



PARLIAMENT OF TASMANIA

PARLIAMENTARY STANDING COMMITTEE ON
PUBLIC WORKS

**Cradle Mountain Tourist Road
Sealing from the Visitors Centre
to Dove Lake including the
Wal dheim Spur**

*Brought up by Ms Hay and Ordered by the House of Assembly to be
printed.*

MEMBERS OF THE COMMITTEE

LEGISLATIVE COUNCIL

Mr *Harriss* (Chair)
Mr *Hall*

HOUSE OF ASSEMBLY

Mr *Best*
Ms *Hay*
Mrs *Napier*

INTRODUCTION

The Committee has the honour to report to the House of Assembly in accordance with the provisions of the Public Works Committee Act 1914 on the:

CRADLE MOUNTAIN TOURIST ROAD SEALING FROM THE VISITORS CENTRE TO DOVE LAKE INCLUDING THE WALDHEIM SPUR

The Cradle Mountain Tourist Road provides access into Tasmania's World Heritage Area and to one of the State's premier tourist destinations, Dove Lake. The road within the World Heritage Area is narrow and winding with a rustic bush character. It traverses a range of vegetation communities ranging from forest to grasslands and provides visitors to the area with vistas of the surrounding mountains.

Increasing traffic demands have created parking issues within the park and have resulted in operational and safety issues along the road itself.

EXISTING ROAD ENVIRONMENT

Appearance

The existing road from the Visitors Centre to Ronny Creek is gravel of variable width between 3 metres and 5.5 metres and is winding with a rustic bush character. From Ronny Creek to Dove Lake the alignment is much more open and to a substantially higher standard with widths of about 7 metres. The Waldheim spur is little more than a single lane track with absolutely minimal opportunity for passing.

Traffic

Annual Average Daily Traffic (AADT) figures show 380 vehicles per day between the Visitors' Centre and Ronny Creek, 310 vehicles per day between Ronny Creek and Dove Lake and 110 vehicles per day on the Waldheim spur.

These figures however, do not adequately reflect the very marked seasonal differences in traffic volumes. The seasonal variation ranges from 390 vehicles per day in January, to 90 vehicles per day in July.

About 4% of all vehicles are buses and campervans. Buses are limited to 28 seat capacity.

Traffic speed surveys carried out during January and March 1996 showed that generally, southbound traffic peaked around 11am to noon while northbound traffic peaked around 3pm to 4pm in January and 1pm to 2pm in March. On weekends, the southbound peak was about an hour earlier and the

northbound peak about 2 hours later. These findings have been verified in a more recent survey conducted in April 2001.

Evening spotlight tours have become a significant source of revenue for operators in the Park.

From the 1996 survey, the 85th percentile speeds were as follows:

LOCATION	SOUTHBOUND		NORTHBOUND	
	Jan	Mar	Jan	Mar
40km/h sign south of Visitors Centre	39	37	46	43
Top of Quailes Hill	47	43	42	38
South of Soldiers Creek	47	39	50	46
South of Fysh Creek	45	39	45	39
North of Rangers Station	46	40	47	42
South of Rangers Station	43	36	45	39

Unfortunately, similar data were not collected for the section from Ronny Creek to Dove Lake. However, observation would have the 85th percentile speeds significantly higher, probably by as much as 50%.

ECONOMIC AND SOCIAL JUSTIFICATION

The World Heritage Area Management Plan 1999 includes the following management prescriptions in relation to the road:

“Retain the Cradle Mountain Road from the Visitor Centre to Cradle Valley car park as a narrow, winding tree-lined road to protect the character of the park. Undertake minor upgrading of the road from Pencil Pine to the Waldheim turnoff in Cradle Valley. Maintain the final section of the Dove Lake Road from the Waldheim turnoff to Lake Dove to a similar standard to that existing. Mute the road surface to reduce visual impact from the day walk area. The road may be sealed to reduce environmental damage to the roadside vegetation.”

In addition, with increasing traffic volumes it is becoming increasingly difficult to maintain the gravel road into Dove Lake in good condition. The road is often very rough and during periods of heavy rain it is prone to severe erosion. Maintenance operations include gravel re-sheeting, regular grading and clearing of culverts blocked by gravels washed from the road.

Environmental issues associated with maintaining a gravel road in this area include:

- Deposition of eroded pavement gravel on to areas of sensitive alpine vegetation
- Risk of the inadvertent introduction of *Phytophthora* or other diseases and weeds especially on machinery or in gravel used during road maintenance operations.

The scope of the work is:

- To provide for a single lane sealed road with passing bays between the Visitors' Centre and Ronny Creek, formalising existing passing areas, extending and widening them where necessary
- To provide a sealed road between Ronny Creek and Dove Lake and incorporating traffic control measures in areas of high pedestrian use in the vicinity of Ronny Creek and Dove Lake
- To provide for a single sealed lane with passing bays along the Waldheim Spur road
- To address surface and sub-surface drainage issues
- To improve the base course as required and seal
- To provide traffic and information signage in keeping with the natural and visual values of the area

THE PROJECT

Project Objectives

- To improve the road to reduce the environmental impacts associated with gravel washing and dust, reduce the visual impact and improve the safety for road users whilst not encouraging an increase in the general speed environment of the road.
- To maintain the natural setting and cultural integrity of the Park by restricting the road to its existing boundaries and without attempting to change the gradients so as to maintain the natural experience.
- To protect the Park's visual and natural values through all stages, including construction and future operation and maintenance.
- To ensure the design of the road works integrates service mains to accommodate future needs.
- To design solutions suited to the climatic conditions of the Valley.
- To provide protection for native vegetation and wildlife.
- To employ adequate and appropriate measures to ensure that weeds and diseases are not carried into the Park by construction plant and equipment, staff and vehicles or through imported construction material.
- To assist in the rehabilitation of presently degraded areas with excess topsoil from any new disturbed areas.

