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PARLIAMENT OF TASMANIA

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

# North East Freight Roads

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*Presented to His Excellency the Governor pursuant to the provisions of the  
Public Works Committee Act 1914.*

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## MEMBERS OF THE COMMITTEE

### Legislative Council

Mr Harriss (Chairman)  
Mr Hall

### House of Assembly

Mr Booth  
Mr Brooks  
Ms White

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## INTRODUCTION

To His Excellency the Honourable Peter Underwood, AM, Governor in and over the State of Tasmania and its Dependencies in the Commonwealth of Australia.

MAY IT PLEASE YOUR EXCELLENCY

The Committee has investigated the following proposals: -

### **Bridport Main Road Upgrade**

and

### **Tasman Highway and Gladstone Main Road Upgrades from Derby through to Herrick**

and

### **Prossers Road Intersection Upgrades**

and now has the honour to present the Report to Your Excellency in accordance with the Public Works Committee Act 1914.

## BACKGROUND

### ***Bridport Main Road Upgrade***

This reference recommended that the Committee approve an upgrade of the subject road to achieve the following outcomes:-

- consistent 8 metre seal width compliant with the standard for HPV and HML vehicles;
- more productive and efficient freight movement
- removal of the Gazetted HPV and HML curfew during school bus operating hours through the provision of increased road width and bus bays;
- improved road safety due to improved road geometry;
- improved road safety due to the upgrading of the junctions at Browns Road; Jetsons Road South; Muskfield Road North; and the Dorset Council Waste Transfer Station access;;
- provision of eight new bus bays and upgrading of two existing bus bays in the southern section;
- four new bus bays and upgrading of two existing bus bays in the northern section;
- reduction of maintenance costs; and
- lessening of road roughness and consequential reduction of vehicle maintenance and operating costs.

### ***Tasman Highway and Gladstone Main Road Upgrades from Derby through to Herrick***

This reference recommended that the Committee approve an upgrade consisting of basic pavement widening, geometric improvements, targeted pavement strengthening, junctions improvements and the provision of safety barriers where required. The upgrade works are proposed for an 8.76 kilometre length of the Tasman Highway (between Derby and the Gladstone Main Road junction) and a 2.06 kilometre length of Gladstone Main Road (between the Tasman Highway junction to the township of Herrick).

### ***Prossers Road Intersection Upgrades***

This reference recommended that the Committee approve the upgrading of the following three intersections:-

- Lilydale Road junction with Prossers Road;
- Prossers Road junction with Patersonia Road; and
- Patersonia Road junction with the Tasman Highway (at Nunamara).

In addition to the abovementioned, the works include upgrading the drainage infrastructure along Prossers Road. Such work is proposed to improve the wet weather conditions along the unsealed surfaces of the road.

The full submissions of the Department of Infrastructure, Energy & Resources in support of these references are published on the website of the Committee at:

<http://www.parliament.tas.gov.au/ctee/Joint/works.htm>

## **PROJECT COSTS**

### ***Bridport Main Road Upgrade***

#### **Anticipated project Total Outturn Cost**

The total outturn cost has been identified for four options. The options are:

- Option A – includes the southern section only (projects 1 to 4)
- Option B – includes the southern section (projects 1 to 4) and project 5 in the northern section.
- Option C – includes the southern section (projects 1 to 4) and bus bays and guardrail improvements only in the northern section (reduced scope in projects 5 to 9)
- Option D – includes all works in the southern and northern section.

The preferred option is Option C.

The location of each project is shown on Figure 2. A summary of the 50% confidence level (P50) and 90% confidence level (P90) cost estimates are presented in Table 2.

