

FORM 37

Rule 60(1)

FINDING INTO DEATH WITH INQUEST

Section 67 of the Coroners Act 2008

Inquest into the Death of SABRINA MICHELLE BRADY

Delivered On:	30 March 2011
Delivered At:	Coroners Court, Level 11, 222 Exhibition Street, Melbourne
Hearing Dates:	2 August 2010 – Directions Hearing 6, 7 and 8 October 2010 and 6, 7, 8, 9 and 10 December 2010
Findings of:	Coroner Heather Spooner
Place of death/Suspected death:	Princess Highway, Heathmere, Victoria 3305
PCSU:	Leading Senior Constable Remo Antolini
Representation:	Ms S Hinchley for VicRoads and The Department of Transport Mr T Keely for Warrnambool Bus Lines Mr J Atkins for Mr Maxwell Shayler Mr Rattray for Iveco

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FINDING INTO DEATH WITH INQUEST

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In the Coroners Court of Victoria at Melbourne

I Heather Spooner Coroner having investigated the death of:

Details of deceased:

Surname: BRADY
First name: SABRINA
Address: 1 Illawong Drive, Mount Gambier, South Australia 5291

AND having held an inquest in relation to this death on 6, 7 and 8 October 2010, 6, 7, 8, 9 and 10 December 2010 and 30 March 2011 at Melbourne

Find: that the identity of the deceased was Sabrina Michelle Brady
And: that the death occurred on 16th April, 2009
At: Princess Highway, Heathmere, Victoria 3305

From: 1a. MECHANICAL ASPHYXIA
1b. MOTOR VEHICLE ACCIDENT (BUS)
2. PREGNANT

In the following circumstances:

Date and Place of Death

1. The death of Sabrina Brady aged 19 years, occurred at Princes Highway, Heathmere on 16 April 2009.

Circumstances Surrounding Death

2. At about 6.30pm on a dark Thursday evening of 16 April 2009, a V-Line passenger coach (registration 3938 AO), was involved in a fatal rollover on a relatively sheltered section of the Princes Highway (also sometimes referred to as the Henty Highway) near Heathmere. The location was about 500 metres south of Flowers Road. Whilst the road was wet, it was not raining. Wind was not a factor. The road surface was in poor condition. The posted speed was 100kph and a VicRoads advisory sign located approximately 700 metres south warned of slippery conditions when wet.

3. At the time of the incident, the coach was being driven by Mr Maxwell Shayler. He was driving a scheduled route from Warrnambool to Mt Gambier and was travelling in a northerly direction approaching Heywood, having recently departed Portland.

4. On this fateful evening, the coach entered a sweeping right hand bend and Mr Shayler lost traction/control as it travelled in a straight line onto the opposite south bound lane. Mr Donald Marshall who was driving his Toyota Hilux in a southerly direction on the Princes Highway, saw lights and a large mass coming toward him. Mr Shayler also saw Mr Marshall's vehicle and in an attempt to regain control and avoid the oncoming traffic, he oversteered the coach to the left. Mr Marshall also moved to his far left and heard a 'whoosh' as the coach passed close by. Mrs Marshall who was travelling behind her husband saw it pass within centimetres of his vehicle. The coach rotated and rolled over, leaving the bitumen road surface and landing on the driver's (off) side. It eventually came to rest on a grassy culvert on the left western side of the highway.

5. There were twelve occupants in the coach including the driver when the incident occurred. Ms Brady, together with her daughter Madison, sat in the middle of the last rear row of coach seats. CCTV footage showed Madison lying on the seat to the left of her mother. Mr Pomery sat a few rows forward in a window seat on the drivers (off) side of the coach. During the rollover, five passengers were ejected or

partially ejected from the coach. Ms Brady who was seven months pregnant, her young daughter Madison and Mr Pomery, all sustained fatal injuries.

6. Although the coach was fitted with seat belts, all three passengers who died were not wearing any form of restraint. In fact only five of the eleven passengers wore lap sash seatbelts as required.

7. Passing motorists stopped and offered assistance. Emergency services were notified and were swiftly on the scene. Every indication was that the emergency response was appropriate. Local police attended, managed and co-ordinated the incident scene. One passenger sustained serious injury and was transferred to the Alfred Hospital for treatment. The remaining eight occupants were conveyed to Portland Hospital with minor injuries.

8. The Major Collision Investigation Unit (MCIU) of Victoria Police were notified and arrived at the scene within hours of the incident occurring. Following discussions between Police investigators and VicRoads representatives, 80kp/h speed restriction signs were erected soon after the coach incident.

Issues at Inquest

9. Several issues were highlighted during the course of the Inquest, including the condition of the roadway, the driver behaviour, the condition of the bus, the apparent failure of passengers to comply with seatbelt legislation and measures to improve this low compliance rate.

Investigations

10. The MCIU investigation was led by the investigating member, Sergeant Chris Carnie. He prepared an extensive coronial brief and organised two site visits on 28 July and 8 October 2010, with the support of local Portland police members.

11. In the latter stages of the investigation another very thorough report of an independent investigation led by the Chief Investigator, Office of the Chief Investigator (OCI report)¹ also became available.

12. This finding does not summarise all the extremely detailed investigations and reports but is based on the material and the evidence at inquest.

The Roadway and Incident Inspection

13. Both Sergeant Carnie and Senior Constable Mehegan, a Police Collision Reconstructionist with MCIU, considered that the road condition was a significant contributing factor to the incident.

14. Sergeant Carnie in his summary described the roadway and rural setting of the Princes Highway at Heathmere where the incident occurred:

“It is defined as a road related area under the Road Safety Act and has a restricted speed limit of 100 km/h. The Princes Highway lies in a general north/south direction. At the location of the collision there is provision for one lane of traffic in each direction. These lanes are divided by a double solid white centre lines with tactile strips. For vehicles travelling in a northerly direction on approach to the collision scene they enter a sweeping right hand curve.

