[redacted]

18 July 2021

Attention:

Mr Tim Mills
Inquiry Secretary
Inquiry into Road Safety in Tasmania
Legislative Council
Parliament House
HOBART
TAS., 7000

Submission to Legislative Council Inquiry into

Road Safety in Tasmania

From:

[redacted]

Author Biography:
Bob Holderness-Roddam has held an unblemished driver's licence for 60 years. He has driven in all Australian states and mainland territories, North America and much of Europe, including Iceland. He completed a defensive driving course several decades ago and has served on road safety committees.

Road Safety is the Subject of Several Inter-related Factors

It would seem to some people that road safety can be improved by the silver bullet of that person's choice. This is not that simple. Several factors affect the safety of our roads, and many of these are inter-related.

The most frequently touted cause of accidents is driver behaviour. The most obvious examples here are the deviants who wilfully flout the law by driving whilst intoxicated, at excessive speed, ignoring traffic lights, over-taking on white lines or using phones and in many other ways. These are often unlicensed and/or driving stolen vehicles. Examples include the driver who killed Sarah Paino, and the recent tragic deaths of two people walking their dogs in Queensland. Both these drivers were allegedly driving stolen vehicles. However, they are but the tip of a rather large iceberg!

Inexperience, along with youth induced testosterone levels, and possible mixes of the above-mentioned misbehaviour, also contribute to serious accidents.

Another Tasmania Police road safety issue is that of driving to the conditions, the environmental issue impinging upon road safety. 'Conditions' primarily refer to the weather – rain, snow and ice, fog and wind all affect our ability to drive safely. In the 1970s I was on the British M1 motorway, on the way to London. In those days, British motorways were not subjected to speed limits, so traffic was moving pretty quickly, including me. Suddenly a bank of thick fog appeared, drastically reducing visibility. Whilst most of us reduced our speed accordingly, several vehicles passed us at speeds that could only be described as being insane.

Rain is another environmental aspect, affecting road surface and, a factor often overlooked, contrast. Even a small amount of rain makes the road surface more dangerous, as the oil deposited from exhaust pipes floats on the surface. Heavy rain reduces visibility. On a few occasions the rain has been so heavy that I have drawn off the road to await improved conditions – yet other vehicles have roared past, often without their lights on. Strong wind also affects vehicles, particularly those with relatively large side surface areas such as vans.

In 1965 the American consumer activist, Ralph Nader, published his landmark book, *Unsafe at Any Speed: The Designed-in Dangers of the American Automobile*. This book resonated with me, as a few years before I had been at University in Montreal, where a good friend with more money than I had purchased a Chevrolet Corvair. Nader used this particular vehicle as his main example to illustrate the lack of safety in American vehicles – well, most on the planet at that time! Fortunately my friend, barely old enough to hold a driver's licence, knew enough to modify the worst safety aspect of the vehicle. However, it is largely thanks to Nader that vehicles have seat-belts, improved suspensions and brakes and – just as important – interiors.

Unfortunately, we have not really learned all the lessons of vehicle design and construction. These days smaller vehicles, such as the Suzuki Swift, Toyota Yaris and several others, share the road with an increasing number of massive SUVs. Imagine the consequences of a head-on or side on collision between one of these smaller vehicles and, say, a Dodge Ram or Toyota Landcruiser. Of particular concern to me is the availability

of these larger vehicles, often older models with worn suspensions, tyres, steering and brakes, to younger, inexperienced drivers. A recent example is that of the 17 year-old who crashed into Anthony Albanese. That youngster was driving a Range Rover: ouch!.

I briefly mentioned the issue of contrast above. This is the ability to discern the difference between a vehicle and the background. This is influenced by several factors – road colour, vehicle colour, background, time of day, and weather. An optician has told me that older people's eyes are less able to discern vehicles in conditions of poor contrast. It is for this reason that I always drive in daylight with my headlights on low beam. However, I suggest that there is a good case for vehicle colours to be required to be lighter than many are – perhaps white or yellow.

The final factor in road safety is that of the design and construction of roads and their associated infrastructure. This covers such features as road surface, width, junction design, lighting, safety barriers and roadside objects such as trees.

To conclude, here is an example of the inter-relatedness of some of these factors. An inexperienced, young, male driving a SUV with worn suspension in heavy rain on a poor road surface, where the water is 'pooling' across the road. Does he put his headlights on and slow down, perhaps even drawing off the road; or does he continue on until he has to brake suddenly, possibly resulting in a skid and maybe even a roll-over?

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(1) Main causes and effects:

I assume that road safety databases and Tasmania Police should have up-to-date information regarding the main causes and effects of road traffic crashes.

4WDs and SUVs

I believe that the proliferation of heavy duty 4WD / SUV vehicles have an effect upon the severity of road crashes in Tasmania. I append a copy of a talk I gave on ABC-TV '*Ockham's Razor*' several years ago (Appendix I). Since writing that paper there have been several accidents involving 4WDs in Tasmania. Although 4WDs may not have been responsible, I believe there is evidence that they may have contributed to the severity of the injuries to occupants of other vehicles.

Committee members will probably recall the tragic accident which claimed the lives of two adults and three teenagers whilst travelling to a sports engagement on the 25th of February 2006 on the Bass Highway, at Round Hill, Burnie.

This accident received widespread publicity and was the subject of a thorough Police investigation. The conclusions, supported by the coroner's report (Appendix II to this submission) stated that vehicles were being driven at legal speeds and were in road worthy condition. The road conditions, lack of median safety barrier and need for a reduced speed limit were highlighted in the coroner's report.

What concerns me is that none of the investigators, nor the coroner, commented upon the likely effects of the side impact on the Holden Commodore from the Mitsubishi Pajero.

Whilst this vehicle did not cause the accident, I believe that its sheer mass and ability to intrude over the Commodore's door sill played a major part in amplifying the injuries to the occupants. Had this vehicle been of a similar mass and ground clearance to the Commodore, the injuries to the occupants may not have been fatal!

In order to illustrate my point, I offer the following photographs. The first is of the side of a Nissan Patrol utility. Note the very heavy chassis member beneath the cab and tray.

The second photograph (below) is of a large four-wheel drive vehicle which is parked in a Hobart car park on weekdays. This photograph illustrates the size/mass differential between this vehicle and the Honda Civic I frequently drive.

My conclusion is that any accident between these super heavy-duty 4WDs and a substantially smaller vehicle is likely to result in vastly increased severity of injuries to the occupants of the smaller vehicle. Police accident investigators and coroners should be aware of this possibility when investigating road crashes.

Prevalence of high speed vehicles

I understand that the maximum speed limit in all mainland states and territories is now 110 kmh. Why then, do we allow the importation, construction and possession of vehicles that are capable of speeds approaching twice this limit? Furthermore, we allow vehicles to display totally unnecessary spoilers and other devices.

I realise this has to be a national issue, but surely we can reduce the performance of vehicles – perhaps reducing maximum possible speeds to say 130 kph. by the installation of governors.

Display of headlights when vehicles are moving

I usually turn on the headlights of any vehicle I am driving at all times. I do this because of research, and my own observations during 40 plus years of driving in many parts of the world (continental Europe, UK, Iceland, Canada, USA and all mainland states and territories in Australia). This indicates that high visibility plays an important role in reducing vehicle collisions with other road users – including cyclists and pedestrians. Headlights don't only enable drivers to see, but they make their own vehicle more visible and assist other road users to assess their approach speed.