**Table 2: North East Freight Roads –Strategic Cost Estimate Summary**

<b>Component of Strategic Cost Estimate</b>	<b>Option A Projects 1,2,3&amp;4 (\$mill)</b>	<b>Option B Projects 1,2,3,4&amp;5 (\$mill)</b>	<b>Option C Projects 1,2,3,4,5#,6,7,8# &amp; 9 (\$mill)</b>	<b>Option D Projects – all (\$mill)</b>
P50 Total Out-turn Cost	12.8	13.8	13.4	15.4
P90 Total Out-turn Cost	14.4	15.5	15.1	17.3

# projects 5 and 8 in Option C includes bus bays only.

### **Benefit Cost Analysis**

The Benefit Cost Analysis (BCA) was carried out for the four different project options (A, B, C and D) and the sensitivity of the Benefit Cost Ratio (BCR) was tested by assessing each option for:

- The P50 estimate and the P50 plus 10% estimate
- The P90 estimate and the P90 plus 10% estimate
- A discount rate of 4%, 7% and 10%.

At the discount rate of 4% applied to the P50 and P90 estimates, the Benefit Cost Ratio and Net Present Value for option C is presented in Table 3.

**Table 3: BCR / NPV– Option C**

	<b>Benefit Cost Ratio</b>	<b>Net Present value</b>
P50 estimate	2.01	\$14.0m
P90 estimate	1.95	\$14.4m

### ***Tasman Highway and Gladstone Main Road Upgrades from Derby through to Herrick***

#### **Anticipated Project Total Outturn Cost**

Total project outturn cost for the proposed upgrades to the Tasman Highway and Gladstone Main Road is \$14.4 million at a 90% confidence level (P90). The corresponding outturn cost at a 50% confidence level (P50) is \$13.8 million. These values were determined using the Evans and Peck “Best Practice Cost Estimation for Publicly Funded Projects”.

The cash flow shown in Table 4 below is for the P50 and P90 capital expenditure values.

**Table 4: Cash Flow**

Year	2011/2012	2012/2013	2013/2014	2014/2015	Total Funding
P50 Cash Flow	\$1.3 m	\$4.5 m	\$7.3 m	\$0.7 m	\$13.8 m
P90 Cash Flow	\$1.4 m	\$4.6 m	\$7.7 m	\$0.7 m	\$14.4 m

**Cost Benefit Analysis**

The Cost Benefit Ratio for this project is 1.0, allowing for the current economic downturn in the freight industry but allowing for forecast growth after 2015 and using a discount rate of 4.0%.

**Prossers Road Intersection Upgrades****Anticipated Project Total Outturn Cost**

Total project outturn cost for the proposed upgrades to the Tasman Highway and Gladstone Main Road is \$3.04 million at a 90% confidence level (P90). The corresponding outturn cost at a 50% confidence level (P50) is \$2.84million. These values were determined using the Evans and Peck “Best Practice Cost Estimation for Publicly Funded Projects”.

The cash flow shown in Table 4 below is for the P50 and P90 capital expenditure values.

**Table 2: Cash Flow**

Year	2011/2012	2012/2013	2013/2014	Total Funding
P50 Cash Flow	0	\$2.74 million	\$0.06 million	<b>\$2.84 million</b>
P90 Cash Flow	0	\$2.93 million	\$0.07 million	<b>\$3.04 million</b>

**EVIDENCE**

The Committee commenced its inquiry on Tuesday, 17 July last with an inspection of the sites of the proposed works. On Wednesday, 18 July last the Committee met in the Conference Room, 4<sup>th</sup> Floor, Henty House, Launceston whereupon the following witnesses appeared, made the Statutory Declaration and were examined by the Committee in public:-

- Steven Kaczmariski, Senior Project Manager Department of Infrastructure, Energy & Resources
- Sarah Boyle, Manager Planning & Design, Department of Infrastructure, Energy & Resources

On Thursday, 30 August last, the Committee met in Committee Room 2, Parliament House and recalled Ms Boyle. The following witnesses also appeared, made the Statutory Declaration and were examined by the Committee in public:-

- Adrian Paine, Project Manager Department of Infrastructure, Energy & Resources
- Shane Gregory, General Manager, Department of Infrastructure, Energy & Resources

### **Overview**

Ms Boyle provided the following overview of the strategy of works in the North East of the State:-