The south bound lane is defined to the east by a single white fog line with tactile strips. There is a bitumen shoulder to the east of this fog line which abuts onto a grass reservation with small shrubs growing on it. To the east of this grass reservation is farming land. The south bound lane is approximately 3.5 metres in width.

¹ . www.transport.vic.gov.au.. <http://www.transport.vic.gov.au/chiefinvestigator>

Since the Coroners Act 2008 became operational, access to the coronial file may be sought pursuant to section 115 of the Act

The northbound lane is defined to the west by a single white fog line with tactile strips. There is a bitumen shoulder to the west of this fog line. At the bitumen edge is a "W" steel barrier, which follows the full length of the right hand curve. There are a number of large shrubs and trees growing to west of this barrier. This barrier commences to the north of a turn out road which allows access to farming properties and a bus stop. This turn out road is located to the south of the right curve and to the west of the bitumen surface. It is approximately 400 metres in length and runs parallel to the highway before re-joining the highway to the north of the collision scene. At the collision scene there is a large grassed area and culvert between the north bound lane and the turnout lane. The northbound lane is approximately 3.8 metres in width.

The Princes Highway is constructed of a bituminous substance. When police investigators examined the road surface they formed the opinion that it was in poor condition.

There were three different surfaces with a high variation in skid resistance within a small area near the collision scene. Approximately 28 metres south of where the coach left the road, the road surface in the north bound lane changed significantly. The section most northerly in the north bound lane was in relatively good condition and appeared to have been recently resurfaced. The south end section of the north bound lane had suffered extensive bleeding with large and plentiful areas of polished road surface. The south bound lanes displayed a different road surface. Although it did not appear to have been recently resurfaced the south bound lane was in better condition than the north bound lane. Within the right curve prior to the collision scene and in the straight approaching the scene in the north bound lane, deep ruts were evident in a number of areas. The maximum rut depth was measured at 36.0mm. These ruts displayed large areas of water pooling.

An examination of the scene located a number of tyre scuff marks. The marks commenced on the bitumen in the south bound lane and continued back across the north bound lane and onto the bitumen shoulder of the west side of the road. These tyre scuff marks were in the form of yaw marks and curved to the left.

These yaw marks led to the continuation of a series of tyre marks leading into the grassed culvert. The yaw marks are consistent with the coach being oversteered to the left. The marks then cease but lead to the point of impact between the coach and the embankment on the west side of the culvert. It was evident from the cessation of these marks that the bus became airborne across the culvert. North of the yaw mark in the north bound lane and west bitumen shoulder are three significant gouges. Measurements of these gouges are consistent with the pillars at the roofline of the coach. The gouges are consistent with having been caused by the impact between the coach and the road during roll over. The three marks were the result of impact with the road and the rear corner at the roofline, the pillar dividing the sixth and seventh windows of the coach at the roofline and the pillar dividing the fifth and sixth windows of the bus at the roofline all on the driver side. These gouges led to further gouges and scrapes leading from the north bound lane, across the west bitumen and gravel shoulder and into the grassed culvert to the rest position of the coach. These scrapes and gouges are consistent with the coach having rolled onto the driver side and then continuing to slide on the driver side whilst rotating in an anti clockwise direction. On the west side of the grass culvert were two areas of significant gouging in the dirt. These gouges are consistent with having been caused by the initial impact of the front driver side corner of the coach after being airborne and then the secondary impact with the front driver side corner roofline during roll over.

A reconstruction of the collision revealed the coach would have been travelling between a minimum speed of 55 km/h and a maximum speed of 73 km/h when it was oversteered to the left."

15. Senior Constable Mehegan agreed in evidence at the inquest that it was difficult to know whether or not the first loss of control by Mr Shayler was due to road surface conditions or bus handling or a combination of both. In her statement she indicated:

"The driver of the vehicle negotiated a right curve before the vehicle has crossed onto the incorrect side of the road for an unknown reason. The driver of the coach has then responded by inputting a severe left steering manoeuvre causing the vehicle to commence to yaw. The coach has rotated in an anticlockwise direction about its vertical axis while sliding back onto the correct side of the road. The coach had rotated about 90° and was being led by the driver side of the vehicle when the front of the vehicle left the bitumen road surface to the west. The front of the coach became airborne for about 7.0 metres across a deep culvert. As the front driver side of the coach impacted with the embankment on the west side of the culvert the coach rolled onto the driver side and commenced to slide. The front of the coach dug into the culvert whilst the rear of the bus continued to rotate around in an anti clockwise direction. The coach remained on its driver side as it continued across the grassed culvert. The vehicle came to rest on the driver side on the west side of the culvert after having rotated 180°.

At the time of the collision the road was in poor condition with severe bleeding, polishing and rutting. Both the bleeding and polishing can result in reduced friction. The severe rutting and water pooling can lead to aquaplaning. While it is not possible to determine whether the loss of control was caused by a reduced friction or aquaplaning it is highly likely that it was one of these factors."

16. The skid resistance level was calculated at well below the recommended level of VicRoads.

Post Crash Incidents

17. On the morning of 20 April 2009, a few days after the crash, Acting Sergeant Hetherington attended the scene. He saw that the speed limit for the location had reverted to 80kp/h, noted the poor road surface and *'..observed traffic travelling north around the bend and noted that heavy vehicles tended to move about as they drove down around the bend. Watching the top of the trailers, on B doubles, they would*

move up and down and pitch to the left. As the A trailer pitched to the left the B trailer would remain straight then also pitch and roll to the left.'

18. Within a month of this incident on a wet Sunday, 17 May 2009 at about 5.50am, Mr Geoffrey Beaglehole (who had been driving this road for 20 years without incident), entered the same stretch of roadway. He had slowed from 100kph down to 85kph and felt the rear of his paper delivery truck skip out to the left about two or three feet. Mr Beaglehole tried to regain control of his truck but ended up tipping over past the right hand side of the roadway.