The Department of Transport and Regional Services, Australian Transport Safety Bureau conducted a Review of the Literature on Daytime Running Lights (DRL) (Peter Cairney and Tanya Styles: 2003) [Report No. CR 218, Date: October 2003, Pages 86, ISBN ISSN 0 642 25510 5 1445 4467] They concluded "There is a substantial body of evidence which shows that DRL reduce daytime crashes".

Pedestrians

- There are a number of fatalities and injuries involving pedestrians each year. Some of these are clearly due to risk taking by young and/or drug/alcohol affected pedestrians.
- However, as a pedestrian (and driver of over sixty years), I am horrified by the general disregard for pedestrians by drivers.
- The road regulations clearly state that drivers turning at uncontrolled intersections must give way to pedestrians. In my experience this seldom happens, and many pedestrians are frightened. (I attach a copy of my research re (a) driver behaviour and (b) pedestrian responses to a survey at a specific intersection in Claremont.) Appendix III.
- Drivers are required to give way to pedestrians when crossing footpaths whilst entering car parks, shopping centres, etc. This rarely happens.
- Drivers are also required to indicate for five seconds before pulling out from the kerb. As a pedestrian, I have frequently been confronted by vehicles pulling out from the kerb without warning. Furthermore, these drivers are seldom paying attention to their task, as they often seem to be doing up their seat belts.

(5) The methods and means whereby road traffic crashes in Tasmania may be reduced:

I feel sure there will not be any shortage of ideas presented to the Committee regarding this term of reference. I may as well have my three pence worth!

- At the moment the taxpayer is paying out a fair sum for the purchase, maintenance and operation of speed cameras. This is all well and good, but the operations are much reduced in their effectiveness by the broadcasting of speed camera locations by the media. Look at it this way. If you are driving in excess of the speed limit and are advised that there is a speed camera operating in a certain location, you will moderate your speed accordingly. However, once you leave the area, you will probably increase your speed again. Very much a *band aid* solution to the problem!

  I observe this behavior frequently when driving towards Hobart from Austins Ferry on the Brooker Highway past the Montrose Bay High School. Vehicles roar past me, slow down for the permanent speed camera, then speed up again once past the camera. I think the state's budget would receive a considerable boost if a Police officer were to be positioned a few hundred metres beyond the permanent camera with a mobile unit!

  If, however, you are caught speeding by a camera and start collecting demerit points, you will probably moderate your speed altogether. Which is the best result for other road-users?

- You will probably receive several submissions promoting 'education' as an effective means of reducing crashes. I have strong views, based upon my formal training (B.Ed., M.Ed. and Diploma of PR) and some forty odd years' experience as an Adult Educator. Whilst education clearly has a role, it is not a silver bullet. Many people are aware of the rules(such as drink driving and excessive speed), but choose to ignore them. Effective education is more than simply passing out information – it must concentrate upon (a) attitude change and (b) behaviour change.

  Many people have the correct attitude and then proceed to rationalize why they can't moderate the behaviour ('*look I know I shouldn't … but …*'). Others will moderate their behaviour, but only because they fear the consequences (demerit points/fines) rather than a belief in the real need to change their behaviour.

  Effective education takes this into account. However, I strongly suspect that the 'education' budget is best spent spelling out the consequences of offending behavior – and then hitting offenders very hard in the hip pocket nerve.

  Notwithstanding the above, I do feel that the Motor Registry misses a golden opportunity to update drivers regarding regulations when they send out registration and licence renewal notices.

- Mobile phone operation is regularly cited as an issue. As a former regular bus traveler and pedestrian, I can testify to the large number of drivers using mobile phones whilst moving. We need to reconsider the penalties for this kind of behaviour. Perhaps it may be possible to install some gadget in vehicles that prevent phones operating unless a vehicle is stationary with the engine switched off!

- I believe we need to consider driver training. At the moment anyone with a valid driver's licence is permitted to supervise a learner driver. It is my experience that many people do not keep up with changing road regulations. **I submit** that anyone who is supervising a learner drive must first (a) attend an assessment session of their practical driving skills (basically, a test) and (b) sit a test of their knowledge of the regulations. Upon satisfactory completion, they are then given a certificate authorizing them to supervise learner drivers.
- As a 78 year-old, I am concerned that there is no longer any oversight of seniors as drivers. I was surprised that the previous mandatory assessments were discontinued several years ago. **I submit** that it be made mandatory for medical professionals to report drivers whom they believe are no longer capable of safely driving on public roads.
- Heavy-duty 4WDs pose a considerable risk to the occupants of smaller vehicles in a collision – particularly if the 4WD hits the smaller vehicle side on. This problem may well increase, given that younger, inexperienced drivers tend to purchase cheaper, less road worthy vehicles. **I submit s**uch vehicles should be subjected to extra purchase and registration taxes.
- Many drivers own vehicles which are capable of speeds well in excess of the maximum speed permitted on most Australian roads. These frequently display such extras as rear 'spoilers'. This is a national problem, which requires a national response. **I submit** legislators should consider mandatory fitting of governors to limit maximum vehicles speeds to 130 kph. (this is still 20 kph above the maximum open road speed limit in most of Australia).
- Headlights improve vehicle visibility for other road users, including cyclists and pedestrians, when turned on during daytime. **I** submit all vehicles should have their headlights wired into the electrical system so that they are on whenever the engine is running.
- Many fatalities and serious injuries occur when vehicles collide with pedestrians. Whilst pedestrians are clearly the principal cause in many accidents, drivers are either unaware of – or choose to ignore – regulations requiring them to give way to pedestrians when turning at uncontrolled intersections or when crossing footpaths to enter service stations and car parks. Drivers also frequently ignore the requirement to indicate for five seconds before pulling out from the kerb.
- Broadcasting of speed camera locations is self-defeating. This should be banned.
- The use of mobile phones whilst driving is a major – though not only – cause of accidents resulting from driver inattention. This needs specific, on-going attention from traffic police.

Appendix I

Dangers to road users posed by privately owned large four wheel drive vehicles

(Broadcast on ABC Radio National's '*Ockham's Razor*' program, Sunday 2 April 2006.)

Abstract

The speaker sets out some of the risks posed by the proliferation of large four-wheel-drive vehicles on Australia roads, referring to relevant research. He then refers to the attitudes of 4WD owners and the Federal Government response to the issues. He closes by proposing appropriate Federal Government action.

The Speaker

Bob Holderness-Roddam is a Hobart-based adult educator. In his younger days he owned a series of 4WDs. These included ex-army Jeeps, an Austin Champ and a Land Rover. He managed to roll a jeep, fortunately without serious damage to himself or his future wife. They drove a monster 4WD through the Canadian Rockies in 2003 – but only because there was no alternative vehicle available for hire.

Text

Australia's National Road Safety Strategy has set a target to reduce the number of road fatalities from 9.3 per 100,000 population in 1999 to no more than 5.6 fatalities per 100,000 population in 2010.