*... the original 2007 election commitment was quite specific in quoting the sites for upgrade within the north-east freight roads area. The projects that were listed initially in the election commitment were Bridport Main Road from Scottsdale through to George Town, Bell Bay, basically the East Tamar Highway; upgrades along Tasman Highway between Branxholm right through to Tebrakunna Bridge at Pioneer. For the Tasman Highway project, that was to achieve the HML - high mass limit - geometric compliance so we could gazette that as a high-mass limit route. The next project that was identified was upgrading the HPB route from Camden Hills Road along the Tasman Highway, and Prossers Road through to Lilydale Road. That particular project also used the term 'providing a truck bypass of Launceston'. Something that DIER gathered from those words was that we also looked at doing a pure bypass route of the St Leonards area by investigating a new link road between Blessington Main Road and the Tasman Highway just west of Nunamara. There was further investigation to extend that link road from the Tasman Highway to Prossers Road about five or six kilometres in to avoid this part of Prossers Road, so that it would effectively be a bypass of Cora Linn bridge and the St Leonards area for those trucks travelling through central Launceston.*

*We did a fair bit of investigation on that link road and it became evident very quickly it would be a \$30 million-plus project. With the forest agreement process and the virtual overnight withdrawal of Gunns from the native forest logging in the Upper Blessington area and the Roses Tier area, the truck numbers projected to use that link road reduced from an average of 30-40 a day down to about 10-15 a day. We went back to the industry and spoke to them and they said, 'We wouldn't choose to use a road with those steep gradients'. It was going to be a sustained length of 10-12 per cent gradients dropping down to the North Esk River and climbing back out. Essentially, the link road fell off the map because it was going to chew up so much money and have very little usage and overall the benefit wasn't there. While all that was happening, we were proceeding with the works along Bridport Main Road and the Tasman Highway and it became evident quite quickly that the Tasman Highway project was going to be a bit more expensive than we had originally nominally allocated funding towards. Then the Mathinna Bridge project was identified by industry and Break O'Day council as well.*

*Essentially, the money that has been nominally allocated for the link roads, from Blessington Main Road through to Prossers Road was then reallocated to Mathinna Bridge and spending additional money on the Tasman Highway.*

The Committee questioned the witnesses as to what the methodology was for prioritizing projects. Ms Boyle responded:-

What I understand is, there were some recommendations made on essentially targeting funding in support of the DIER asset. The original steps leading up to the election commitment were there was quite a substantial list of recommendations and it was about \$80 million worth of upgrades on pretty well all the network, including Ringarooma Road.

(the recommendations) came from within DIER and it was essentially looking at the condition of our asset, the pavement condition, the traffic task and the freight task that was clearly rising rapidly, and the safety.

... it was becoming evident there was a rapidly increasing freight task on it and at the time, forest freight task particularly, but [also] the agricultural task from the increasing dairy intensification and agricultural activity up in this area. This was identified as the most rapidly growing freight transport task in the state.

### **HPV & HML**

The Committee sought an explanation of the HPV and HML categories of vehicles. Ms Boyle responded:-

For a high productivity vehicle, the tonnage limit on that is 62.5 tonnes and 25 metres and for a high mass limit vehicle that is slightly less, but it allows for a slightly different loading of the axles.

... It is something to do with the suspension of the vehicles. They came in initially separately as applications for high productivity vehicles and then a higher mass limit and the axle changes on that, and then both of them started morphing together, so we were getting permit applications to run vehicles that had both and that pushed it up to a higher level of tonnage.

... the combination of a higher mass limit and HPV is 68 tonnes. It also permits them to have a slightly longer vehicle, which is 26 metres.

...Historically, what happened is these permit applications were coming in thick and fast - and we are talking 10 years ago in the agency - so there was some basic level auditing done of roads to see if physically those trucks would fit and the bridges would be okay. Essentially the permits were provided either on short-term basis or ultimately if there were enough permit applications there was this en masse gazettal of routes to meet either HPV only or HML only or HML plus HPV. What we've ended up with is a network of routes across the state which have been gazetted for general access HPV, HML or HML plus HPV, but in the last five to seven years there has been this sort of geometric compliance overlay put and guided by the federal government, basically, so there is an expectation now that routes that have been gazetted or are running those HP vehicles need to meet a geometric standard...