19. Constable Apps and Senior Constable Handley, attended the scene and observed other trucks also having difficulty driving on the roadway surface.

The Coach Driver

20. Mr Shayler was aged 57 years. He was an experienced driver and had been employed by South Western Roadways trading as Warrnambool Bus Lines (WBL), for approximately two years. He routinely drove the coach and route where the incident occurred.

21. A statement obtained from his treating general practitioner, Dr Frank Fox, who last saw Mr Shayler on 1 April 2009, indicated he was fit for a full, unrestricted Bus Driver's Licence. According to Sergeant Carnie, Mr Shayler was not affected by drugs, alcohol or fatigue and he was not suffering from any medical condition that may have caused or contributed to the collision.

22. Mr Shayler told the Inquest that he was driving according to his normal schedule on the evening of the incident and had been under no time pressure. He was aware of the 'Slippery when wet' sign but felt it was some way back. Mr Shayler had difficulty pinpointing exactly where the loss of control occurred but stated that without any warning the bus failed to respond to his steering as it went through the gradual curve of the road. He had no alternative but to steer to his left to avoid oncoming traffic.

23. A passenger described Mr Shayler as a top class driver however, others thought he may have been going a bit fast for the conditions.

24. Evidence about the pre-incident coach speed varied but it was probably somewhere between about 90-100kp/h. Senior Constable Mehegan estimated that at the point where the oversteer commenced the maximum coach speed would have been 73kp/h.

25. Leading Senior Constable Finnegan told the inquest that during a conversation with Mr Shayler at the scene, he asked what happened and Mr Shayler replied with words to the effect of:

"I was coming from Portland to Heywood, coming around the corner. I was doing 100, the rain was easing when the back of the bus started sliding. I was heading towards oncoming traffic and then I think I overcorrected. The bus overturned and slid over the road."

26. In Mr Shayler's Police Record of Interview conducted at Portland police station on 22 April 2009, he shed further light on his driving and his estimated 90kp/h speed just prior to the incident occurring. In answers to questions 552 and 553 he stated:

"Just to clarify.

Alright. Pretty well I w-, I went straight out of - out of town. I didn't make any announcements because the people that were on had already been on, so I didn't see any need to make any announcements. I headed through Bolwarra. It was dark and I was using my high beam on and off. The roads were still a little bit wet, but besides using my - my wipers, I think just before Portland I - I don't remember using them on that road. Maybe - if it - they just got a bit damp, I might've just flicked them on intermittent, but they weren't on, going all the time.

Continuously, yeah.

Through Bolwarra. No – no problems. Slowed down there, and then picked up the speed again, until I came to the – the – the truck stop – what I call the truck stop, and that's a – a – a curve to the – it curves to the – to the right, and then curves to the - to the left. It's a slow curve. I don't – I don't know what speed I was doing, but I would have thought that I probably would've backed it off a little bit. So – because I wasn't looking, I was concentrating on the road. I wou-, I would've maybe backed it off to 90, but I - I can't – because I wasn't looking at it I don't know. I got to – I did the – the – the right-hand curve fine. When I went to take it back to the – to the left, it didn't – it didn't go. It just wouldn't. It went straight ahead, the – the bus physically just went – slid or whatever straight ahead. There was oncoming traffic. There was two cars coming. I know the first one was a four wheel drive.”

27. Sergeant Carnie told the Inquest he had no reason to dispute Mr Shayler's evidence to the effect that he may have taken his foot off the pedal as he entered the sweeping bend and slowed to 90kp/h.

28. When Sergeant Carnie was asked whether Mr Shayler may have entered the bend too fast, he noted that with the benefit of hindsight it could be suggested, although the average driver would not agree. According to Sergeant Carnie, Mr Shayler was familiar with the area and would be expected to take some caution going into the road curvature, however, dropping his speed to 60kph, 70kph or 90kph as was the case here, may be sufficient. He added that any driver who had concerns about the performance of the coach and the road and wet weather conditions would have taken added caution as to the way the coach was driven.

29. Ultimately, Sergeant Carnie did not consider that Mr Shayler entered the bend too fast and like his superiors, he had found no evidence to warrant a prosecution. He considered the manner in which Mr Shayler controlled the vehicle immediately prior to the collision, did not cause or contribute to the loss of control and subsequent rollover, albeit he could find no evidence/marks on the roadway to explain the first initial loss of control. Sergeant Carnie maintained that had Mr Shayler not subsequently oversteered to the left, the coach would have impacted with oncoming traffic coming from the opposite direction.

Coach Drivers Concerns

30. Several drivers were concerned about prevailing poor road conditions in and about the region where this incident occurred. Also, whilst some drivers thought bus 38 (as the coach was known within the fleet) was fine, others expressed concerns about the bus handling characteristics and such things as loss of traction with the bus going straight ahead on wet roads or being buffeted in cross winds. More than one driver told the inquest of the need to slow down and be particularly careful in wet conditions with bus 38.

31. The Inquest heard evidence from drivers about the handling problems with bus 38 that led Iveco Trucks Australia Ltd (Iveco), the provider of this particular bus to become involved and undertake testing and install new, stronger shock absorbers to improve stability.

32. Mr Balmer recalled an incident earlier in 2007, whilst driving bus 38 in poor weather and 'bleeding' road conditions: *'I was about three quarters through the curve and.....without any warning, the bus started to go straight. It didn't continue to go around the corner, the way I was steering it. The bus was sliding straight whilst I was steering right...'* He reported the incident to the company and he had 'no criticism whatsoever' about their response.