I wish them luck, because they'll need it in large chunks unless they address one of the major problems on Australian roads. I refer to the proliferation of large four-wheel-drive vehicles being used for private transport. They are battering rams, disguised as glorified shopping carts and school busses. To make matters worse, many are fitted with 'bull(y)bars' which serve to increase the risk to other road users.

In this talk I will briefly outline the increased risks posed by these metallic monsters to their occupants and to other road users. I will then consider the attitudes of their owners and then the government response. I will finish by stating what I consider needs to be done to deal with the problem.

But first, let me state that I have nothing against four-wheel-drives in their rightful place – farms, forestry and mining operations, some trades and in legitimate bush environments. I have owned several, and my wife and I recently drove a monster through the Canadian Rockies, albeit rather reluctantly.

Let's start with the risks from four-wheel-drive vehicles:

They are far taller and heavier than ordinary passenger vehicles, such as Ford Falcons and Holden Commodores. This difference increases with other, smaller, passenger

vehicles such as Honda Civics or Toyota Corollas, etc. The result is that the occupants of these smaller vehicles are at a greatly increased risk of serious injury or death if they collide with one of the monster four-wheel-drives. This risk is particularly high if the four-wheel-drive 'attacks' the side of the passenger compartment of the smaller vehicle. The occupants will suffer serious chest and head injuries.

According to the ABC *Catalyst* program broadcast on 31 October 2002, the drivers of vehicles hit side on by four wheel drives have a 26 times increase in death or serious injury – than if they had been hit by a standard passenger vehicle.

Four wheel drive vehicles are at increased risk of rollover if involved in an accident – with or without another vehicle. Their high centre of gravity makes them relatively unstable. Add to this that their extra weight is more likely to crush their passenger compartments.

Many four-wheel-drives have poor rearwards visibility – resulting in these vehicles being over-represented in accidents involving reversing over small children in driveways.

But, please don't take my word for this – here's the proof. The executive summary of a paper by the Monash University Accident Research Centre 1997 Vehicle Occupant Protection: Four-wheel drives, utilities and vans stated that four-wheel-drives were becoming an increasingly large proportion of the vehicle fleet on Australian roads. Because they are not classed as "*passenger cars or derivatives*" they avoid many of the design rules applied to passenger cars in Australia.

The Australian Transport Safety Bureau Monograph no. 11, September 2003 included the following key findings.

1. Four-wheel-drives involved in fatal accidents increased by 85% between 1990 and 1998 – whilst the overall number of fatal road accidents decreased by a quarter over the same period. This is likely to be because of the increased distances driven by four-wheel-drives on Australian roads, as an overall percentage.
2. In accidents where four-wheel-drives contributed to the cause of the crash, fatigue, alcohol or other drugs were a major factor. Four-wheel-drivers were more likely to be affected by alcohol than drivers of any other class of vehicle.
3. Four-wheel-drives were far more likely to roll-over in a crash than a standard passenger car (35% compared with 13%).
4. Occupants of passenger cars accounted for 64% of the fatalities in accidents involving four-wheel-drives. The fatality rate for four-wheel-drives was only 18%.

A senior US journalist, Keith Bradsher, has published an excellent book – "*High and Mighty: SUV's the world's most dangerous vehicles and how they got that way*". This book is about the American experience, but much of it applies to Australia. Here's what he says about roll-overs. US Federal crash statistics show roll-overs are less than 1% of US vehicle accidents, but result in 25% of all vehicle deaths. SUVs roll-over five times per hundred crashes, compared with 1.7 times for cars. The 1999 US insurance surveys found that large SUVs, such as Ford Explorers, resulted in 39 deaths per million

registered vehicles. Bigger mid-sized cars accounted for 14 deaths per million registered vehicles. Large family sized passenger cars accounted for only nine per million registered vehicles.

SUV rollover killed 2,049 occupants in American in 2000.

The report Driveway deaths: fatalities of young children in Australia as a result of low-speed motor vehicle impacts, April 2002, said that large four-wheel-drives were over-represented in accidents where young children were killed in driveways.

The Sun-Herald for 7 September, 2003 carried a heart-rending story by Frank Walker about a Nissan Patrol driver who ran over and killed a five-year-old-girl in the grounds of her school. The driver claimed she didn't see the victim.

Now, how about the attitudes of four-wheel-drive owners? Not too flash, I'm sorry to say. Earlier last year I shared my thoughts on four-wheel-drive safety in a letter to my local newspaper, the Hobart Mercury. My letter had been triggered by two recent accidents involving four-wheel-drives on Tasmanian roads. The reaction from readers was interesting. One wrote in agreement, whilst three others wrote to challenge my statements.

You will appreciate that the letters pages of newspapers don't allow space to offer the research findings to support a case.

One of those challenging my letter thought I'd missed the point. "*It's the nut behind the wheel. Just remove the idiots from the road*", he said. OK, firstly, that "*Nut behind the wheel*" term was coined by the US auto industry in an effort to combat a young Ralph Nader's crusade to improve car safety in the 1960s. Now, what about removing the idiots from the roads? Various police forces have been trying to do that for some time, with little apparent success. Trouble is, they keep breeding the idiots! And some of them are going to get their hands on four-wheel-drives.

Another respondent simply stated that if I didn't feel secure in my "*flimsy flip-over, plastic-panelled buzz-box, why didn't I buy a strong, sturdy, rigid four-wheel-drive."* Well, the reason that I no longer have a strong, sturdy, rigid four-wheel-drive is that I care about my fellow road users and the environment.

The final response was from an acquaintance of mine. He had been involved in Neighbourhood Watch for many years and I had often heard him speak at some length on road safety issues. It would be reasonable to expect him to have been aware of the issues raised. But no, he claimed the number of four-wheel-drive roll-overs was because all the drivers were spending time in the bush. [Actually, over 80% of four-wheel-drives never venture off the bitumen!] He also stated they must be safe as his son had one, and he'd never had an accident.

Radio National's *Background Briefing* broadcast a program dealing with this issue in June 2003, *The Cars that ate Cities*. The presenter, Stephen Skinner, spoke to a random selection of four-wheel-drive owners in a suburban car park. These were your average mums and dads, not your macho bush drivers. Their attitude towards other road users was quite appalling. Basically, they felt it was the other person's responsibility to keep out of their way, rather than their responsibility to consider fellow road-users.

So, there we have it. A mixture of ignorance and macho arrogance from some four-wheel-drive owners – hardly a comforting response for those of us who prefer to drive '*flimsy flip-over, plastic-panelled buzz-boxes".*

Now, I'm going to be quite unscientific here and add my own observations about the behaviour of four-wheel-drive owners. It seems to me that the drivers of these technological *tyrannosaurs* have an increased feeling of their own safety, and to hell with the rest of us. Over recent months I have seen four-wheel-drives pull out into traffic flows and accelerating through red lights secure in the knowledge that other road users will get out of their way. Where are those log trucks when you need them?

There is clearly an enormous road safety issue here – so what's the federal government doing about it. Not very much.

Senator Ron Boswell, Parliamentary Secretary to the Minister for Transport and Regional Services, issued a media release in March 2002 headed '*Large Increase in Fatal Four-Wheel-Drive-Crashes*.' The release opened by stating there had been an 85% increase in the number of fatal four-wheel-drive crashes over the nine year period to 1998. Senator Boswell described these figures as being '*quite staggering*'. The rest of the release gave further information to flesh out the story.

