMERON—That is a fair point, isn't it? It is the private sector which is developing the technology which we want to use to achieve our policy objectives.

Mr PETER MORRIS—That is a policy matter.

Mr Butterworth—The private sector is applying a technology that is probably generally available for a purpose that they have. It would be open to government to—

Mr PETER MORRIS—Mr Morris's questions, dear colleague, were about the contribution made by the private sector to research into better ways of building and maintaining the roads, not better ways of slugging motorists for using them. That was my point of order.

On the third page of your submission you make reference to the major review of Commonwealth-state roles and responsibilities through COAG by the Intergovernmental Committee on Ecologically Sustainable Development, and say that they are reporting to COAG next month. Is that work finished? Will it go to COAG next month?

Mr Butterworth—No, in fact the work is ongoing.

Mr PETER MORRIS—Will the report go forward to COAG next month?

Mr Butterworth—COAG will get a report on the progress that we have made.

Mr PETER MORRIS—Which will say, 'We are conducting further progress. We are working on these kinds of things.' How far have you got with it? What can you tell us about it?

Mr Butterworth—We have got a fair way down the track.

Mr PETER MORRIS—You can be a bit more specific than that.

Mr Butterworth—We have developed some draft principles that will guide, whether it is a Commonwealth problem, a state problem or a joint problem. We are trying to refine those principles and see what they mean in terms of legislation that the states and the Commonwealth have in place. We are not nearly finished, but I think we have made substantial progress. It is quite a complicated issue.

Mr PETER MORRIS—Of course it is—that is why we are asking you—but so is this inquiry. It is a broad-ranging inquiry. Our first term of reference is the role of the Commonwealth in road funding and the whole roads picture. What you are looking at there is absolutely pertinent to that term of reference, so we would dearly love to have some information on what you have got. We have got to report at the end of the year. How can you help us?

Mr Butterworth—I cannot.

Mr PETER MORRIS—Why?

Mr Butterworth—Because that work is still in progress, and I cannot tell you how it is going to come out. Presumably, what would be of interest is what changes we envisage being made to the relationship. I cannot pre-empt the discussions with the states—

Mr PETER MORRIS—No, you are jumping ahead of me. The work that you would have done would identify the various roles of the differing levels of government in those respects. Even that would be of help.

Mr Butterworth—We can give you, I guess, an account of how the responsibilities are split now, if that would be of help. That is some of the work that has been undertaken through that review—just establishing the status quo. If you feel that would be helpful to the committee, we can—

Mr PETER MORRIS—Why don't you put it in your submission? You are saying 'where Commonwealth policies have a significant environmental dimension.' I have asked you what you can tell us, and you are saying, 'Sorry, I can't tell you anything.'

Mr Butterworth—We have defined those areas of Commonwealth legislation that currently exist, and we have outlined for you how they apply to road projects. What those triggers are and who does what is what that review is about; we are reviewing that relationship.

Mr PETER MORRIS—I have another question I want to ask you which goes back to the original report, *Driving the road dollar further*, and the reference there to the Minister for Housing and Local Government tabling the results of the local roads expenditure summary. The next part of it talks about liaising with local government associations to improve councils management of local roads. Transport have told us in their response to that that your department is pursuing a number of initiatives to assist councils improve their performance over a range of program areas, including the management of local roads. Can you tell us something about that? What have you achieved there? Is local government making a better fist of managing roads? This is a vast area of expenditure.

Mr Butterworth—Our interest in this matter stems mainly from the importance that local roads have for natural vegetation. The road reserves in many parts of Australia are the last bits of vegetation that used to exist. I can give you some statistics on that, and I will return to that in a moment. What we are doing through the national vegetation initiative is trying to improve the ability of local governments to manage that vegetation on the roadside when they are maintaining their road, realigning, and those sorts of things, to give them a better information base and better management techniques so that they can both achieve their objective of maintaining the road and servicing their community, and also preserve the vegetation that is there.

Mr PETER MORRIS—There is a reference here to the local government development program. It does not go to the actual management of materials, construction of roads, the level of efficiency they achieve or anything like that, does it?