33. Another driver, Mr Bruce, also told of his experience with bus 38 in May 2007. The wind was apparently 'gusting' and the road surface poor: *'...I was travelling south-west, there is a sweeping right hand bend. About half way through the bend, round about the apex of the corner, the bus started into a slide off to the left side of the road.'* Although he had another incident of 'split second' loss of control he had not reported this to the company as he *'..believed investigations were ongoing within the company to rectify the problem...'*

34. Mr Twigg, Product Support Manager for Iveco, told the Inquest that in May 2007, he went to Warrnambool to look at bus 38 and fixed the problem after being told that it had been taken off the road due to driver concerns about handling issues. He recounted that after participating in a test drive with the foreman he arranged for

Koni shock absorbers to be fitted to the front of the bus and then after further concerns were raised about wind buffeting they were also fitted to the rear. Mr Twigg indicated that this could have a very good effect on steering and handling. He agreed that if there had been further concerns he would have returned to investigate and that if there were any other issues they were not identified by him.

35. Whilst some drivers acknowledged an improvement to bus 38 after the Iveco intervention, there were still some complaints. Various theories about the cause of the bus handling problems were ventilated at the Inquest, including issues around the light front end, bodyweight, soft suspension, tyre pressure, twin height valves, weight distribution and overall design.

36. Mr Harley, a former WBL employee mechanic at the Portland depot, told the Inquest that he had been concerned about what he claimed to be inappropriate tyre pressure, however, after hearing from several other witnesses I was not convinced of the merits of his view and the weight of the evidence was against this being an issue or factor in the incident that occurred.

37. The only problems Mr Shayler had experienced since the Iveco intervention involved wind and low speed, neither of which were really a factor on 16 April 2009.

38. Mr Yelland was the other regular bus 38 driver and he handed the bus over to Mr Shayler on 16 April 2009. He told the inquest that five weeks prior to the incident he felt the front end of bus 38 move to the left whilst travelling from Heywood to Portland. It involved a small smooth area of bitumen on a slight curve on a wet raining day. He had not mentioned it to anyone nor had he filed a defect notice and portrayed it as a *'very minor incident that didn't cause any concerns.'*

39. Another driver told the inquest of an incident, which involved such a severe loss of control that his failure to stop the bus, file a defect notice or deal with it in the very serious manner it would have deserved, cast his evidence in some considerable doubt.

40. About a month prior to the incident another driver, Mr Palfreyman, whilst driving the same bus on the same roadway in dry conditions; *'lost all grip on the front tyres....it was like within a split second this all happened before I felt the front tyres grip and I regained control of the bus.'* He went on to tell the Inquest that he had rung a company mechanic and told him that he thought it was the road.

The Bus Inspection and Mechanical Condition

41. Although the evidence of concerns with the handling characteristics suggested the possibility of something peculiar or out of the ordinary with this particular bus 38, the numerous and intensive post incident inspections failed to reveal it.

42. The Euro-3 bus chassis was purchased from Iveco by WBL in 2006. The body of the bus had been constructed by 'Coach Design' and it entered service in November 2006. The bus was licensed to carry 53 passengers. It was intended for distance passenger travel on the V-Line run between Warrnambool and Mount Gambier and was known within the fleet as bus 38.

43. Bus 38 suffered extensive damage during the incident including the shattering of all the windows on the right hand side.

44. A mechanical inspection was performed by Leading Senior Constable Booth who stated: *'Prior to and at the time of impact, this vehicle as inspected would have been classed as being in a roadworthy condition. In particular all suspension components were in good serviceable condition. I am of the opinion that it has been mechanically well maintained.'*

45. He also stated : *'..... buses and coaches in general, are adversely affected by cross winds, poor road surface conditions, i.e. wet surfaces and smooth bitumen surfaces e.g. bitumen bleed. It appears that a combination of these conditions need to be present together with a degree of steering input i.e. negotiating a bend or curve before a serious loss of control is experienced..'*

46. There was somewhat contradictory evidence from another police member who told the Inquest that the coach would have been strictly classified as 'unroadworthy' due to some frayed seatbelts on board. It was apparent from his evidence however, that this was due to a very limited and fine technical interpretation of the legislation governing roadworthiness and he was somewhat conflicted about categorising the coach in this way.

47. Sergeant Carnie told the Inquest: *'From my investigation, I couldn't identify any fault either mechanically or design wise that would indicate a component of the vehicle contributed to the collision.'*

WBL and the Defect Notice System

48. The evidence of Messrs Lucas, the coach company management and some drivers indicated that WBL gave bus safety top priority and that neither money nor time was an issue insofar as bus repairs and maintenance were concerned. WBL was required to maintain a Quality Assured Maintenance System (QAMS), and were subject to audit by the Public Transport Safety Board of Victoria.

49. Drivers were also required to complete a Defect Notice if they detected a mechanical fault and provide it to the company mechanic for rectification. It was apparent however, that this system did not always capture the problems that some drivers experienced or perceived as arising from road surface or weather conditions. The evidence from the drivers revealed irregular and inconsistent compliance with the Defect Notice System. Some drivers apparently preferred to express their concerns orally despite an awareness of the requirements of the system. One driver told the inquest *'...I'm a person who likes to speak direct I know it's a breach of protocol-prefer to tell problems by word of mouth...get better response...'*. He later conceded that if he were being honest it came down to laziness on the part of the driver.

50. It was apparent from the evidence of Messrs Lucas that they were somewhat surprised and concerned to learn of some issues for the first time during the police investigation and inquest process. Despite their open door policy there had been a breakdown in communication.