General Principles

- Adopt the concept of "Single Lane with Passing Bay"
- No road widening beyond the limits of the existing road except for some passing bays, curve widening
- Pavement to be sealed
 - Visitors' Centre to Ronny Creek light sealing aggregate to increase visibility of animals on the road and reduce road kills

- Ronny Creek to Dove Lake dark sealing aggregate to minimise the visual impact of the road from the surrounding walking areas above the road
- Waldheim spur light brown aggregate
- Adopt a low speed environment and design for a reduced speed environment
- Retain the existing vertical alignment
- Provide sight distance between passing bays
- Formalise existing passing bays and construct additional bays as required.
- Re-establish single lane sections where gravel “creep” from maintenance work has occurred
- On wider sections of the existing road, construct single lane sections to reinforce the concept of “Single Lane with Passing Bays”.
- No trees shall be removed and removal of shrubs shall be kept to a minimum
- Table drains in cuttings shall be sealed to provide “shoulder” function 0.5m shoulders shall be provided on road embankments
- Inlet pits and headwalls shall be provided to all culverts
- Speed control devices shall be incorporated at select locations particularly in areas of high pedestrian use, straight sections of roads and areas of wildlife crossing zones
- Line marking and guide posts shall be kept to a minimum
- Effective and unobtrusive signposting for the road shall be developed
- All disturbed areas shall be rehabilitated
- Turn areas for snow clearing, maintenance trucks, emergency vehicles shall be provided. These areas shall be surfaced with gravel
- Temporary turn areas for construction equipment may be provided at appropriate locations on the basis that these areas shall be rehabilitated at the end of the works.
- To assist wildlife in escaping from the road, “ramps and runways”, where warranted and considered effective, shall be incorporated into the design

Road Cross-Sections

- Passing Bays: 5 metre sealed pavement with 0.5 metre sealed shoulder in embankment on 0.6 metre asphalted table drain in excavation
- Single Lane: 2.5 metre sealed pavement with 0.5 metre sealed shoulder in embankment on 0.6 metre asphalted table drain in excavation

ENVIRONMENTAL AND SOCIAL IMPLICATIONS

Environmental Considerations

Environmental concerns are being addressed by applying the following constraints:

- No existing quarries within the Cradle Mountain – Lake St Clair National Park shall be used or new quarries opened
- All construction materials shall come from quarries that are weed and disease free. The quarries shall be approved by the Parks and Wildlife Service
- Any road works involving road widening shall be avoided in areas of mature stands of myrtle and in grasslands and grassy woodlands. Where the adjacent roadside vegetation consists of rainforest species or poa grasslands, widening shall not be permitted.
- No trees shall be removed and removal of shrubs shall be kept to a minimum
- Washdown procedures for all construction plant, equipment, tools, etc and vehicles entering the job site shall apply
- The existing Waldheim Road shall not be widened nor any trees or shrubs destroyed

Public Contact

A public contact plan was developed with the support of Parks and Wildlife Service and Tourism Tasmania.

Operators within the Park have been consulted to ascertain their concerns. Wherever practical, their concerns are being addressed through the tender documents or by other appropriate means. A person will be dedicated full time initially as a liaison officer to deal with, immediately and effectively, any problems should they arise. During construction, the contractor shall be required to maintain acceptable access into the Valley for all visitors to the area.

COSTING

The estimated cost of the project is in the order of \$2.0 million.

EVIDENCE

The Committee commenced its inquiry on Thursday, 24 January 2002, and inspected the site of the proposal. Following the inspection, the Committee commenced hearing evidence. The Committee met again on 9 October 2002.

The following witnesses appeared, made the Statutory Declaration and were examined by the Committee in public:

- Peter Todd, Manager, Asset Management, Department of Infrastructure, Energy and Resources;
- Tim Nevard, Consultant, Pitt and Sherry;
- Leigh Barrett, Consultant, Pitt and Sherry;
- Roy Cordiner, Consultant;
- Hank Schinkel, Senior Ranger, Parks and Wildlife;
- Allen Carman-Brown, District Planner, Parks and Wildlife;
- John Fenech, Senior Supervisor, Network Operations, Department of Infrastructure, Energy and Resources;
- Eddie Firth, Ranger, Parks and Wildlife;
- Hon. Greg Hall MLC;
- Rod Stendrup, Manager, Cradle Mountain Lodge;
- Dennis Stoddart, Field Officer, Parks& Wildlife Service;
- Milan Prodanovic, Chief Traffic Engineer, Traffic Standards & Land Transport Safety Division, Department of Infrastructure, Energy and Resources;
- Graham Gee, Resident of Sheffield; and
- Hon. Don Wing MLC.

Background

Mr Todd outlined to the Committee the background of the project and detailed some of the safety works already performed:

“... the Cradle Mountain tourist road provides access into Tasmania's World Heritage area and one of the State's premier tourist destinations - Dove Lake and the surrounding area. The current road within the World Heritage area is narrow and winding with a rustic bush character; it transverses a range of vegetation communities ranging from forests to grasslands and provides visitors to the area with vistas of the surrounding mountains. The existing road from the visitor centres to Ronny Creek is gravel of variable width between 3 and 5.5 metres, it is winding. From Ronny Creek to Dove Lake is a much more open alignment, a substantially higher standard with widths up to seven metres. The Waldheim spur is little more than a single track with very limited opportunity for passing. Increasing traffic demands have created parking issues within the park and have resulted in some operational and safety issues along the road itself. In addition, with the increasing traffic volumes, it is becoming increasingly difficult to maintain a gravel road into Dove Lake in good condition. It's often very rough and, particularly during period of heavy rain, it is severe; there is severe erosion. Maintenance operations include gravel re-sheeting, regular grading, clearing of drains and so on and it is becoming more and more difficult without having substantial impact also on the environment in those operations.”