So what did Senator Boswell propose to do about the situation? He simply suggested that four-wheel-drive owners be made aware of the greater risks and urged them to drive more cautiously.

More recently, Senator Campbell, then Minister for Local Government, Territories and Roads, was interviewed on ABC Radio. The Senator was quoted as saying that he thought driver education and consumer information at the point of sale about safety aspects of four-wheel-drives are things the Australian Government can work on immediately with the co-operation of the states.

So that's it. Government identifies serious road safety issue and issues media releases urging caution and 'education'!

But does education work? No, at least not when we are trying to change behaviour. I have been an adult educator for 30 years, and it is the wrong tool for this issue. If you don't believe me, just look at the situation regarding seat-belt use, drink-driving, speeding and use of mobile phones whilst driving. The authorities tried education in an effort to change driver behaviour in each of these situations, but it was not successful. In the end legislation had to be used, with education serving to remind drivers of the penalties for flouting the laws. Even then, some drivers continue with their bad behaviour on our roads.

Frankly, until the federal government gets serious about this twenty-first century scourge of our cities, suburbs and highways, we are going to see more serious accidents involving four-wheel-drives on our roads. Not only are they forming an increasingly large proportion of our national vehicle fleet, but these vehicles will age with the resultant wear on such important components as brakes, steering and suspension. Team this with the younger, inexperienced drivers – including a proportion of hoons – and we have the recipe for a national road tragedy on a major scale over coming decades.

So, what is the answer? The federal government simply must act to have all privately owned vehicles comply with design standards currently covering the standard passenger vehicle fleet. This should go a long way towards improving safety – particularly for other road users – and fuel economy.

The front end of four-wheel-drives must be designed so as to reduce their aggressivity towards other road users – smaller vehicles, cyclists and pedestrians. Their bumpers must be lowered, to prevent them sliding over the sills of vehicles they hit side-on. Their bonnets must conform to a maximum height standard, again for the protection of other road users.

All vehicles must meet standards to minimise the risk of roll-overs, and to protect their occupants from being crushed if the vehicle does roll-over.

We must also address the proliferation of '*bullybars*'. The unwritten rule seems to be that *the bigger the vehicle, the bigger the bullybars*. The current Australian Standards must be revised to ensure only vehicles operating in circumstances where bullbars are required should be permitted to have them fitted. They should be banned from all residential areas.

Some drivers claim that bullybars protect them from collisions with animals. In fact, animal collisions count for very few serious accidents. The animals come off worst. The answer is to drive more slowly in areas where wildlife is likely to be on the road.

Finally, any legislation dealing with four wheel drives must consider their impact upon our environment. Clearly the heavier a vehicle is, the larger the engine and the more fuel it will use. These machines are contributing to the rapid depletion of our fossil fuels, and contributing excessively to greenhouse gases and pollution in our atmosphere. You can compare the environmental performance of vehicles in Australia on the internet by visiting www.greenvehicleguide.gov.au

A recent article in the Sunday Tasmanian highlighted the serious reduction in Tasmanian shorebird numbers. The reasons? Unrestrained dogs, trail bikes and four wheel drives. A small number of irresponsible owners drive their vehicles above high water mark on our beaches, destroying the eggs and young of shore-birds which breed in this area above-the-tide zone.

END

Appendix II

RECORD OF INVESTIGATION INTO DEATH

Coroners Act 1995

Coroners Regulations 1996

Regulation 14

Form 4

I, Peter Henric Wilson, Coroner, having investigated the deaths of

Bianca Maree THORP, Sherilea Anne KEATING, Larissa Anne HERON,

Claire Helen TAPSON & Bianca GOURLEY

WITHOUT HOLDING AN INQUEST

FIND THAT :

Bianca Maree THORP died on or about the 25th day of February 2006 on the Bass Highway, Round Hill, Burnie.

Bianca Maree THORP was born at Burnie on the 4th of October 1991 and at the time of her death was aged 14 year(s).

Bianca Maree THORP was a single person whose occupation at the time of her death was a Student.

I find that the deceased died as a result of Head, Chest & Abdominal Injuries due to a Motor Vehicle Collision.

At the time of the deceased person's death she was not being treated by a medical practitioner.

Sherilea Anne KEATING died on or about the 25th day of February 2006 on the Bass Highway, Round Hill, Burnie.

Sherilea Anne KEATING was born at Smithton on the 9th of January 1970 and at the time of her death was aged 36 year(s).

Sherilea Anne KEATING was in a de facto relationship whose occupation at the time of her death was Home duties.

I find that the deceased died as a result of Head & Chest Injuries due to a Motor Vehicle Collision.

At the time of the deceased person's death she was not being treated by a medical practitioner.

Larissa Maree HERON died on or about the 25th day of February 2006 at Bass Highway, Round Hill, Burnie.

Larissa Maree HERON was born at Smithton on the 12th of October 1992 and at the time of her death was aged 13 year(s).

Larissa Maree HERON was a single person whose occupation at the time of her death was a Student.

I find that the deceased died as a result of Head, Chest & Abdominal Injuries due to a Motor Vehicle Collision.

At the time of the deceased person's death she was not being treated by a medical practitioner.

Claire Helen TAPSON died on or about the 25th day of February 2006 on the Bass Highway, Round Hill, Burnie.

Claire Helen TAPSON was born at Smithton on the 10th of June 1991 and at the time of her death was aged 14 year(s).

Claire Helen TAPSON was a single person whose occupation at the time of her death was a Student.

I find that the deceased died as a result of Multiple Injuries due to a Motor Vehicle Collision.

At the time of the deceased person's death she was not being treated by a medical practitioner.

Bianca GOURLEY died on or about the 25th day of February 2006 on the Bass Highway, Round Hill, Burnie.

Bianca GOURLEY was born at Hobart on the 15th of May 1980 and at the time of her death was aged 25 year(s).

Bianca GOURLEY was a married person whose occupation at the time of her death was a Business Owner.

I find that the deceased died as a result of Head Injuries due to a Motor Vehicle Collision.

At the time of the deceased person's death she was not being treated by a medical practitioner.

CIRCUMSTANCES SURROUNDING THE DEATH : -

At approximately 8.35am on Saturday 25 February 2006, a fatal three-vehicle accident occurred in the westbound lanes, of the Bass Highway, Round Hill, Burnie. The accident occurred approximately 1.6km east of Stowport Road.

Initial scene observations were that the road surface was wet and there was light rain falling.

The accident was investigated by 1/c Constable C T Willcox of the Tasmania Police Accident Investigation Section and his detailed review and analysis which is here in substance largely reproduced as my findings.

Unit 1: The deceased, Bianca Gourley was the coach of the Smithton Saints Under 16 basketball team. She left her residence at Smithton, at approximately 7.20am and was in "good spirits". Gourley was to travel to the East Devonport Stadium where the basketball team was to participate in a tournament. The start time of their first game was 9.20am. She picked up the deceased, Sherilea Keating and her daughter, Larissa Anne Heron from 29 Hellyer Street, Smithton. The deceased, Claire Helen Tapson was picked up from 6 Tatlow Street, Smithton. (Tapson had stayed at this address due to the fact that they were leaving so early. Tapson's normal residence at Marrawah is approximately 45 minutes from Smithton.) They travelled on the Bass Highway to the Forest/Stanley intersection where they picked up the deceased Bianca Thorp. Thorp was waiting at this intersection with her mother, Roseanne Thorp. Mrs Thorp states that they left this intersection at approximately 7.45am. They were travelling in Gourley's white Commodore sedan. (The distance from this location to the East Devonport Stadium is approximately 100km.