### **Bridport Main Road**

Ms Boyle provided the following overview of the works:-

The intention and the objective of this project is to widen the sealed cross-section to about 8 metres width. It is nominally going to be 3.5 metre travelling lanes and a 1.5 metre sealed shoulder. The purpose is to improve the cross-sectional standard to meet our contemporary high-productivity



vehicle geometric requirements. It is already a gazetted high-productivity vehicle plus high mass limit vehicle route so it has the capability, and it does carry vehicles up to 68 tonnes and 26 metre length. This project is about rolling out approximately 7 or 8 kilometres of consistent 8 metre width and improving the curves to meet contemporary standards for that speed environment. The design speed has been to 80 kilometres an hour in recognition there are some curves on there. On the straighter sections vehicles will be able to travel a little faster, but the curves are still around 80 kilometres or a bit lower. Curves that are less 80 kilometres design speed will be signposted at the recommended speed for traversing them.

The works start at Burnside Road, just north of Scottsdale, and proceed as far as an area called Hurst Creek bridge. We are also setting up a provisional quantity for the contract to do two other little pieces of work of road widening. On the small poster you can see a little blue section just to the north of Hurst Creek bridge and another blue section about 2 kilometres beyond that again. Our intention is to advertise the project to do all the yellow work, and we have asked the tenderers to tender for these additional sections of work. Depending on the tender prices that come in, we will assess whether the additional sections of work can be undertaken.

The contract we will deliver includes the installation of some new bus bays, or upgrading of existing bus bays. The orange dots on the small plan are also for upgrading the steel-beam guard fence. At the moment the guard fence in some locations is too close together and we want to make sure we have a clear 8 metre sealed cross-section or trafficable section for the freight vehicles to be able to pass each other - also larger vehicles, caravans and boats. We will be adjusting guard fence locations in those extra four areas as well.

The works closer to the Scottsdale end include significant pavement rehabilitation and strengthening. At the moment that pavement is in quite poor condition and has essentially come to the end of its structural life. The first half of the road, particularly towards the top of the hill, will have significant pavement works. Between the top of the hill when we change geology and move more into the sandy country, there will be some pavement strengthening works but it is not as extensive as the first section out of Scottsdale.

There will be an intense construction period confined to one summer, which will be the 2013-14 summer, so a year and a bit from here. It will be a busy time on Bridport Main Road. There will be construction happening at several different locations at the one time. It will be complete by April or May 2014, depending on the weather.

The work includes additional bus bays on this northern section, and there are improvements to bus bays and new bus bays around the whole length of the route. Because there is heavy freight usage along here and there is school bus movement, the route has had a curfew applied and gazetted for HPV vehicle use during the school bus hours from 3.30 until 4.30 on Bridport Main Road. With this widening work and all this additional bus bay installation and upgrading, the department would seek to have the curfew lifted through reversing the gazettal process to enable the B-double freight vehicles to travel through there at the same time as school buses are operating.

Overall, the objective of the project is to improve safety for all road users and school buses and to contemporise the geometric cross-section of the road to meet our agreed high productivity cross-sections for vehicles.

### **Bus stop**

The Committee questioned the witnesses as to the provision of a safe bus stop at Oakdene Road. Ms Boyle responded:-

*The junction of Oakdene Road will be marginally improved. The bus bays have been adjusted around the minor improvements to the junction. They are going to be sealed and lengthened, so they will be longer and the surface more weatherproof.*

*... We have not included any pedestrian access to the bus bay itself. We are about 50 metres from the access of the Oakdene Road.*

*... The space that is there now is being formalised. In terms of the immediate area around the bus that is a formalised and improved space. The widening and improving of the road will tend to improve that whole road environment so people will travel there a little bit faster. There is more space in that improved road environment for the activities that occur but we do not have specific pedestrian connection from Oakdene Road to the bus bay.*

*... We have not included pedestrian connections anywhere along here. Mostly the bus bays are on driveways or opposite the other junctions so it is not a practice that DIER commonly does.*

The Committee questioned the witnesses as to whether there was a particular standard that applied to such bus stops. Mr Gregory responded:-