Planning

Mr Todd outlined to the Committee the planning process that had been undertaken to establish the project specifications:

This work was undertaken taking into account the requirements of the World Heritage Area Management Plan and the Cradle Valley Site Management Plan. There are other works being planned at the moment, which include a walking track from the visitor centre to Ronny Creek, the undergrounding of services and other works associated with possible shuttle bus services and building infrastructure.

Before establishing the upgrading requirements for the road this department undertook a number of studies, which are listed in the document that was provided to the committee. I won't go through all those but it picks up on a wide range of issues with regard to botanical, traffic management, landscape issues, accident management - snow and ice and so on - pavement issues and so on. The State Government has allocated funds for this financial year from the State infrastructure fund for the upgrading of this road and this brings to a culmination a number of years of planning that have gone to bring us to this point.

Independent safety audit

Mr Todd briefed the Committee on the independent safety audit which was conducted following the bus accident on the road in February 2001, which resulted in a number of fatalities:

While the accident records did not indicate there were major safety problems with the road, a number of recommendations to improve safety were made and works to address items requiring immediate attention from the road safety audit were completed in June 2001. Those works will be incorporated into the new grading. Those works were the placement of the safety barriers, some site improvements and curve widening and the placement of markers along the side of the road.

Economic and social justification

Mr Todd made the following submission to the Committee in respect of the economic and social justification for the project:

The World Heritage Management Plan 1999 includes the following management prescriptions in relation to the road: "To retain the Cradle Mountain Road from the visitor centre to Cradle Valley car park as a narrow, winding, tree-lined road to protect the character of the park, undertake minor upgrading of the road from Pencil Pine to the Waldheim turn-off in Cradle Valley, maintain the final section of the Dove Lake Road from Waldheim turn-off to Dove Lake to a

similar standard to that existing, mute the road surface to reduce visual impact from the day walk area and the road may be sealed to reduce environmental damage to the roadside vegetation.”

As I indicated before, it is becoming more and more difficult to maintain the road. It's often very rough and there's a lot of material being washed off into adjacent vegetation. There is also the associated disruptions to visitors that occurs with that work, which needs to happen on a substantial basis every two years. Some of the environmental issues associated with maintaining a gravel road include: deposition of eroded pavement gravel onto the areas of sensitive alpine vegetation, and including dust problems; and also the risk of inadvertent introduction of phytophthora or other diseases and weeds into the park.

Shuttle-bus service

The Committee questioned the witnesses as to the likelihood of the introduction of a shuttle-bus service, and what, if any, surveys had been conducted to assess the reaction of park users to any such introduction. Mr Carman-Brown responded:

Firstly, to clarify, there is a planning intention to introduce a bus service. This idea has been floated since 1992, and now with the draft visitor services zone plan, and that had gone through a public consultation. I must also add that that particular document went through a public consultation process, but it is non-statutory in nature.

Following on from that, in 1999 there was a further study looking more intently at the infrastructure requirements for the area, and that formed a major component - the introduction of a transport system. It looked at a number of different possibilities and did an evaluation. The upturn of that was that the best possibility for this area would be to adopt a bus shuttle system. The bus shuttle system would address the growing visitation into the area by visitors and the environmental degradation that is occurring because of those numbers. At the moment ... the environmental degradation is occurring because of those numbers ...

Mr Cordiner cited the visitor statistics as follows:

... In 1991 there was 153 000 total person entries, of which 81 registered from overseas ... to 200 700 in 1999-2000 and it jumped very sharply from 1998-99, which was 185 000. I believe this year the trends looks like it is slightly down,

... That is total visitors and interstate and overseas visitors, which is the figure that tourism surveys quote, is 160 000. So there's a very high proportion in all of these figures of interstate and overseas.

Mr Caram-Brown continued:

... with this increase from those numbers that have just been quoted to the committee, you can see that there has been over the last 10-year period a dramatic increase and this has to do with general upgrading and general tourist marketing of the area, more accommodation on the outside of the park, people staying longer - all these factors come into play and those factors will still continue to come into play as the promotion of the area is highlighted - this being the icon of the State as far as tourism goes. While we are getting various types of visitors - short stay visitors, comfort visitors, people who want to spend a lot more time out on the trails and what not - those numbers are all going to increase and there comes a point where you reach a carrying capacity and we have to plan for that before we exceed that carrying capacity and therefore the need to look at establishing an alternative bus transportation system. There will always be room for cars to be entering the park but we also have to look at reducing the number of actual vehicles entering the park for a number of reasons and, as it is now, we do have a bus system that does go into the park by the different tourist operators.

As I said, this is a planning intention and planning intentions take a while to develop. In this particular case we have been more intensely looking at the infrastructure, including the bus transportation system more intently, with further studies being done. There are other studies that have to eventuate, as well as there is a need for a number of approval processes and hurdles to be achieved. So this is not a foregone conclusion but it is an intention that we're working towards.

The Committee, questioned the witnesses as to whether the introduction of a compulsory shuttle-bus service would be likely to impact negatively upon visitors' preparedness to travel to Dove Lake. Mr Carman-Brown responded:

I cannot substantiate that because we will have studies yet to undertake, but from my general appreciation I would say there would be some people who will choose not to come but those numbers would be more than adequately met by new visitors - different visitors.

The Committee pursued this point by questioning the witnesses as to why, given the fact that the proposal for a shuttle bus service appeared to be firming up, there hadn't been any recent survey of the considerable numbers of visitors as to the likely effect of the introduction of such a service. Mr Carman-Brown responded:

I cannot say why that has not occurred in the past because I've only been on the scene a relatively short time - the past year - but I'm

sure that we would attempt to do further surveys. In fact that would be required and we've talked about that already and we're approaching discussions with the Department of Tourism all the time on this matter of finding out user-satisfaction - who's coming, why they're coming and what numbers and what their attitudes are.