51. By contrast, Mr Bruce told the inquest about an incident at Crossley Corner prior to the Iveco intervention, when he lost control of bus 38 on another right hand bend. He reported this incident and together with representatives from the company, VicRoads and the Moyne Shire Council, they attended the scene and decided on a rerouting of the coach given the condition of the road. He had no criticism of the company and their genuine desire to rectify any problems with the bus. He told the Inquest that '*...when the bus went back on the road it was in good faith.*'

VicRoads

52. On day two of the inquest, Ms Hinchey of Counsel made a significant concession:

"...Your Honour, it's my instruction from VicRoads that we acknowledge that there is sufficient evidence in the coronial brief for Your Honour to draw a connection between the road surface and the loss of control, and I wonder, Your Honour, if that might in fact shorten proceedings both in terms of the questions my friends might need to ask but also whether or not those witnesses need to be brought along. Obviously their statements still go in and it is accepted that the evidence is there, and Your Honour we wish to make it clear that VicRoads does not say that this the only factor, but we certainly do concede that there is – together with the additional evidence that has been put forward by my friend, sufficient evidence (indistinct) for Your Honour to draw a connection between the road surface and the loss of function as well."

53. Mr Robyn Miles, Regional Director, South Western Region, VicRoads gave evidence at the inquest. He produced a lengthy statement and was subject to extensive cross examination. In his statement and in his evidence he conceded that the road surface texture was poor and proposed some improvements.

54. Mr Miles told the inquest of the 2004 VicRoads Road Management Plan for which VicRoads has responsibility. He explained the VicRoads maintenance regime and the involvement of Contractors, VicRoads Surveillance Officers and local

Glenelg Shire staff in the roads inspection and repair process and pursuant to the Roads Maintenance Standards.

55. There was evidence about the crash history going back to 2004, including another fatality in June of that year², a semi trailer crash in April 2006, this bus rollover in April 2009 and Mr Beaugelhole's paper delivery truck crash in May 2009.

56. It was also apparent that this section of the Princes Highway was seeing increasing mining, logging and interstate truck traffic at a significant level and that this location was part of the Green Triangle Freight Action Plan.

57. A brief chronology of the maintenance history of the crash site follows:

- In August 2004, following a fatality, a VicRoads inspection of the site was performed and 'Slippery when wet' signs were installed and sideways force co-efficient routine investigations machine (SCRIM) testing requested.
- In September 2004, the SCRIM testing revealed skid resistance or surface texture values below the VicRoads investigatory level necessitating site inspection.
- In October 2004, an inspection revealed significant texture loss.
- In December 2004, a funding bid to reseal a section of the road was launched.
- In March 2005, Surface Inspection Rating (SRI) assessment of the crash site noted it as a candidate for water blasting, however, VicRoads decided to await the further reseal in March 2006 following the success of the earlier funding bid.
- In March 2006, a reseal was performed however, due to an error in the bidding process the work performed was 130 metres short of that previously identified as required for the site.
- In Spring 2006, another funding bid for the extra 130m reseal failed to attract funding.
- In July 2007, VicRoads received the results of a Pavement Study indicating the roughness of the road and wheel rutting were moderate.

² Coroners case no 3381/04

- In Spring 2007, an inspection noted that the 130m unsealed roadway was in poor condition and the balance of the crash site needed water blasting. The successful funding bid that followed was limited to the 130m reseal and did not include any waterblasting.
- In January 2008, a further SIR survey noted texture loss and again recorded it as a candidate for waterblasting.
- In Spring 2008, an inspection of the crash site only noted low skid resistance on the 130m unsealed section.
- In February 2009, the 130m reseal was completed.
- On 17 April 2009, a day after the bus rollover, the speed limit was reduced to 80kph
- On 6 May 2009, VicRoads received the results of a March 2009 pavement survey revealing wheel rutting, but not at a depth that would usually require remedial treatment.
- On 17 May a paper delivery truck lost control upon entering the same right hand bend.
- On 26 May 2009, a different SCRIM testing vehicle from NSW performed testing which revealed varied surface friction results at the crash site.
- On 26 May 2009, the road was waterblasted.
- On 27 May 2009, further SCRIM test results revealed significantly increased surface friction values for the crash site after waterblasting was performed.

58. Mr Miles suggested to the inquest that as there was no further note in Spring 2008 of the need for waterblasting, the accelerated deterioration of the road likely occurred during the prolonged and extreme heatwave conditions between then and April 2009. He also considered it unfortunate that in February 2009, the Contractor who performed the extra 130m reseal did not alert VicRoads to the poor condition of the roadway, nor had the VicRoads Surveillance officers or Glenelg shire officers noted it during their routine inspections.

59. Mr Miles agreed however that despite any over arching obligations, there was no specific provision or process for the contractor or inspectors to alert VicRoads to the adjacent poor road condition and that previous suggestions for waterblasting had

gone unheeded. He interpreted the Spring 2007 note about the need for water blasting, as merely a need to keep an eye on the area because there was no urgency flag or note attached to it. He also agreed that the VicRoads *'description of intervention criteria'* for *'safety inspections and response'* was deficient in that there was really no provision for reporting hazards such as the severe bleeding, polishing and rutting that were so apparent at this crash site. Mr Miles acknowledged that the road had also been incorrectly categorised for *'safety inspection frequency'* explaining that it was due to some confusion over a dual roadway number.

60. It was apparent that the funding bid process was protracted and dependant on regional and state wide priorities, however, there was some capacity to pursue additional funding or change priorities which could have occurred.

61. Mr Miles agreed that the reporting back to VicRoads had not been as good as it could have been and that improvements were required. During the course of his evidence he referred to those improvements set out in his statement and mentioned several proposals:

- To conduct a review of internal processes to address the ability of VicRoads to better use the information already in their possession.
- To improve the reporting and feedback about how a road surface was actually deteriorating over a period of time.
- To develop a checking process around extreme weather events.
- To improve the pavement diary to clarify the extent of a work site and whether a seal needs to be extended. He suggested that when a surveillance officer goes to mark out a work site with a contractor, that would be placed in the pavement diary for checking off during the Spring maintenance check.
- To identify any funding bid errors by arranging for the surveillance manager to inspect the site before any work commences and alert VicRoads to any errors and the need for more funding.
- To develop and provide a particular training module for VicRoads Surveillance Officers.