This would allow them about 1 hour and 20 minutes to travel to East Devonport, and allow about 15 minutes for the girls to get ready for their first game.)

Unit 2: Peter Anthony John George and his wife, Helen Maree George, left their residence at approximately 8.10am. When they first left home it was overcast, but not raining. They were travelling to Burnie in a blue Mitsubishi Pajero 4x4, with the intention of looking to purchase a motor vehicle. They travelled along the Bass Highway at the posted speed limit or just under for most of the journey. Around the Sulphur Creek area rain started to fall heavily. The speed limit in this area is 110km/h. Once they passed through the Heybridge roundabout they travelled at a speed of between 90 and 100km/h. The rain had eased off in this area. The speed limit at this location is 100km/h.

Unit 3: Peter John Smith left his residence between 8.00am and 8.10am, to travel to Burnie. The purpose of his journey was to travel to his place of employment. Smith is a car salesman Cooee. Smith travelled along the Bass Highway towards Burnie. He was overtaken by a "dark coloured Pajero" between Ulverstone and Penguin. (This Pajero was being driven by George). Smith followed the Pajero from this point, through to Round Hill, Burnie, where the accident occurred. Smith states that throughout the journey both himself and George's vehicle travelled at the posted speed limit or just under and states that, *"……As we went past Blinking Billy (the lighthouse at Roundhill) both myself and the Pajero were in the left lane. We travelled around a sweeping left hand bend. At this stage we would have been travelling at about 90 to 100km/h……"*

Events at the scene:

George was travelling in a westerly direction on the Bass Highway at approximately 90 to 100km/. He has driven past Blinking Billy (the lighthouse at Roundhill) in the left hand lane. He has negotiated a sweeping left hand bend before travelling along a short straight. At this stage Smith was travelling a short distance behind George and was also in the left lane. Light rain was falling at this time.

Gourley was driving her white Commodore sedan in an easterly direction on the Bass Highway. She has driven past the industrial businesses at Roundhill and negotiated several left and right hand curves. As she has approached a sweeping left hand bend, she has lost control of the vehicle. The Commodore has started to spin in an anti-clockwise rotation, before crossing the concrete median strip that divides the east and westbound lanes.

George has attempted to take evasive action by braking heavily and turning to the left. The Commodore has continued to travel directly into the path of George, who was unable to avoid the collision. The primary impact occurred between the front of George's Pajero and the driver's side of the Commodore. Upon separation the Commodore has rotated approximately 180 degrees in a clockwise direction before coming to final rest in the middle of the westbound lanes, facing in a general south-easterly direction.

Smith also attempted to take evasive action by turning to the right and braking heavily. Smith was unable to avoid the collision and has made light contact with the passenger side rear guard, before coming to rest in the right lane.

Evidence at the scene:

The Bass Highway is the main arterial road into and out of the City of Burnie, and generally travels in an east/west direction. The posted speed limit is 100km/h. The land use in this area could best be described as commercial / light industrial. The highways curvilinear nature is due to the significant geographical constraints in the general area. The coastline is on the northern side and steep rising hillsides on the Southern side of the roadway.

The accident had occurred in the westbound lanes near the Burnie Ten foot-race turning point. This is approximately 1.6km east of Stowport Road.

The roadway consists of two eastbound and two westbound lanes which comprise a bitumen aggregate with hotmix shoulders. The road surface was in reasonable condition and devoid of any major defects.

The travelled portion of each of the four lanes measured approximately 3.5 metres in width. All lanes are divided by single broken white painted centre lines. The east and westbound lanes are divided by a concrete median strip, bound by shallow water drains on both sides, measuring a total of 3 metres in width. The median strip is angled upwards with the low side bordering the eastbound lanes.

The shoulder on the left of the westbound lanes measured 3.5 metres in width and also comprised a slip lane which was delineated by broken white edge lines. This shoulder is then bound by a gravel/grass verge. There is a 1.75 metre shoulder on the right side of the westbound lane which is then bound by Armco railing. This Armco railing concludes 9.5 metres east of the point where the Commodore crossed the median strip. There is no form of railing, fencing or protective barrier on the median strip throughout this area. (This Armco railing ends 9.5 metres east of the point where the Commodore crossed the median strip. There is no form of railing, fencing or protective barrier on the median strip throughout this area).

The shoulder on the left of the eastbound lane measured 3 metres in width and the shoulder on the right measured 1.5 metres in width. There is Armco railing present on the left at this location. As stated above, there is no barrier of any kind, present on the right hand side.

An inspection of the eastbound lanes on the approach to the accident scene, where the Commodore was alleged to have lost control did not reveal any tyre or skid marks on the actual travel portion of the roadway, due to the road surface being wet, nor were any foreign objects located on the roadway. Two tyre marks were present between the right edge line and the median strip that divides the east and westbound lanes. It is at this point that four distinct tyre marks appear on the median strip. These marks came from the Commodore. These marks indicated that the Commodore was side slipping and rotating in an anti-clockwise direction and travelling from the eastbound lanes towards the westbound lanes.

The first and longest of the tyre marks measured 17 metres in length. This was attributed to the right rear tyre of the Commodore. The second tyre mark measured 12 metres in length and is attributed to the left rear tyre of the vehicle. The third tyre mark which is attributed to the front right tyre and measured 14 metres in length. The fourth tyre mark which is attributed to the front left tyre and measured 13 metres in length. A scratch mark measuring 3 metres was located on the concrete median strip. This scratch was inside the longest tyre mark and was consistent with being caused by the right rear rim.

At the conclusion of the marks made by the right rear tyre, there was a break or gap of approximately 2.5 metres, before the appearance of a gouge mark which extended across the right lane of the westbound lanes. This gouge mark measured 12.5 metres and concluded basically at the centre line of the westbound lanes.

1/c Constable Willcox believed the Commodore became airborne as it left the median strip, before landing on the right rear rim. The rim has dug into the road surface as the vehicle has continued to slide eastward. The gouge stopped approximately 9.5 metres west from the area of impact (or maximum engagement).

Using a drag tyre (a part tyre filled with concrete), 1/c Constable Willcox and Constable Mason established that the co-efficient of friction of the road surface in the eastbound lanes was 0.606,

which is about average for a wet road. The concrete median strip was determined to be 0.696. This was slightly higher than the road surface, due to the coarse nature of the concrete and the fact that the tyre was dragged upwards in the same direction of travel as the Commodore.

The Commodore had come to final rest basically in the middle of both westbound lanes facing in a general south easterly direction. This vehicle suffered a massive impact to the driver's side of the vehicle, with the main point of impact extending from just in front of the 'B' pillar to the rear driver's side wheel.

The Pajero had come to final rest also facing in a general south easterly direction on the grass/gravel verge on the south eastern side of the roadway. This vehicle has suffered extensive damage to the entire front section of the vehicle.