Visitor number predictions

The Committee questioned the witnesses as to what projections have been calculated regarding visitor numbers that may be expected in future decades. Mr Carman-Brown responded:

There have been a number of extrapolations, projections, based on previous visitor numbers. These vary in terms of what percentage you use as the rate. Previous studies by Hydro, and what-not, have used a higher rate than what we are currently using; we are currently using a 3per cent which we find to be conservative but more realistic. The planning horizon that we are using is a 24-year period, and within the present numbers we have a doubling of numbers during that period.

... I must also say that these are just projections; projections very rarely hold true to the future but they're the best way we can go about it. It's not forecasting because it's always variable. Who would have known about 11 September or the Ansett crash? They have immediate impacts but they're not impacts that stay around forever; it's always changing its dynamic but there will always be an upward growth. We have to plan using some number, and that is the percentage and the numbers that we are planning on at this stage.

Performance standard of the road

Mr Nevard made the following submission to the Committee in relation to the adoption of the 'single lane with passing bay' specification, specifically as to its effect upon the environment and its relationship to the presentation of the World Heritage Area as a tourist destination:

... on the visit to the site this morning I talked about adopting this single lane with passing bay approach - which is the instruction I've had from my client and one I endorse - no road widening beyond the limits of the existing road except for some passing bays and curb widening - which again I endorse. This is a World Heritage area and I want to emphasise that and say that the World Heritage Area Management Plan which brings the Commonwealth into play in all of these discussions, not this one today, I accept, but in the context of the overall approvals process, because this is in the World Heritage area and because it is a nominated project within the World Heritage area the Commonwealth view had to be sought, which we sought. Officers from the Commonwealth Environment

Agency came over here - Environment Australia -went on a similar inspection to that that you have been on and asked us some very similar questions.

They were concerned about two things: one was environment protection and the second one was continued presentation of the World Heritage area, so they have similar concerns. The proposal that we have put to them has been approved by them in the sense that they do not wish to call it in, that's essentially how the approvals process works. They accept that it is a reasonable proposal and does not warrant their getting involved in it, so we have been through that first tier.

The second tier of the proposal that we have has been to both the Parks and Wildlife Service who, whilst they are our client in one sense, are also the gamekeeper in another in so far as they have an approvals process which the project must go through; it must be circulated with the Parks and Wildlife Service to the relevant officers for their comment and approval before it is accepted as a proposal.

Before we did that in a formal sense, we made it available to both DIER and the Parks and Wildlife Service for their comment before it went to them for formal submission, so it's been through a two stage robust process internally.

It's also been to the Environment Division of DPIWE with regard to pollution issues, noise issues, those sorts of things, because there is a separate approvals process that DPWIE have and it's passed through that process too with comment from them which we amended before we presented our final proposal to Parks and Wildlife. So that is the sort of formal process we have been through.

With regard to the tenderers, the contractors who are tendering for the job should you approve it, as Mr Todd has said we have sent that out to them. In the tender document which I have here, which is in many ways a distillation of all of what I've said to you, it's been made very clear to the tenderers that they are dealing with a World Heritage area road and that they are dealing with wildlife protection and they have to be careful with people; it is a very careful contract, in other words.

So that thread of the environment and people first before the road is an engineering artefact has being led right the way through the design process and the design response, which is Leigh Barrett's province, properly is really to that. I have been part of setting those parameters of working with Leigh on the engineering, walking up and down the road with him with various measurement tools, understanding how the road works as a piece of engineering but

*understanding how it works as an ecological and visitation centre.
So that is the background behind it.*

Alternative design

The Committee questioned the witnesses as to whether any consideration had been given to designs other than that specified in the brief, that is, a single lane sealed road with passing bays". Mr Nevard responded:

I certainly gave consideration and pressed at the beginning of it, is it necessary to seal it? Something flows from this that is quite important ... if you are going to surface the road you have to slow the vehicles down because if you don't slow the vehicles down there will be wildlife deaths on it. This particular section of road running from here out to the link literally became a blood smear, it was dreadful; it eliminated a globally threatened species of wildlife in the area, in a World Heritage area, it killed the whole population because they move between the park and here - which was eastern quolls - it reduced Tasmanian devils, it reduced spotted quolls et cetera to vast proportions below what they were before and so consequently the road has the potential to be a damaging thing if traffic speed goes up as a result of sealing.

When questioned as to what consideration, if any, had been given to the impact of constructing a sealed, two lane road, Mr Carman-Brown responded:

One, the implication is that it would raise serious concerns of that sort of road going into a World Heritage Area. I am quite certain that it would constitute the need for a major pathway and there are lots of implications and processes that are involved there and one of them is a ministerial council, which is David Llewellyn and the minister for Environment Australia, as well as another local representative.

Because of that representation there would be a need to go through the major pathway but there would also be a likely call - within the last year there's been a new act come out, the Environmental Protection and Biodiversity Conservation Act which requires that we refer things to them in World Heritage areas and they make a determination whether they want to control the process of assessment. They would, I believe, take very serious adding this extra disturbance to the World Heritage Area. Not only in a double highway but also putting alongside the road further service mains and that would constitute further disturbance. I believe that the proof of the determination already made by Environment Australia with regards to the road upgrading would need to be reconsidered.

In changing from two lanes to one we are not doing something which is not happening in a lot of other places, that is the first

point. So we are not breaking new ground here. We may be doing it in relation to this road but certainly a project which I was involved in recently in far North Queensland in Kuranda does precisely that, it removes carriageway widths. It is in an urban situation in order to slow traffic down and give precedence to pedestrians. We are doing much the same, we are slowing traffic down to give precedence to the environment - wildlife in the broader sense. So we are not doing something that is not recognised, that is the first thing, and is not part of the normal tackle of traffic calming that goes on all over the place.