*There are no standards per se when you are dealing with road design as distinct from bridge design. Where there are specific standards with road design there are guidelines that are produced by Austroads and they prescribe desirable and minimum requirements that are to be used at the discretion of the designer. The guidelines provide general guidance and the experience of the designer then comes in applying those. There is no standard that is in black and white that says it must be this long and this wide. There are various publications. ARD has done some work and Austroads have done some work on pedestrian and cycling facilities. In terms of the number of pedestrians here and the traffic volumes on this road, they would not warrant anything other than having a shoulder to walk on.*

*... We are talking about a significant increase in the pavement width that allows the children to get off, out of the traffic and so on. Then a new gravel shoulder here will be better than what is there now and the shape will be better. I would suggest that it will be significantly safer than it is now.*

### **Gladstone Main Road/Derby**

Ms Boyle provided the following overview of the proposed works:-

*This project seeks to provide a similar cross-section. We are looking at upgrading the road between Derby to the eastern side of Ringarooma River bridge. This is a 1950s-style road. It has never had any improvements or*

upgrades. We are now 60 years later with the nature of our traffic, the vehicles that are using it, the caravans and freight vehicles.

At the moment we have about 5.5 metres to 6 metres sealed widths, as you climb the hill out of Derby. Between Derby and the junction at Gladstone Main Road we are looking at providing an 8 metre sealed cross-section as well and a similar process just easing out the curves. We have a 60 kilometre an hour design speeds coming up the hill out of Derby from the top of the hill and then it is an 80 kilometre an hour design speed. Again, that does not mean to say that you can travel it at that speed but the curves will still be less than those speeds and they will be specifically signposted with advisory signs. They will be consistent cross-sections and minor vertical curve improvements, minor horizontal curve improvements changing shape of the pavement to match those changes on the curves.

A section from Gladstone Main Road in towards Herrick at the moment is a 5 metres sealed cross-section. There are quite severe pavement failures. The pavement has come to the end of its structural life along here so we are upgrading that as well.

Originally, we were looking at an overall narrower sealed cross-section of about 7 metres or 7.2 metres and having wider sealed shoulders. From a maintenance perspective, our maintenance staff have said can we please just put the extra seal on because it is a higher cost in the life cycle of the project to come back and keep maintaining the shoulders. We will end up with an 8 metre sealed cross-section on the section of Gladstone Main Road and that is primarily to reduce the long-term maintenance costs.

... The Derby through to Herrick route is part of the Pioneer or Tebrakunna Bridge forest freight routes. The Tebrakunna Bridge was replaced under this north-east freight roads program and construction finished about two years ago on that so that has been purpose built to support forest freight industry and to support the high productivity vehicles as well. The original election commitment specifically spoke to upgrading the route from Tebrakunna Bridge right through to Branxholm as an HPB route.

The Derby to Gladstone Main Road section of road has been gazetted recently as high-productivity vehicle and so this work will achieve that with a geometric cross-section to support that gazettal process.

(the rest of this project is all predicated on the Tasman Highway) ... In the last number of years, DIER has invested in upgrading the section from Herrick through to Pioneer, so that is about 7 metre cross-section and the 8 metre trafficable width is achieved because of the gravel verges outside the gravel shoulders. It is a trafficable section of road between Herrick and Pioneer for high-productivity vehicles and it was the section between Herrick and the Tasman Highway that was constrained.

### **Traffic movements**

The Committee questioned the witnesses about the heavy vehicle movements on the subject road. Ms Boyle responded:-

... Projections were made over the next 20 to 25 years for potential harvests from all the coupes in this area. Those projections were made from all the coupes in this area. Those projections were made in 2007 or 2008 when we started this work. They have been updated in 2009 to reflect the plantation-

only timber, on the assumption that the plantation timber will come out at some stage. The projections have been based on the 2011 revisions of traffic numbers, of freight vehicle numbers, and have been revised to reflect that plantation-only timber coming out some time over the next 20 years or 30 years.

At the moment, I believe, the numbers are below those projected numbers, the revisions from 2011 and what that looks like in the future -

... There is an average of two (agricultural freight) vehicles a day coming up here to take dairy product from the Gladstone area around here, and as these dairy farms expand we will anticipate there will be higher dairy vehicle movements.