The Pettet/Guajardo Findings & Recommendations

62. These previous Coronial findings³, with Comments and Recommendations made by the former State Coroner in July 2003, were raised during the course of the Inquest, as it was considered they may still be relevant. A comprehensive series of comments and recommendations on '*road maintenance and risk management*' followed a lengthy inquest into five deaths that occurred when a tanker lost control in the wet on a dangerous section of road, crossing to the opposite lane and colliding with two oncoming vehicles causing the deaths. The road surface was in poor condition with bitumen bleeding and polished smooth appearance.

63. VicRoads lawyers were requested and provided a letter (copy attached and marked with the letter 'A') setting out VicRoads response regarding two of those recommendations that were raised.

Passenger Evidence at Inquest

64. There were eleven passengers, plus the driver on board at the time of the incident. Not all the passengers gave evidence at the Inquest. Some passengers, quite understandably, had limited recall and different impressions of what had occurred so the evidence focussed more on where they were seated and whether they recalled any seat belt safety messages or wore their seat belts.

65. Mr Hoggan was seated in the second seat from the back and over the back wheel on the near side. He was aware of Madison lying down behind him. Just prior to the incident he felt the coach slide to the left, close to the guard rail on the left hand side and felt stones flicking off the back wheels. Mr Hoggan could not be 100% sure that he was wearing a seat belt as he did not always wear one. He told the Inquest that the need to wear seatbelts was not generally verbalised by the drivers and he could not recall seeing a flashing sign at the front of the bus.

³ Coroners cases Nos: 269, 270, 271, 272 & 273/01.

66. Mr Patterson was texting on his mobile phone and seated unrestrained in an aisle seat when he was ejected from the coach during the incident. He had not detected any change in the drivers speed and felt the back of the bus was moving toward the guardrail at a point around the entrance to the bus stop. He was aware of the flashing seat belt sign but did not recall the driver mentioning seatbelts.

67. Ms Stuchbery told the inquest that she may have suffered some loss of her sense of direction during the incident and although her impression was of the bus going to the right she had some uncertainty about the actual movement. Ms Stuchbery sat four rows from the front and was wearing her seat belt after getting a reminder at Warrnambool from the bus driver who had said words to the effect of *'you should wear a seat belt and it is the law in Victoria to wear a seatbelt'*. She was fairly sure it was not repeated at Portland and she had not seen the flashing seat belt sign. She felt that the driver had not communicated as much as many do. According to Ms Stuchbery some drivers expanded on the seat belt safety message, whereas she did not think that this driver said anything when they left Portland. Ms Stuchbery told the Inquest that although she felt the bus was driven a bit fast given the conditions, overall she was not concerned about the driver's management of the bus.

68. Mr Verma was seated next to the window in the third row of seats from the front nearside of the bus. He wore his seatbelt because of the flashing sign ahead. Mr Verma had heard the driver advise of the need to wear seatbelts but was unclear as to when it was said on this occasion. He thought that the flashing seat belt sign operated if you were not wearing a seatbelt.

69. He told the inquest that the speed of the bus did cause him concern (*'like a bullet'*) but he also stated that it would have been travelling under the speed limit.

70. Mr Stipanov sat five or six rows from the front on the driver's side and in a window seat. He was not wearing a seatbelt and was also ejected from the bus. When he got on at Warrnambool *'the driver made some brief statement that the bus was fitted with seatbelts and required to, but usually not worn and most passengers didn't have one on.'* He had not seen the flashing seatbelt sign. When questioned he stated that *'this is a pretty ineffective way of getting people to wear them..'* and

suggested that something more like an airline warning with the driver going down the aisle as being more effective. There was a need for *'a bit of encouragement'* according to Mr Stipanov. When it was put to him that people did not need to be told he disagreed, stating *'people become complacent.'* He had looked around the bus on this day and *'no-one was even listening, which was not an effective way of getting people to wear seatbelts.'*

New Bus safety Legislation

71. On 31 December 2010, the *Bus Safety Act 2009* (Vic) came into operation. The purpose of this new legislation is to *"provide for the safe operation of bus services in Victoria."* The objects of this Act are to promote:-

- (a) *the safety of bus services;*
- (b) *the effective management of safety risks in bus services;*
- (c) *continuous improvement in bus safety management;*
- (d) *public confidence in the safety of the transport of passengers by bus;*
- (e) *the involvement of relevant stakeholders in bus safety;*
- (f) *a safety culture among persons who participate in the provision of bus services.*

72. Transport Safety Victoria (formerly Public Transport Safety Victoria) is responsible for administering the Act.

Expert Evidence

73. An expert statement of Dr Shane Richardson was tendered on behalf of WBL. Dr Richardson was apparently unable to identify any mechanical and/or design defects with the bus prior to the collision and it was his opinion that the roadway surface caused the incident.

74. A report was requested from Mr John Lambert, Safety Consultant and he gave evidence at the inquest. Mr Lambert highlighted a number of bus safety issues including the role of seatbelts in a crash event, the use of child restraints and the

potential survivability of this particular incident. His report also provided background information on bus crash and fatality rates:

- Buses are generally considered to be the safest mode of road transport and fatal crash rates and fatalities have been decreasing steadily since 1990. Most people who are injured in bus crashes are not bus occupants. In fatal bus-involved crashes, bus occupants typically represent 30% of those who die and 40% of those hospitalised.
- Seatbelts may have an impact in reducing or eliminating occupant deaths in up to 75 to 80 per cent of fatal crashes. Circumstances where seatbelts may provide limited protection to an occupant, include severe collisions resulting in massive intrusion into the bus occupant space. Occupants may die through direct contact with other occupants, the vehicle. Seats may shear off the floor in very severe head on crashes.
- Adult lap-sash belts are entirely unsuitable for restraining children under 7 years old.
- There may be situations where passengers wearing seatbelts are still injured in a bus rollover, through impact with the interior of the bus. However, because most bus rollovers are slow, these injuries would normally not be expected to be severe or fatal.