The second thing is that we tried to - I remember it was Jane Foley who was quite strong on this from Tourism Tasmania's point of view and she said she was representing an industry view and she brought to the meeting very much a tourism industry's view of this - they wanted to make sure, and she pointed to this wilderness, the feel of wilderness was retained on this road, and therefore if it was at all possible to achieve traffic calming without signage and still retain obviously the safety issues then that's what we should try to do so that's what we have set out to do.

Now, Milan Prodanovic of DIER - he is the senior traffic engineer - is not known for his flexibility - so to get this through his safety audit we were honestly not confident that it would because it is not in the normal course of what you would do on a road of this nature. However, to our pleasure and surprise they believed the fact that we were changing the geometry of the road, which the essence of the point is, by making sure the people had a perception that it's one lane with passing bays rather than two lanes with narrow bits because there is a fundamental difference between those two.

Mr Graham Gee, in evidence given to the Committee on 9 October, submitted:

The section from the visitor centre to Ronnie's Corner would need major rebuilding; the section from Ronnie's Corner to Dove Lake would need minimal rebuilding. The cost of the road would be cheaper - note, I say cheaper - than that proposed by the present one. This is because the conditions laid down in the specifications for a variable-width road are unpractical ...

I firmly believe that the dual carriageway road, with a vastly extended parking area provided at Dove Lake, is the best option.

The Committee sought evidence as to the comparative speed limits in the subject section of road. The following exchange took place:

CHAIR - *What was the maximum speed limit on that section of road?*

Mr NEVARD - I think it was 80 - it's not so much the limit, it's the speed at which people drive, the capacity of the road... So you have to design for human nature as much as the strict speed limit issues and that's, I guess, what I was concerned about, to be realistic about our behaviour rather than our adherence to the law.

CHAIR - So it was 80 and still is?

Mr NEVARD - I think it's 80 beyond there and I think -

Mr TODD - Sixty.

Mr NEVARD - it's 60 this side.

CHAIR - So from the turn-off up the road leading onto the Lyell Highway in here initially it's 80, is it?

Mr NEVARD - I think so.

CHAIR - That's what I thought. It's very difficult to compare road kill when the speed limit is 100.

Mr TODD - This end, I think it was always, sorry forgive me, I think it was always 60.

CHAIR - It's very difficult to compare when there's a speed limit of 100 and 40.

Mr TODD - That is absolutely true and that's why we're proposing the speed limits we are inside the park and that's why we're designing the road to accommodate - 60 kilometres an hour animals still get killed.

Mrs NAPIER - So 40 is your limit and below?

Mr NEVARD - Forty is really the limit. So just putting a 40 kph speed limit won't stop people; if the road is capable of being driven faster, they'll do it. No, I'll go further, we will do it, not just they.

CHAIR - So it seems to be the speed limit rather than single lane or double lane that cause the road kill.

Mr NEVARD - Not the speed limit, the design speed of the road.

CHAIR - If people are travelling at 100 on a two-lane highway and there was a lot of road kill out here initially it doesn't mean that that would happen if this road from here to Dove Lake were two lanes -

Mr NEVARD - No, this last section was 60 - and that's where the majority of the kill took place, because this is where the majority of the animals are.

Mrs NAPIER - In the 60 zone.

Mr NEVARD - Yes. Because inevitably the national park is the hub of most of the populations because it is least disturbed and those populations spread out from the national park into the surrounding areas.

CHAIR - So as you were saying, it doesn't matter what the limit is, it's the speed that motorists drive at. What is that understood to be during this period when there was so much road kill.

Mr NEVARD - I can't answer that because I don't know. I am relying on a very good zoologist's report - two of them - from Menna Jones, who is really the best marsupial carnivore expert I have come across. Her reports to DIER are quite clear: reduce the road speed to 40 and you will, not eliminate, but you will reduce the road kill massively. Allow people to drive faster and you won't...

Road safety audit

The Committee questioned the witnesses as to whether the proposed road design had received any consideration from road safety experts. Mr Todd replied:

... there are a series of audits that can be conducted on a road, beginning with the concept design right through to a number of stages, right through a final to what we call an existing road. So an audit can be done at any stage of a road, from its design right through. Part of the requirement for any of our new projects, our new designs, is that they actually go through that formal process. It is established by Austroads, it is a formal process that needs to be gone through and that is part of our design process. So that's what has occurred in this project.

Mr Eddie Firth, a Ranger with the Parks and Wildlife Service and based at Cradle Mountain, appeared before the Committee and made the following submission in respect of the proposed road design:

... the main reason I'm here today is my concern about safety. I believe the road as proposed isn't safe. We've heard from Mr Nevard earlier on about the people who are coming in for a look, he's admitted that they will speed and he has admitted that there's nothing that they can do about that, so with 67 single lane areas of road where they have to actually give way to people I feel that the events that happened early last year in February in the road

accident the staff here will be the first people that will be called upon to give assistance to the public, which is the nature of our duties. I feel it's very unfair to put the staff in a situation where we're going to have to revisit, possibly, situations that we have had to deal with in the last 12 months. That's why quite a few of us are concerned about what's being proposed.

At the conclusion of the meeting of 24 January, in order to obtain an independent assessment of the proposal, the Committee authorised the then Chairman of the Committee, the Honourable Don Wing, to consult with Professor Colman O'Flaherty. Professor O'Flaherty is an engineer and retired academic with expertise in the fields of road building and bridge construction. Mr Wing reported the outcome of his meeting with Professor O'Flaherty at the second meeting of the Committee in relation to this project on Wednesday, 9 October:

'Professor Colman O'Flaherty, spent some two hours studying the plans and allied documents for this project. He has authorised me to say that the proposal probably would work. He would expect it to work in terms of slowing down traffic, reducing speeds. However, as it is a new development for Australia, he felt it would probably be desirable for the committee to receive independent expert advice to reassure itself regarding the safety implications of this new design. He pointed out that the committee has received assurances from the government safety audit review but it would have reassurance from an independent review of the safety implications.