The following exchange ensued:-

**Ms WHITE** - That is just taking advantage of Gladstone Road and the Tasman Highway-Derby upgrade; does that accommodate a lot of agricultural truck users?

**Ms BOYLE** - There is agricultural land use adjacent to that that takes agricultural vehicles.

**Mr BOOTH** - At the moment that road there is carrying two milk tankers a day?

**Ms BOYLE** - Currently and some other general agricultural vehicles, but in terms of the HPVs they can go as far as the Gladstone Main Road turnoff on a legal route and beyond that they are legally not able to travel.

**Mr BOOTH** - Don't you sometimes give them an exemption or a permit or something?

**Ms BOYLE** - They can apply for a permit. Permits are generally temporary for a limited period of time, so 12 months is a common period of time. If you are an industry that has a long-term sustained continual use that would be a different consideration. Permits are often given for short-term forestry coupes, so it is short and intense at harvesting time and then it is not going to be touched again for 20 years.

**Mr BOOTH** - Surely if someone wanted to take an HPV milk tanker out to a farm once a day you are not going to spend or take the HPV route right to the dairy, are you? They are going to have to go off the designated routes and they have to have some sort of permit to get into the farms.

**Ms BOYLE** - Once they are into the farms that is whatever -

**Mr BOOTH** - No, no, but the highway doesn't go to the gate of every farm up there obviously, so they are going need permits to get to the farm gates. At this stage anyway you have two milk tankers a day, but you could permit them for 12 months and then give them another permit 12 months later, otherwise they are not going to be able to get to the farm gate because the highway doesn't go to the farm gate in any event.

**Mr GREGORY** - You are referring to the concept of the last mile.

**Mr BOOTH** - It might not be the last mile, it depends where you have a farm out there, it might be the last 10 miles.

**Mr GREGORY** - The concept is the last mile and the Australian government does have an interesting map concept that when you get off the main network, how do you deal with this on the local roads? Generally it is through permits.

**Mr BOOTH** - The point I am making is that the permits have to be a factor of this anyway because you are not going to get the highway going to every farm gate and whether you call it the last mile or last 10 miles you are still going to be running on permanent or annualised permits or something.

**Ms WHITE** - In terms of other traffic usage of that particular section of this project, I am not familiar with the area, but I presume it is a through road to somewhere further up on the north-east coast.

**Ms BOYLE** - Gladstone Main Road goes through right up the coast. There is a whole circle; you go through right down towards St Helens.

**Ms WHITE** - 5 metres to me does not seem like a particularly wide stretch of road, do you have tourists travelling on that road often with caravans? We know we have a lot of caravans in Tassie. I have passed a lot of them up and down the east coast, so I presume they are travelling that road and it is only 5 metres wide.

**Ms BOYLE** - There are a number of destinations that caravans or boat users will go out to here and will travel that road.

**Mr BOOTH** - You wouldn't upgrade a road to HPV because there are a couple of caravans or tourists? What would you want it to be, like, 5.5 metres might be wide enough?

**Mr GREGORY** - You need to understand that HPV cross-section isn't the widest cross-section in our suite of target cross-sections. For example, the category 1 roads, the national highway network, has a significantly wider target cross-section than HPV cross-section, it is in category 2 roads. It is about category 3 and our normal hierarchy of roads is 1 to 5. Category 3 is about the HPV cross-section. They are not - when we say we are providing for HPVs, we are not leaping to some much higher level of cross-section at all. It is about between category 2 and category 3. That is about the -

**Mr BOOTH** - What is category 2?

**Mr GREGORY** - Off the top of my head, I don't know the exact number, but generally we don't build less than 3-metre lanes on any of our road categories unless you get right down to single-lane roads or unsealed roads. If you apply that to this bit of road, which is a state-maintained road, it doesn't meet the target cross-section now. What the Australian government funding -

**Mr BOOTH** - You're not going to upgrade every road around Tasmania, HPV, are you? This isn't the normal -

**Ms WHITE** - But there would be an upgrade to at least a minimum standard that we would like to achieve.

**Mr GREGORY** - That's the point.

**Mr BOOTH** - Well, what is the minimum standard? What I am putting to you is ...

**Ms WHITE** - 2 metres by 3 metres.

**Mr BOOTH** - I am asking the panel.

**Ms WHITE** - I am helping you, Kim.

**Mr BOOTH** - Yes, thank you. What I want to drill down to is that HPV standard is clearly more expensive than a general access road fill. Otherwise you would be designing every road around the state to HPV standard.