The Camry sedan came to final rest in the right hand lane, slightly diagonal to the centre line. This vehicle sustained very minor damage to the front of the vehicle, indicating a very low speed impact. The damage consisted of minor dents to the front registration plate and bonnet, as well as a small amount of paint scraping.

Evidence of the vehicles:

1/c Constable Willcox conducted a detailed inspection of the vehicles involved with the following observations:

1998 white Holden Commodore VT sedan, Registered Number DZ 5238.

Inside this vehicle he observed the bodies of five females, being the deceased. The two front seat occupants appeared to be adult females, whilst the three rear seat passengers appeared to be young teenagers. All occupants were wearing seatbelts.

The Commodore had suffered extensive damage to the entire driver's side of the vehicle. The main damage commenced basically at the centre of the driver's door and concluded at the back of the rear wheel. The driver's side B-pillar had been pushed in approximately 944mm towards the centre of the vehicle. The distance between the B-pillars measured approximately 980mm. The standard width dimensions of this particular vehicle pre-collision is 1824mm.

The driver's side doors, pillars and both front and rear mudguards were buckled, with the boot, roof and bonnet also buckled. The front bumper bar was dislodged and all driver's side window glass, front windscreen and rear window glass was shattered. The driver's seat had been pushed inwards and twisted towards the centre of the vehicle. The dash was dislodged from its mountings.

The Commodore's odometer indicated the vehicle had travelled 140,945km prior to the accident. The vehicle was fitted with an automatic transmission and was in the drive position. The heater was on medium with air recirculating. The fan was off. The windscreen wipers were in the on position.

The vehicle was fitted with Pos-A-Traction P205/65 R15 brand tyres on all four wheels, and the tyres were fitted to AMG alloy rims. All tyres were deflated with the exception of the front right tyre. It appears that the remaining three tyres were deflated due to rim damage sustained in the accident. All tyres displayed good tread pattern. The Commodore appeared to be in a good roadworthy condition prior to the accident.

Unit 2: 2003 blue Mitsubishi Pajero 4x4 wagon, Registered Number ER 0099.

The Pajero had suffered extensive damage to the entire front section of the vehicle. The front bumper, both front mudguards, and the bonnet had all been pushed rearwards approximately 530mm. The vehicle measured approximately 4300mm in length. The standard length dimensions of this particular vehicle pre-collision is 4830mm.

The driver's door was buckled and the windscreen was cracked. The inside of the vehicle was relatively intact. Both the driver and passenger airbags had deployed.

He was unable to determine the mileage of the vehicle as it had an electric odometer fitted. (According to Peter George the vehicle had travelled approximately 179,500km.) The vehicle was fitted with a 5 speed manual transmission which was in the neutral position. The heater was positioned on cold and directed at the face. The fan was on (2). The windscreen wiper lever was broken off, so he was unable to determine if the wipers were activated.

The vehicle was fitted with alloy rims and Dunlop Grandtrek 265/70 R16 brand tyres on all four wheels. All tyres were inflated and displayed good tread pattern. The Pajero appeared to be in a good roadworthy condition prior to the accident.

Unit 3: 2000 green Toyota Camry Sedan, Registered Number EJ 1149.

The Camry had sustained very minor damage to the front of the vehicle, indicating a very low speed impact. The damage consisted of minor dents to the front registration plate and bonnet, as well as a small amount of paint scraping.

The Camry's odometer indicated the vehicle had travelled 52 473km prior to the accident. The vehicle was fitted with an automatic transmission and was in the park position. The heater was positioned on cold directed at the face. The fan was off. The windscreen wipers were in the off position.

The vehicle was fitted with Michelin Certis 205/65 R15 brand tyres on all four wheels, which were inflated and displayed good tread pattern. The Camry appeared to be in a good roadworthy condition prior to the accident.

Post accident investigation:

On Sunday the 26th of February 2006 1/c Constable Willcox returned to the scene with Constable Mason. Together they completed a survey of the scene using the Geodimeter 500 Infra-red Total Survey Station. All items of relevance were surveyed. Those computations were later downloaded to computer and Constable Mason produced several scale plans of the scene.

On Tuesday the 28th of February 2006 1/c Constable Willcox made arrangements for a "Virtual Reality" of the scene to be conducted. "Virtual Reality" is a number of digital images that are electronically "stitched" together to give a 360 degree panoramic view of the scene. It basically allows for a "walk through" view of the scene. This procedure was conducted by personnel from Burnie Forensic Services.

He requested a report from the Bureau of Meteorology in relation to rain fall over the preceding days. It was found that "there was little rain in the seven weeks leading up to the incident, and very few especially wet days. There were light showers or drizzle in the area at the time of the incident." The report states, *"……Of significance is the generally light rainfall in the weeks prior to the incident. There were several moderate falls during December, but after 1 January (when 24-hour totals of around 10 to 15mm were common), most falls were less than 2mm; many were less than 1mm. The main rain events in February were around the 1st, 9th and 13th. There were falls (mostly of less than 2mm) in the 24 hours to 9am on the 23rd, with Round Hill registering 1mm." The report for 9am on the 25th "shows slight intermittent drizzle, as there had been in the previous 3 hours. The total amount recorded was 0.2mm, since 3pm the previous day……"*

Witnesses (drivers):

Peter John Smith of Ulverstone.

A summary of his evidence discloses:-

• He was the driver of green Camry sedan involved in this accident;

• States he left his residence at "about 8am to 8.10am" to travel to Cooee for work;

• Recalls being overtaken by a blue Pajero between Ulverstone and Penguin, which he followed all the way to Burnie;

• States that he "followed this vehicle at a distance of between 50 and 80 metres for most of the way";

• States that throughout the journey both the Pajero and his vehicle travelled at, or just under the posted speed limit;

• Was following the Pajero when he observed the Commodore cross the median strip and become "airborne for a short distance before landing on the driver's side wheels";

• States that the Pajero braked and veered to the left before it collided "heavily with the driver's side of the sedan";

• States that he braked and turned to the right to avoid the accident, but was unable to avoid lightly colliding with the left rear of the Commodore;

• States "at the time of the accident I believe it was lightly raining. The road surface was wet, but water was not sitting on the road"; and

• States "there was nothing the driver of the Pajero could have done to avoid the accident".

Peter Anthony John George of Turners Beach.

A summary of his evidence discloses:-

• He was the river of the blue Pajero 4x4 involved in this accident;

• States he left his residence at approximately 8.10am to travel to Burnie to look for a new car for his wife;

• States "it was raining quite heavily around Sulphur Creek. It rained heavily through until around the old Tioxide site. The rain eased off around here. The road surface was very wet, but it wasn't forming pools. I drove at the speed limit or just under all the way";

• Recalls travelling in the left lane as he went past Blinking Billy and driving around a sweeping left hand bend. He then observed "a white sedan in the eastbound lanes," lose control;

• He then observed the vehicle cross the median strip and directly into his path. He braked heavily and swerved to the left in an attempt to avoid the accident. "The front of my Pajero collided heavily with the driver's side of the vehicle";

• States "I recall seeing the Commodore lose control, but I don't know what caused it. I would not say that the vehicle was speeding. The speed limit is 100km/h and I don't think it would have been in excess of 100"; and

• Has had the Pajero for about three years and "would average about 60,000km per year."