Seatbelt Requirements

75. It was apparent that this Iveco coach was defined as a 'heavy omnibus' and thus categorised as a 'ME' for the purposes of the Vehicle Standard (Australian Design Rule 68/00-Occupant Protection in Buses) 2006 (ADR68/00).

76. Bus 38 complied with the ADR68/00 requirement in that all seats were equipped with a lap sash seatbelt and six seats had child restraint anchor fittings. Whilst it is a requirement that child restraint anchorages be fitted in ME buses, there is no requirement for child restraint devices to be provided.

77. The applicable legal framework governing the fitting and wearing of seatbelts and child restraints is attached and marked with the letter 'B' (Attachment B). There appears to be no statutory obligation on parents or guardians travelling with children under the age of sixteen to ensure that the child is restrained, when on a bus fitted with seat belts.

78. In a broader context, it was apparent that there may be buses operating in Victoria on high-speed roads (including school buses), that are not subject to ADR68/00 requiring seat belts to be fitted. There may also be buses in operation that were manufactured prior to the commencement of ADR68/00. Although this inquest did not involve a 'school' bus the Australian Government's "Seatbelts for Kids" funding programme⁴, does demonstrate the importance of the safety of children on buses as does an NRMA policy paper which calls for the fitting of seatbelts complying with ADR68/00 in all buses used at any time to transport school children.⁵ The Country Mayors Association of NSW recently called for the mandatory installation of seat belts in school buses.⁶

Improving Seatbelt Compliance

79. The Iveco bus had seat belt signs installed although several witnesses indicated that they paid little attention to these signs. Some passengers recalled looking around to see if others had chosen to wear their seat belt before deciding whether or not they would.

80. Bus drivers had an inconsistent approach about how, when and where, they cautioned passengers about their legal obligation to wear seat belts as fitted and provided. Some issued the warning at every major stop, whilst others like Mr Shayler only issued it at the start of the journey. One acknowledged that they should do it

⁴ This programme offers school bus operators a subsidy of up to \$25,000 to fit seat belts to new buses or retro fit existing buses. It may represent an opportunity to assist the bus industry to incorporate additional safety measures such as the provision of child restraints. Refer to the Australian Government's Department of Infrastructure and Transport website:

<http://www.infrastructure.gov.au/roads/safety/seatbeltsforkids/index.aspx#subsidy>

⁵ http://www.mynrma.com.au/images/About-PDF/NRMA-Seeing_Red_on_Roads-Roadmap_for_the_next_NSW_Govt-March_2011-2.pdf

⁶ <http://www.coffscoastadvocate.com.au/story/2011/03/25/country-mayors-support-belt-up-campaign/>

more often than they did. Another did not commence the warning until he had driven further out of town.

81. Mr Michael Apps, the Executive Director of the Bus Industry Confederation of Australia (BIC, the peak body representing bus and coach operators and suppliers in Australia), contended that the public was well aware that when they board a coach and a seat belt is available, they are required to wear them – just as they do in a car.

82. Mr Lambert thought differently, noting that seat belt compliance among passenger car occupants in Australia is around 96%. In contrast, compliance on buses is much poorer and it is not an automatic action for people to put on their seatbelt on a bus, as they do in a car.

83. Mr Apps was not aware of any industry policy addressing the role of bus drivers in providing such information, nor the use of a recorded message.⁷ He did acknowledge that individual operators may already have systems in place to advise their passengers of the requirements through management practices and driver training.

84. The appropriateness and practicalities of attaching stickers to buses to inform passengers of the requirement to wear their seat belt was raised at the inquest. Mr Apps agreed that this would be a simple, practical and inexpensive initiative that industry operators could undertake.⁸ Mr Lambert noted that a verbal reminder by bus drivers was important as not all occupants may be able to read.

Seatbelts for Expectant Mothers

85. Ms Brady was not wearing her seatbelt when the bus lost control. It is impossible to know whether this was a decision based on comfort, or like most other passengers, a perception that bus travel is inherently safe and seat belts are not necessary.

⁷ Transcript 9 December 2010, page 591.

⁸ Transcript 9 December 2010, page 601.

86. In his report, Mr Lambert noted that internationally, lap-sash belts are appropriate for expectant mothers as long as the lap is pulled down under the mothers protruding belly, and the sash is positioned so it passes between her breasts and hence does not put pressure on the foetus.

Child Restraints

87. The death of Madison Dobie brought into sharp focus a significant gap in the seat belt regulatory framework. There were no child restraints available on the bus, nor were they required to be fitted. This is despite all buses subject to ADR68/00 being required to have adult lap/sash seat belts on all seats and a minimum of six child restraint anchor fittings.

88. It is anomalous that no suitable restraints are made available to infants and young children, while adults are expected to be restrained. The OCI in their report recommended that the Public Transport Division of the Department of Transport, in consultation with the BIC, review the requirement for child safety harnesses on long distance road coaches.

89. Mr Apps told the inquest that the BIC does not have a national policy position on this issue, nor has the issue ever been raised in the eight years he has been Executive Director. The complexities of introducing child restraints onto the bus fleet became apparent during the course of the inquest. Some issues included:

- How many different types of child restraints are necessary to safely accommodate children ranging in age and size from infants to young children? In evidence, Mr Lambert stated that anchorage points are designed to be standardised and there are essentially three distinct types of child restraints needed, before graduating to an adult seat belt:
 - Under six months – baby restraint/capsule with in-built harness.
 - Six months to under four years – child restraint with in-built harness.