**Ms BOYLE** - I will support what Shane has said. This 8-metre cross-section of contemporary road combined with - it's a pretty minimal cross-section. Currently, we have an agreement with the federal government on any mainland state for any routes that an HPV is running on, they have a wider standard. So 8 metres in a Tasmanian context is actually a minimal standard and it's just a direction we are going to get consistent travel environments on any routes that there has been demand for high-productivity vehicles in support of the transport industry. So, it is actually quite a minimal cross-section and it just reflects that in Tasmania our topography and our budget situation doesn't allow us to upgrade our roads to meet a more nationally recognised cross-section, particularly in these rural areas and particularly in the mountainous rural areas.

**Mr BOOTH** - So the difference between this being a HPV in additional measures apart from the pavement, there is also the structure of the pavement. Is that right? And the radius of curves. Are they the things that make it different to any other road? Otherwise, why would you bother to have other standards?

**Mr GREGORY** - That is actually the point I was trying to make. It is not significantly different. We work under the PPS standard, which is the prescribed performance standard. Generally they do fall within our normal standards. For example, category 1 roads like the Midland Highway have a standard cross-section of 3.5-metre lanes and 2-metre sealed shoulders. So we have 11 metres. Immediately, anything we build to the category 1 standard is automatically HPV compliant as long as we make sure that the returning movements through towns and various places are compliant. The point is simply that HPV isn't an extra, over standard, it is one that fits in. It doesn't match exactly with our other standards but it fits in.

**Mr BOOTH** - Is the pavement constructed differently?

**Mr GREGORY** - The pavement is constructed differently basically on every road. It's based on axle loads.

**Mr BOOTH** - So it's the number of axles.

**Mr GREGORY** - The number of axles.

**Mr BOOTH** - So there is actually quite a difference between the pavement of a HPV for nine-axle combinations as opposed to 7-axle ones.

**Mr GREGORY** - It's about axle numbers and over the life of the road. You might have a road that is not taking any HPVs but it's taking lots of trucks.

**Mr BOOTH** - Okay. You mean not the numbers on each vehicle; you mean the total number of axles that travel over the road.

**Mr GREGORY** - That's right. Generally it's trucks. It's not cars - they aren't really significant in the process. You forecast out the number of axles; the type of truck is irrelevant. It's a repetitive loading process. That's what changes the depth of the pavement and it's also underlying soil conditions that make it different.

**Mr BOOTH** - So this road, because there is only one B-double travelling on it every day, will have a much thinner pavement, based on your axle as you have said than the one that had more axles.

**Mr GREGORY** - This pavement thickness would be at the lower end. You get to a point where you cannot go any thinner because you would end up with a crust and a low puncture through. So this would have a different pavement design than, say, the Brooker Highway.

### **Prossers Road**

Ms Boyle provided the following overview of the proposed works:-

The Prossers Road project comprises the upgrading of three intersections: the intersection with the Tasman Highway and Patersonia Road at Nunamara, the upgrading of the intersection between Patersonia Road and Prossers Road, and upgrading the section between Lilydale, Main Road and Prossers Road as well.

Also we will be doing drainage improvements along the unsealed section of Prossers Road - between Patersonia Road and the descent down the hill towards Lilydale Road. Along that whole section we will be improving drainage to try to get the pavement a bit better drained so that during winter the travel surface on that unsealed section of road is more reliable. Currently, because this area in here is very flat, water lies around next to the road quite a lot during the wet season so we are looking to try to move the water away from the road.