Mr Butterworth—In some senses it does. One of the issues that will occur when you are trying to repair the road surface or do a realignment is what happens with the management of run-off during the construction phase. It might have important bearings on the streams that are adjacent to the road and the vegetation that is there, and there can be win-win situations where we can improve the way in which the construction takes place, its sequencing, the control of run-off—that has an environmental benefit, but it also means they do not have to come along and put another five tonne of blue metal there because it has washed

away. There are important engineering implications for that advice, but they are not simply costs. They are finding better ways of doing things that have engineering benefits and environmental benefits.

Mr Ross—I think it is also worth making the point that the operations of roads at local level are regulated or overseen mainly by the states rather than the Commonwealth.

Mr Butterworth—Just to give you some statistics. It is quite an important issue for us, and perhaps it should not be overlooked, but in some parts of Australia, roadsides contain up to 12 per cent of the remaining native vegetation. This is particularly the case in Victoria. Road reserves in Victoria contain 25 per cent of all endangered plant species. Again in Victoria, road reserves constitute about a third of the area of national parks. It is quite important to preserve that vegetation on the roadside.

Mr PETER MORRIS—I do not follow that.

Mr Butterworth—If you add up all the road reserves in Victoria, the area that they comprise is equal to a third the size of the national parks in Victoria. They are thin, but they run for a long way.

Mr PETER MORRIS—I misunderstood you. I thought you said that they constituted a third.

Mr Butterworth—No.

Mr PETER MORRIS—You mean they are equivalent to one-third.

Mr Butterworth—Yes.

Mr McDOUGALL—Your submission refers to an intergovernmental agreement on the environment to recognise that the polluter pays and that the users of goods and services should pay prices based on the full life-cycle costs of providing those goods and services. We could ask the question: what would you include in those costs and is it feasible to price roads on this basis? I am more interested in asking: how do you price the road user on existing roads to maintain the environmental benefits of the surrounding area, where the polluter or the user of the road actually causes damage, whether it be water run-off or air pollution coming from that existing road? How do you recommend we charge that?

Mr Butterworth—We have to develop some methodologies for working out what those cost externalities are, and that is not an easy task.

Mr McDOUGALL—Are you capable of doing that or are you saying that somebody else has got to do that job?

Mr ROSS CAMERON—Car manufacturers might have written something that could tell you how much a vehicle is polluting, mightn't they?

Mr Butterworth—It can tell you what the volume of greenhouse gas emission is or what the particles per cubic metre are. The difficulty is working out what that cost is to the community.

Mr McDOUGALL—Let me phrase it this way. You might be able to do that, but you are going to find it very difficult to find out the pollution of run-off from the roads into the rivers and streams that we have got around the roads. If you argue that the polluters should pay for that cost, what is your position in relation to the cost of the damage to the environment by rail that runs through a similar terrain and causes both air and water pollution as well. Who pays there?

Mr Butterworth—The users of rail.

Mr McDOUGALL—How would you propose that should be charged?

Mr Butterworth—If you can work it out then it becomes a levy that is added to the price of moving goods by rail. The people who move goods, or the people who travel, would bear a charge in their price for those externalities.

Mr McDOUGALL—Is your department requesting the Department of Transport to give you some information on that?

Mr Butterworth—What we have got is that inter-governmental agreement where the states and the Commonwealth have agreed that as a general principle that should apply, and as they develop technologies and policies that they should try to take that into account. That question of intermodal equity is quite an important one both from an economic and an environment perspective. It is important that the costs of both road and rail transport are recognised and borne by the people who use them be they economic costs, infrastructure costs or environmental costs.

Mr McDOUGALL—Through that agreement, have you got a date set to achieve that goal?

Mr Butterworth—It is a general agreement that is governed by the practicalities of applying those policies.

CHAIR—Gentlemen, thank you very much for coming along and giving evidence. I think there were a couple of questions taken on notice and if it is possible to get a response back on those that would be helpful. As soon as a proof copy of your evidence is available, we will forward it to you. Finally, on behalf of the committee, I would like to thank all witnesses who have given evidence at the public hearing today. I declare this public hearing adjourned.

Resolved (on motion by Mr McDougall):

That this committee authorises the publication of the evidence given before it at public hearing this day.

Committee adjourned at 12.22 p.m.