Consultation with D.I.E.R. engineers and their recommendations:

On Monday the 27th of February 2006 1/c Constable Willcox met with D.I.E.R. engineers at the scene. He informed them of the circumstances surrounding the accident and made several recommendations to them. He indicated that his main concern at this location was the lack of protective barriers, railing, or fencing between the east and westbound lanes. The engineers indicated that given the current road environment (the presence of a U-turn facility west of the accident site) a protective barrier was not an immediate option, as there were visibility issues for

vehicles performing a U-turn. He requested that as an interim measure could consideration be given to lowering the speed limit to 80km/h. This was due to the fact that with winter approaching and the likelihood of more wet weather and hazardous road conditions, a lowering of the speed limit may reduce the likelihood of a similar accident.

Subsequently he was forwarded a preliminary report dated 29 March 2006, written by Peter Hubble (D.I.E.R), which contained a Accident History/Analysis in relation to the number of reported accidents for the 1.5km section of roadway from Clarke Street to the Chasm Creek Lighthouse, which incorporates the accident site. These statistics were for the period 1 January 2001 to 25 February 2006. The report states that the westbound carriageway had 9 reported accidents with 5 occurring during wet road and weather conditions. There were 4 accidents reported for the eastbound carriageway all of which occurred during wet road and weather conditions. Younger drivers are almost exclusively represented in these accidents.

The report details the inspection and observations of the engineers at the accident site. Of interest is the last three points listed for the eastbound carriageway:-

· All four bends have been checked using a vehicle mounted ball bank indicator with a good conditions 'advisory speed' finding of approximately 85km/h for

each. (The weather and road conditions at the time of this accident were poor.);

· Asset data indicates that the pavement was last resurfaced in 1999 with a sprayed seal. (Seven years since last reseal.); and

· A desktop review of skid resistance survey data, collected using the Sideway-force Coefficient Routine Investigation Machine (SCRIM), indicates that further investigation, as per Austroads guidelines, is advised. (Indicates that road surface friction is close to the minimum required by Austroads guidelines)

The following recommendations were listed in this preliminary report:-

· As an interim measure lower speed limit from 100km/h to 80km/h by extending existing 80km/h limit near Stowport Road to a point east of bend D. Following implementation of any physical roadworks consultation with the community to take place in terms of any reversion of the limit back to 100km/h;

· As an interim measure install guideposts in the central median around bend C;

· Design and construct a u-turn facility at the existing median opening located at Link 52 CH 5.22km;

· Close the central median opening at Link 52 CH 5.98km;

· Install wire rope safety barrier in the central median between Link 52 CH 6.18km and CH 5.86km;

· Consider options for the development and design of slippery when wet flashing light warning sign arrangements that automatically activate during periods of wet weather including an investigation of any possible sign locations; and

· Asset Management Group to undertake a detailed investigation of road surface condition in the general area and identify any warranted treatments such as pavement resurfacing and drainage of any road surface standing water.

On Wednesday the 5th of April 2006 a second accident occurred at the same location and in similar weather conditions. The circumstances surrounding the second accident are basically identical to this accident. Mr Damien Wilton was travelling in an easterly direction on the Bass Highway, when he lost control of his vehicle on the same left hand bend. He was unable to regain

control and as a result crossed the median strip and continued across the westbound lanes before colliding with the embankment on the south-eastern side of the roadway. On this occasion there was no westbound traffic, thus, there was not a side impact collision. Wilton states that at the time of the accident he was travelling at approximately 100km/h. 1/c Constable Willcox informed the Department of Infrastructure Energy and Resources (D.I.E.R.) of this accident and as a result the speed limit was reduced to 80km/h the following week.

On Thursday the 27th of April 2006 1/c Constable Willcox met with the Secretary of D.I.E.R. Mr Mark Addis and several of his engineers. Together issues were raised concerning changes to the section of the Bass Highway where this accident occurred, resulting in the following:

Median Strip Barrier:

1/c Constable Willcox's opinion is that a protective barrier must be erected between the east and westbound lanes at this accident site. D.I.E.R. indicated that Brifon fencing would be installed in the future, but could not elaborate when this would occur.

He requested the installation of guideposts as an interim measure and they indicated that this would occur as soon as practicable.

This particular section of road becomes very slippery in wet conditions and without some form of protective barrier, there is nothing to stop eastbound vehicles encroaching into the westbound lanes if the driver loses control. The reasons provided by D.I.E.R. engineers for the absence of protective barriers, concern visibility issues for vehicles performing U-turns west of the accident site. This U-turn facility is approximately 80 metres west of the accident site. D.I.E.R. did however indicate that closure of the current U-turn facility, and the construction of a new U-turn facility was no longer a preferred option. They have since conducted further enquiries and believe a realignment of the highway would be a better option.

He believes that had some form of protective barrier been present, this accident would not have had the same tragic outcome. A barrier should prevent a vehicle from encroaching into the oncoming lanes. The impact with a protective barrier would not have been anywhere near as severe, as colliding with a vehicle travelling in the opposite direction. It is almost certain all five occupants would not have died had a protective barrier been present. The fact that the vehicles were travelling in opposite directions gives an approximate impact speed of 180 to 200km/h. As the accident involved a side impact, at this combined speed, the occupants of the Commodore had very little chance of survival, even though all were wearing seatbelts.

Resealing the road surface:

Skid resistance tests conducted by the D.I.E.R. engineers "indicates that further investigation, as per Austroads guidelines, is advised." Pavement resurfacing is going to occur in the future when final arrangements are made in relation to the road alignment.

There is no indication as to when the road resurfacing would occur, and as we are now approaching the winter months, it is unlikely to be completed soon. This is a concern given the slippery conditions when the road surface is wet.

The road and weather conditions at the time of this accident were certainly contributing factors. The lack of rain over the previous weeks would have allowed oil, diesel, and other forms of sediment to settle on the road surface. This area is used by a large number of heavy vehicles and due to the slight incline would cause these vehicles to omit a large amount of fumes and smoke. The minimal amount of rain in the days prior to the accident, would not have been sufficient to wash away sediment that had built up over the preceding weeks. Although not a factor in this accident, this area also has issues with water settling on the road surface during periods of heavy

rain. These issues give weight to the importance of the resurfacing work to be carried out as a matter of priority.

Warning lights and speed limit:

The erection of automatically activated flashing warning lights (that come on automatically in wet conditions) is still being considered. D.I.E.R. consider warning lights or a flashing speed limit sign (80km/h) may be an option, however further investigation by D.I.E.R. is required.

The reduction in speed limit from 100km/h to 80km/h as an interim measure, has occurred, thus, reducing the risk of driver's losing control, however this does not prevent vehicles encroaching into the westbound lanes. There have been no incidents of reported accidents since the speed reduction has been implemented. Police have noted the high level of public compliance to the revised speed limit.