Professor O'Flaherty said that, in view of the Government's public responsibility to provide safe road designs, it could not be accused of introducing an unreasonable measure if it has taken the precaution of having its safety audit independently checked.'

Mr Wing continued with the following submission to the Committee:

I visit Cradle Mountain quite often, and have done for some years. I also take visitors there and in the last two years we have had picnic lunches on the banks of Dove Lake with overseas visitors I have been entertaining. That is always very enjoyable. I wouldn't feel that I would be able to do this - certainly not in the same way and probably only rarely - if private motor vehicles are restricted from travelling from Cradle Mountain Lodge and the interpretation centre to Dove Lake. I think this is relevant: although the committee is asked to deal only with the road project, it seems apparent from the totality of the evidence that it is intended that this be part of an overall plan for the area. It seems that the overall plan for the area at this stage, or when the committee last met, also involved a walkway from the interpretation centre down

near to Dove Lake with some services - sewerage and water - being placed under the wooden walkway and also it seems that it at least is being considered very heavily closing the road that you are dealing with in the project to private vehicles for at least most of the time, when people would be required to travel by bus from the interpretation centre to Dove Lake. All those matters are also under active consideration

Personally, as a member of the committee I was finding it difficult to deal with the road project in isolation knowing that it was likely to be part of an overall plan involving the other factors and maybe some others. It seemed to me, and I know it seemed to other people who have given evidence, that the only satisfactory way to deal with the road project was to have an overall plan prepared so everybody knows what is intended to be done in this area so that every aspect of the various projects can be considered in relation to each other. I feel it is very difficult to do justice to the situation by dealing with one in isolation. As it seems that there is at least a feeling in some quarters that the road should be closed most of the time at least, for private vehicles, I feel that is a problem. As a citizen of Tasmania I would find it a problem. I would be reluctant to take visitors to Tasmania there, knowing that they would have to get out of my car and, if we were intending to have a picnic, take the picnic things on a bus and then get off the bus at Dove Lake and have the picnic, then have to wait for the next bus to come and then get on the bus back to the Interpretation Centre or wherever the base is then repack the car and go from the area. I would find that a rigmarole that I would not want to be doing. I would not feel that was convenient or comfortable, even in fine weather. But in wet weather it would be most unpleasant to get out of a comfortable car, get into a bus, repack everything, get out of the bus at Dove Lake, and after the bus had gone, if it started to rain heavily, find there is no protection. You cannot just get back in your car as you can now and it would certainly deter me from taking people there or even visiting alone.

Through Tourism Tasmania, Cradle Mountain is one of the tourist icons being heavily promoted to encourage visitors to Tasmania. I think it would be a retrograde step, quite counter-productive, if a measure were taken which discouraged people from visiting Cradle Mountain. If it is a drawback to bring people to Tasmania and then we set up a measure which discourages people from going there or places inconvenience on them once they are there, even if they don't realise that before, it does seem to be counter-productive to the efforts of another department and not in the best interests of using a tourist asset to the best advantage. But the difficulty, Mr Chairman, is that your committee is not dealing with the question of road closure. Although it is relevant to your considerations, it is peripheral to it. Because of the evidence you have received - and at least some witnesses have given

evidence that this is favoured for certain reasons - it is a relevant matter for you to take into account as a committee, even though that part of the project is not before you. But I think members of the committee will be aware that it is difficult for you to deal with this particular project when there is no overall plan and I think it is a matter of the cart before the horse.

Design philosophy and standards

Following the meeting of 24 January, the Committee sought additional information of the Department of Infrastructure, Energy and Resources in relation to the design philosophy and standards which were applied in the design. The Pitt & Sherry document entitled "Cradle Mountain Tourist Road Design Philosophy and Standards" was prepared and submitted to the Committee and is tabled with this report. Mr Todd addressed the document as follows:

... Really this project is principally about protecting the environment from the run-off and contamination that is occurring because of the unsealed road and the risk of the importation of phytophthora and other diseases that could affect that area. In fact what we are proposing in terms of the design is really formalising what is already happening. We are bringing together a number of the single-lane and the double-lane sections to make those longer and more continuous ... the single-lane sections constitute 40 per cent of the length of the road, so the rest is double or two lanes.

What we then did was utilise a modelling technique ... to work out when the road would become saturated. This is a fairly technical input and we utilised the traffic volumes that were supplied to us by Parks and Wildlife. ... the maximum degree of saturation ... of 12.5 per cent which is anticipated in 25 years, is within the very good range, so our modelling indicates that even in a 25-year period if the road continued to be used as it is now with the growth that is anticipated it still would not have reached saturation. So the design is not contingent at all on excluding light vehicles. It is robust with respect to that issue. That may be an issue that others might have, but it is certainly not one that as a road-owner we have considered to be a problem in terms of reducing the volumes of traffic and the saturation that might be created on the road. The modelling indicates that the current design will, for a 25-year period at least, be capable of coping with the traffic volume.