I will work through each of the junctions. The junction at Nunamara between Tasman Highway and Patersonia Road we are putting in - primarily we are upgrading the bus bay there and at the moment the bus tends to stop in the throat of Patersonia Road and it gets a bit confusing with some parents parking so we are actually forming a specific bus bay off the side of the road so that the buses pull right off and they have that clear pull-off area, and then the parents can still park because there are parking spaces around the throat of the junction. Then on the other side of the road we are putting a bus bay.

Currently the practice that happens is on the return trip towards Launceston the bus stops outside the little shop. We are actually moving that site up to the Patersonia Road junction so the bus movements happen in the same place and the students are not walking along. At the moment the students are walking from the shop along, across the bridge and up to Patersonia Road. So we are improving that bus bay, the bus situation there and we are also putting in a right-turn facility for vehicles to turn into Patersonia Road.

### **Bridge**

The Committee questioned the witnesses as to what pedestrian access was proposed. MS Boyle responded:-

*At the moment the bridge is just the carriageway with edge lines on it and then there is a narrow space on the bridge for students walking along outside the edge line.*

Mr Gregory added:-

*...If you are talking about a rural area and the pedestrian traffic is very low, the cost of putting another 2 metres on a bridge is quite significant. You would have to look at what you thought the possible pedestrian movements would be in the life of the bridge, which is a little bit of crystal ball gazing because you do not really know what is going to happen. When you are talking about the movement of school children, that can change in the space of five or six years. Where they were dropped off they are no longer dropped and now they are dropped off further up the road because there is a different family.*

*In a general sense in rural environments, no, we would not put pedestrian facilities on unless there was something quite specific about the area that suggested a high pedestrian level.*

### **Bicycle use**

The Committee questioned the witnesses as to what provision, if any, had been made for bicycle riders. Ms Boyle responded:-

*At the moment the roads are all narrow, so there is going to be significantly more space. They are moving from 6 metres or 5 metres in places to 8 metres cross-section of moving on to a space where there is actually an edge line and doing out its shoulder area -*

## **DOCUMENTS TAKEN INTO EVIDENCE**

The following documents were taken into evidence and considered by the Committee:

- Department of Infrastructure, Energy & Resources Submission to the Parliamentary Standing Committee on Public Works – North East Freight Roads – Tasman Highway and Gladstone Main Road Upgrades from Derby through to Herrick - July 2012;
- Department of Infrastructure, Energy & Resources Submission to the Parliamentary Standing Committee on Public Works – North East Freight Roads – Bridport Main Road Upgrade - June 2012;
- Department of Infrastructure, Energy & Resources Submission to the Parliamentary Standing Committee on Public Works – North East Freight Roads – Prossers Road Intersection Upgrades - June 2012;



- Correspondence dated 27 July 2012 from Norm McIlpatrick, Secretary, Department of Infrastructure, Energy & Resources to the Secretary covering the following documents:-
  - A copy of the spreadsheet entitled “Road Upgrades proposed for North east circa the 2007 Election”;
  - A copy of the form entitled “High Productivity and Higher Mass limits Route Assessment”;
  - A copy of the document entitled “Department of Infrastructure, Energy & Resources – Process for Seeking a Temporary Permit for Higher Mass limits (HML) of High Productivity (HP) Routes
  - A copy of the document entitled “State Road Infrastructure Investment Strategy”.
  - A copy of the document entitled “Review of Gazetted High Productivity Vehicle Route Network”.

## **CONCLUSION AND RECOMMENDATION**

These references recommended that the Committee approve upgrades of the subject roads to achieve basic pavement widening, geometric improvements, targeted pavement strengthening, junctions improvements and the provision of safety barriers where required.

The works will facilitate more productive and efficient freight movement and the removal of the Gazetted HPV and HML curfew during school bus operating hours through the provision of increased road width and bus bays for relevant sections and the provision of new and improved bus bays will ensure greater road safety for school students.

The proposed improvements will reduce both road and vehicle operating maintenance costs.

The works proposed for Prossers Road will improve the wet weather conditions along the unsealed surfaces of the road.

The Committee recommends each of the projects, in accordance with the documentation submitted.

**Parliament House  
Hobart  
6 September 2012**

**Hon. A. P. Harriss M.L.C.  
Chairman**