Conclusion:

Bianca Gourley was travelling in an easterly direction on the Bass Highway, Round Hill, Burnie, when she has lost control of the Commodore sedan, in wet conditions, on a sweeping left hand bend. The vehicle has broke traction and started to rotate in an anti-clockwise direction. She has been unable to regain control of the vehicle and has subsequently crossed the concrete median strip that divides the east and westbound lanes. The Commodore has continued to travel into the westbound lanes, directly into the path of the Pajero driven by Peter George. The point of maximum engagement occurred between the driver's side of the Commodore and the front of the Pajero. The impact could best be described as massive. Upon separation, the Commodore has rotated 180 degrees in a clock-wise direction before coming to final rest in the middle of the westbound lanes. (The forces on the occupants would have been extreme). At this stage the green Camry, driven by Peter Smith, has collided lightly with the rear passenger side guard of the Commodore. This secondary impact was of little significance.

As a result of 1/c Constable Willcox's investigation into this accident it is obvious that no blame can be attributed to drivers George and Smith. Both have endeavoured to avoid the collision, however, have been unable to do so. George and Smith have been travelling at approximately 95 to 100km/h which is within the speed limit of 100km/h for the area.

He was unable to complete a speed analysis for this accident, but due to the damage to the vehicles involved and witness accounts (Leon Rayner and Peter George), he believed the Commodore would have been travelling around 100km/h. Witnesses state that the Commodore did not appear to be in excess of the 100km/h speed limit.

In his opinion a protective barrier must be erected between the east and westbound lanes at this accident site as soon as practicable. This would hopefully prevent vehicles from encroaching into the opposite lanes if a driver was to lose control, and should prevent a similar tragedy occurring again.

Once a protective barrier has been erected, resurfacing would not be seen as urgent. The main issue at this location is preventing encroachment of eastbound vehicles into the westbound lanes.

The erection of flashing warning lights which will automatically activate in wet conditions, would be another option if the resealing process was to take longer than expected.

Again I wish to thank 1/c Constable Willcox for his detailed review of this accident and his attention to detail, which has assisted me greatly in handing down my findings into this tragic event.

COMMENTS & RECOMMENDATIONS :-

I find that the deceased Bianca Maree THORP died as a result of Head, Chest & Abdominal Injuries due to a Motor Vehicle Collision.

I find that the deceased Sherilea Anne KEATING died as a result of Head & Chest Injuries due to a Motor Vehicle Collision.

I find that the deceased Larissa Maree HERON died as a result of Head, Chest & Abdominal Injuries due to a Motor Vehicle Collision.

I find that the deceased Claire Helen TAPSON died as a result of Multiple Injuries due to a Motor Vehicle Collision.

I find that the deceased Bianca GOURLEY died as a result of Head Injuries due to a Motor Vehicle Collision.

Having regard to the evidence before me, I recommend that the Department of Infrastructure, Energy and Resources implement the following recommendations as a matter of priority:-

· The erection of Brifon fencing between the east and westbound lanes at the accident site;

· The resealing of the road surface; and

· The erection of automatically activated warning lights.

I further find that road and weather conditions were major contributing factors in this accident. Bianca Gourley has lost control of the vehicle in wet and slippery conditions. This indicates that although not in excess of the speed limit, she may have been travelling at an excessive speed for the circumstances existing (wet road, raining).

In this connection, had the vehicle been fitted with The Electronic Stability Program (ESP) which uses intelligent sensors to detect skidding, then reduces engine torque and selectively applies brakes to individual wheels to bring the vehicle back on track, then this tragic event may have been avoided.

It is particularly effective during sudden evasive manoeuvres. Many cars manufactured in Europe now have ESP as standard, although many of the European makes which are imported to Australia do not..

I am aware that the Victorian State Coroner and Monash University Accident Research Centre have already recommended its standard fitment to all new cars and I would encourage the motor vehicle industry to consider the fitting of this life saving technology to all cars, both local and imported.

Before I conclude this matter, I wish to convey my sincere condolences to the family of the deceased for their loss.

This matter is now concluded

DATED : Thursday, 1st of June 2006 at Launceston in the state of Tasmania

Peter Henric Wilson

CORONER

Appendix III

Bilton Street Pedestrian Survey Report - Summary

Introduction

As a fairly frequent walker between Austins Ferry and Claremont Village I have become aware of potential hazards for pedestrians attempting to cross Bilton Street at the junction with Main Road. My own experience and observations indicate that many vehicles turning into Bilton Street from Main Road fail to give way to pedestrians attempting to cross Bilton Street near the Claremont Memorial Hall.

In order to check whether my experience and observations were supported, I decided to:

a. Observe vehicles turning into Bilton Street, and count pedestrian crossings on 25 Nov. 2004 (Quantitative research), and

b. Interview pedestrians crossing Bilton Street at this location to determine their experiences and observations on 2 Dec. 2004. (Qualitative research).

The procedure followed and results of this research follow.

Summary of findings

During the observation period on 24 Nov. 2004 (8:00 am – 5:30 pm.):

- A total of 1,038 (78%) vehicles turned left into Bilton Street from Main Road during the period of observation. This varied from 33 for the half hour period between 12:00 and 12:30 hrs. to 109 for the period 08:30 – 09:00 hrs (presumably children being driven to Claremont Primary School).
- A total of 290 (22%) vehicles turned right into Bilton Street from Main Road during the period. This relatively lower figure is presumably because most vehicles were turning into Box Hill Road at the traffic lights, rather than travel via Bilton Street.
- Total traffic turns into Bilton Street were, therefore, 1,328. The average was 139.79 per hour, or 2.33 per minute
- Total pedestrian count for crossing Bilton Street in either direction was 163, varying from only two for the period 12:30 – 13:00 hrs to 17 for the period 11:00 – 11:30 hrs. This total excludes the group of at least forty school students who crossed shortly after 13:00 hrs. They returned about 20 minutes later, without crossing Bilton Street.

Responses to the pedestrian survey on 2 Dec. 2004 (8:00 am – 5:30 pm):

Sixty seven responses,

- A large majority regularly cross Bilton Street at this intersection several times per week (63%).
- An overwhelming majority (72%) of pedestrians reported that vehicles seldom or never gave way to them.

- 56% said they did not feel safe when crossing at the intersection. Furthermore, half of those who said they felt safe qualified their answers with such comments as, “You’ve got to keep alert anywhere you go”, “Safe, provided you’re careful what you’re doing”, “Safe? I’m very careful, let’s just say it like that”, “Most times”, “A little bit,” “Sometimes”.

Conclusions:

- There is a high proportion of elderly people crossing Bilton Street at this location. This is to be expected, given the prevalence of unit style accommodation in the area.
- The vast majority of vehicles turning into Bilton Street fail to give way to pedestrians attempting to cross Bilton Street.
- The majority of pedestrians do not feel safe when crossing Bilton Street.
- There is a strong possibility of a serious injury befalling one or more pedestrians if vehicle behaviour is not modified

Proposals:

- Enforcement – Tasmania Police be requested to enforce legislation requiring vehicles to give way to pedestrians when turning at uncontrolled intersections.
- Installation of a raised pedestrian crossing, similar to those used in Terry Street, Glenorchy. This would be more visible than a standard type of crossing, and would slow turning vehicles down. Given that most vehicles using this junction are likely to be regular users – school drop offs and collections and Cadbury shift workers – they would quickly become used to the changed situation and modify their driving accordingly.

Bob Holderness-Roddam
[redacted]