Mr Barratt gave the following explanation of the modelling work undertaken in respect of the road:

We chose five locations along the road which we considered would be the most likely sections to cause any traffic problems - where the one-lane sections are at their longest, where you have

short two-lane sections adjacent to them and you might find queuing could possibly extend longer than the actual length of the two-lane section back into a one-lane section, which would then cause a bottleneck in the road. We took the traffic data which was provided to us by the Parks and Wildlife Service and analysed that data to find the maximum traffic flow for any given hour from that data, and that worked out to be 122 vehicles in an hour - that is two-way traffic - with approximately a 52:48 per cent split, so the flows were approximately equal in each direction. We took those volumes and then increased them to look at what the traffic volumes would be like in five years, 10 years, 15, 20 and 25 years, allowing a 3 per cent growth rate every year, as 3 per cent is a State-assumed average increase in traffic, which is probably an overestimation, so we are looking at the worst case scenario. We are still being ultraconservative, trying to look at what could be the worst traffic case possible. Looking at 25 years from current traffic data would give a 12.5 per cent degree of saturation, so it would not cause any traffic congestion at all.

... Throughout that analysis the longest queue length is 1.7 vehicles: 95 per cent of time the queue length will be less than that and only 5 per cent of the time would that queue length be exceeded. That is when you have the maximum amount of big traffic using the road which, again, is a very small fraction of the total time throughout the year and which would possibly occur probably only once over a one hour period over the whole year. This is really looking at the worst case scenario.

Safety

Mr Prodanovic addressed the road safety aspects of the proposed works:

in terms of the level of the traffic side, there are probably two aspects. One is the capacity of the road. We've heard some evidence in terms of how it is seen to perform and complementing with the analysis that had been undertaken. I see no problem with that side. The other side is obviously the safety side and in that regard I at an early stage indicated what I thought was necessary in terms of a motorists exiting and entering the one-way sections along the road.

In that regard, I see the measures that are necessary aren't being provided for. In my mind there is still a little bit of detail to be resolved to fully satisfy me about entry and exit arrangements. As an extreme, you have the bays on one side; a motorist going down in the one direction that hasn't got any bays on it might be able to assume now the right-of-way and that sort of thing, but Mr Wing has indicated that there might be some tendency to jump in if the design goes into the one-way - if it were done differently, if I could put it that way - and there is in fact sort of an entry more into what

seems to be the territory of the opposing traffic, then there may be more caution undertaken by those motorists. I think those sorts of elements are provided for if there is appropriate signage.

Obviously in view of the environment, I am satisfied there are safety issues that need to be addressed. Certainly it is a somewhat unique design that I am aware of, in terms of deliberate design. I think I came across one or two very minor roads somewhere in the State some years ago that may have had a similar arrangement, but just ad hoc; I can't even remember where they were. Overall, personally I am confident in this working; it is a matter of balancing a sealed-surface road that will tend to generate higher speeds with a design appropriate for that area that will create more of a stop-start situation as much as possible.

The Committee questioned the witnesses as to what work had been undertaken at the site of the fatal accident on the road. Mr Todd responded:

My recollection - and it needs to be seen only as a recollection - is that the safety barriers that have now been put in place following the accident are satisfactory and meet the comments made by the coroner. I am not sure whether he referred to it explicitly, but that was certainly the implication I drew from reading the findings. From that, I understand that the issues in terms of drops off the road has now been addressed on the whole length of the road and, following the accident and the safety audit that we had done, we implemented the recommendations of that audit.

Commercial interests

Mr Stendrup appeared before the Committee and made the following representations on behalf of commercial operators in relation to the proposed works:

I am here in two positions: one, I am the resort general manager of Cradle Mountain Lodge; the other is that I am the inaugural chairman of the newly formed Cradle Mountain Tourism Association, which is basically a group of commercial operators within the area.

... we are quite in favour of, sealing the road for environmental purposes ... We are concerned, however, about the wider ramifications about the design of the road. I understand that the engineers are quite sure regarding delays, traffic jams, et cetera, but we feel that certainly at major times, peaks times and busy times - and there is a big significance in the change from busy times to quiet times, from summer to winter - that it will in fact be a catalyst to the introduction of a shuttle-bus service or a bus service of some format. That will be quite negative (in terms of its) commercial ramifications and the impact it will have principally, I

guess from a selfish point of view, on our commercial businesses in the area.

... we are constantly told that the way we can enhance our visitor nights and the stays up there - because the overnight stays are declining as a proportion of the visitors to the area - is by providing greater facilities, greater activities, et cetera. We see the fact of our guests and visitors to the areas having to get out of their cars or leave their cars at home and wait for a bus, or hop on a bus and hopefully there is a seat - if there is a group of them there may not be enough seating they are relatively small buses - that this has the potential to impact quite significantly on the viability of the businesses up there and the potential future growth of the area.

Our major concern with the road itself is not bitumening the road or improving the surface of the road by sealing it - we think that that is quite wonderful - it is the number of single passing bays. I am not sure what the final number is, but I know that it was mentioned just a while ago there were seven or eight stops. I would be surprised if it was as few as that during January through to the March-April period; I would think it would be significantly more than that ...

Planning context of the project

In his evidence before the Committee on 9 October, Mr Firth made the following submission in relation to the project:

... this document the Cradle Valley Tourism Development Plan has come forward since the last time the committee met - ... this is the first time, to my knowledge ... that we have actually had a document that plans the whole area. As Bob (Tyson) said, the planning is a very complex issue, but we have a draft Pencil Pine Cradle Valley Visitor Services Zone Plan so we have little bits and pieces everywhere and the road is one component of it, but we have no overall plan. To rush off and do a bus service or a road or infrastructure of late we really need to have a plan or some document that actually shows us where we are going. I have serious concerns about how a bit here and a bit there can happen and when we are spending good public money we should have some common goal at the end of where we are headed for.

Mr Firth continued:

... I would like to make some comments on this submission that came from DIER. The first one I would like to make is - and it goes back a little bit to planning - there is some work in here from Dr Menna Jones quoted about the potential of road kill and the species of animals. She draws a lot of her information from the road outside the national park which is from Cradle Mountain

Lodge to Clearys Corner. I would like to suggest that while her work is very good it does seem to be a little bit inappropriate for this. That is probably is the closest road you can compare, but to compare the usage pattern of a road that is going from Cradle Mountain Lodge out, which is being used at all hours of the night because of staff knocking off and going home to Wilmot, people who have gone down to the lodge for a meal and are going back to the camp ground or whatever, to that of a road in the park is not appropriate because that pattern is not the same. As you have been made aware of, since this data on a road count has gone in on the road just past the visitor centre going into the park, you can actually look at these figures and they tell you how many vehicles go in and out in a quarter of an hourly period. So if we go through and look at the day, say, 9 January when 550 cars went into the park and then we look at the critical danger area, which we are supposedly being told that the road is being designed for, of the 550 cars that went in, 20 went in during that period of high road kill, which takes me back to the overall ... planning again: of those 20 cars that went in there or let us say of any of the traffic that goes in there during the night time, there is a proposal to get rid of the staff housing out of the park and at that time of the year we have quite a few staff living up in the park so, if in the overall context of planning, those houses were going to be removed then that would eliminate x amount of people travelling along the road. Again, certain numbers of those figures would probably be the spotlight tour, which is operating as well. The way I am looking at it is, there should be a lot more planning done. All the facts and figures should actually be looked at because if we are designing a road on the wildlife side of things and only 20 vehicles are going to travel on it out of 550 and the other 330 people have to duck and dive every day, day in day out because of the 20 vehicles at night or whatever it is, then I think that all needs to be brought into the equation. That is just one aspect of it. I think that covers what I wanted to say on that. It's just that I think the usage patterns are different outside the park versus inside the park.

DOCUMENTS TAKEN INTO EVIDENCE

The following documents were taken into evidence by the Committee:

- Submission of the Department of Infrastructure, Energy and Resources, November 2001;
- Submission of Mr Peter Sims;
- Submission of Mr Norman and Mrs Merleen Lawson, 21.01.02;
- Submission of Peter Radel, January 24 2002;
- Northwest Walking Club, 19 February 2002;
- Kentish Council, February 25th 2002;

- R. J. Graham & Associates, 8/1/02
- Pencil Pine – Cradle Valley Visitor Services Zone Plan, January 2002.
- Pencil Pine – Cradle Valley Visitor Services Zone Plan, July 1993
- Demand Analysis for the Cradle Valley Area (Draft Version 2.0 (26.04.00) ;
- Cradle Mountain Infrastructure Redevelopment Program;
- Assessment of eastern quoll populations at Cradle Mountain two years post works implemented to reduce road mortality, Report to Department of transport, June 1998;
- Cradle Mountain Tourist Road, Visitor Centre to Dove Lake Roadworks, Drawings and Specifications (2 Vols);
- Decision of the Coroner's Court held at Burnie – Friday, 17 May 2002;
- Submission of Mr Graham Gee, 9.10.02;
- Department of Infrastructure, Energy and Resources – Project Design Brief – Cradle Mt Tourist Road Visitor Centre to Dove Lake & Waldheim Spur Road;
- Draft Cradle Valley Tourism Development Plan; and
- Cradle Mountain Tourist Road Design Philosophy and Standards, Pitt & Sherry, April 2002.

CONCLUSION AND RECOMMENDATION

The evidence presented to the Committee presented three matters for deliberation: the timing of the reference of the project itself, seemingly in isolation to, and pre-empting a strategic management plan for the entire Cradle Valley; the proposed introduction of a shuttle bus service; and the road design.

The Committee was presented with considerable documentation dealing with the management of the Pencil-Pine/Cradle Valley, with particular emphasis upon the provision of visitor services. With the exception of the Tasmanian Wilderness World Heritage Area Management Plan 1999, such documents were however, in 'draft form', and yet to be finalised, with further visitor surveys being undertaken. The Committee is concerned that the road works were referred in isolation from a wider strategic plan, however, the Committee recognises the need for the safety upgrading to continue, and the limited opportunities for road works to be undertaken due to the weather conditions in the Park.

Notwithstanding the incomplete nature of visitor surveys in relation to the introduction of a shuttle bus service, the Committee took the view that its inquiry was limited to the road works and that any considerations relating to the proposed bus service must be confined only to the effect, if any, on the design.

Mr Barrett's evidence of 9 October neatly sums up the evidence in relation to this issue, when he said "In our design we didn't specifically take into account using buses solely on the road and no cars. The road has been designed to take cars and I don't see that the actual use of buses is really linked to the road. I think it is probably more linked to the car parks being overcapacity and so I think the buses are used." Accordingly, the Committee is satisfied that the proposal for a shuttle bus service, whilst being an important consideration for future planning of Park usage, had no bearing on the road design.

Considerable attention was given by the Committee to the road design, particularly as to whether a sealed, dual carriageway alternative would be preferable, particularly in terms of safety. Evidence was presented to support this view. The Committee challenged the design in those terms, evidence was adduced from the witnesses which supported the proposed design, particularly in that road safety was in no way compromised by the unique design. The Committee is satisfied that by restricting the road to its existing boundaries and without attempting to change the gradients so as to maintain the natural experience, the road will maintain the natural setting and cultural integrity of the Park, whilst significantly improving the safety of the road by the adoption of the unique 'single lane with passing bay' design.

At the conclusion of the deliberations of the Committee, Mrs *Napier* moved – That the Committee, in the context of the lack of a completed Cradle Valley visitor and tourism development plan, and in light of a proposal to locate sewerage and power infrastructure under a walking track parallel to the road, does not recommend the project.

And when the Question was put;

The Committee divided.

AYES

Mrs *Napier*

NOES

Mr *Best*
Mr *Hall*
Mr *Harriss*

So it passed in the Negative.

And the Question being put – That the Committee recommends the project, in accordance with the plans and specifications submitted, at an estimated total cost of \$2,000,000.

It was resolved in the Affirmative.

**Parliament House
HOBART
19 November 2002**

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