- Four to seven years – booster seat with seat belt or harness; or a child restraint with in-built harness.⁹
- Who would be responsible for providing such devices – the parents or the bus operators? Parents and guardians who do not own a car would not possess a child restraint and therefore would not be able to supply their own device. One could not reasonably expect a parent or carer to carry a child seat along with their child.
- If the bus company provided child restraint devices, how many devices would be required per vehicle? Discussions on this issue were limited as Mr Apps noted that the industry could not determine with any certainty the patronage of young children and hence the number of restraints necessary. It was noted that child numbers may increase during particular times such as school holidays.
- Who would be required to fit the child restraint to the seat – parents or bus drivers? If bus drivers were required to fit the devices, they would need to receive the appropriate training to appropriately install the devices. Some bus drivers who gave evidence at the inquest indicated disapproval of the onus being placed on drivers.
- Hygienic issues associated with using a communal seat were raised.
- Possible avenues to advise parents and guardians on the need for children to be restrained and the potential to bring along their own restraint was discussed. Mr Apps noted that most people nowadays booked tickets online or over the phone. If this were the case, bus companies could ensure the required number of restraints were made available at the commencement of the route trip.

Clearly, there are a range of operational challenges to address.

⁹ Refer also to VicRoads' *Choosing and using Child Restraints and Booster Seats* (effective 9 November 2009)

Post Mortem Medical Examination

90 An Autopsy was performed by Dr Paul Bedford, General Pathologist at the Victorian Institute of Forensic Medicine. Dr Bedford formulated the cause of death and made the following comments:

“Death appears to have occurred from crush injuries sustained under a bus and leading to decreased movement of the chest. This movement is essential for breathing. This restriction of breathing is termed mechanical asphyxia. Restriction of breathing is also affected by the pregnancy.

Fractures to the pelvis and lower spine are noted.

A female foetus was present.”

The Families

91. The families of Ms Brady, her daughter Madison Dobie and Mr Pomery attended the Inquest and were devastated by the most unfortunate and regrettable loss of three young lives in this incident. They raised concerns over the apparent failure of VicRoads to repair the roadway in a timely manner and the need to encourage seat belt compliance.

Acknowledgements

I wish to particularly thank and acknowledge the role of the police investigating member, the police assistant, coronial staff and members of the Coroners Prevention Unit¹⁰ for their co-ordination, support and assistance.

¹⁰ The Coroners Prevention Unit is a specialist service for coroners created to strengthen their prevention role and provide them with professional assistance on issues pertaining to public health and safety.

Comments and Findings

Pursuant to section 67 of the **Coroners Act 2008**, I make the following comments and findings connected with this death:

It was impossible to determine exactly why the coach initially crossed over onto the wrong side of the road but I find that it was related to the poor road surface.

VicRoads made a sensible concession about the condition of the roadway and proposed some partly implemented improvements however, it is a pity that it took an incident such as this for that to occur.

Whilst acknowledging the vast road network responsibilities of VicRoads and the limited road maintenance budget, this particular section of road had been in a very bad way for several years with bleeding, polishing, rutting and loss of road surface texture. There was a fatality in 2004, a crash in 2006 and at least one other close by, together with increasing heavy vehicular traffic flow however the reporting regime, prioritisation and resources surrounding inspection, monitoring, identification, signage, funding, maintenance and repair went awry.

It was extraordinary that one section of roadway could be repaired whilst another adjacent section was left in bad condition. In the years prior to this incident VicRoads inspections had identified the site as needing water blasting but that was not performed until after this incident occurred and the excuses surrounding the intervening delay were unsatisfactory. Although relevant, it was not good enough to blame recent extreme weather or suggest that responsibility lay with others.

The system was flawed and protracted and failed to adequately identify hazards and manage risk as it should have done under the Road Management Plan. Whilst that Plan was intended to manage risk, it was found wanting and unable to effectively gather or use information on this occasion. An expanded checklist and internal system to encourage and support the reporting of risks and maintenance and signage requirements was needed.

It is apparent that VicRoads did consider and at least partially act on the recommendations of the Pettet/Guajardo findings, however those recommendations still have such general application for the management of risk that they remain relevant today and apply equally to the site of this incident.

The former State Coroner wrote in a Summary :

“As with most large and small government agencies there is always a need to learn from events and continually work on improving processes. The deaths examined in this inquest have tested VicRoads own systems and identified significant areas for improvement. In summary VicRoads systems for identifying and dealing with significant maintenance problems that had potential to adversely effect safety have failed.”

So too in this incident, VicRoads systems for identifying and fixing a similar maintenance problem to the Pettet/Guajardo incident failed despite it having responsibility for ensuring that road maintenance problems do not adversely effect safety.

I find:

The poor road surface and low friction values were responsible for this incident occurring.

The 100km/h speed designation was probably excessive and the slippery when wet warning sign was inadequate to warn traffic of the poor road surface conditions.

VicRoads system for management of risk, hazard identification, road maintenance, funding and repair were inadequate.

The coach was well maintained and no mechanical or design defects were detected.

The evidence that bus 38 had particular handling problems was not sufficiently made out to support a finding that this may, of itself or in combination, caused this incident to occur. I concluded that the handling problems some drivers complained about were more likely due to prevailing weather, wind or road conditions.

Although it did not necessarily impact on this incident, shortcomings were identified in the communication of driver concerns and the operation of the Defect Notice System. It is apparent that the bus operators will need to be increasingly active and vigilant with their systems surrounding these issues particularly given the provisions of the new Bus Safety Act.

I find:

The bus was well maintained and there was no apparent mechanical or design defect in the bus that caused the loss of control in this incident .

The WBL system for communication of driver concerns and the completing of Defect Notices failed to operate as it should.

Although there was a suggestion that Mr Shayler may have entered the road curvature too fast for the prevailing conditions, neither his speed nor his driving of the bus in general could be considered inappropriate.

I find:

Mr Shayler was not responsible for this incident.

The bus industry has a good safety record to date. Bus travel is considered the safest mode of road transport in Australia however that does not diminish the importance of continuous improvement. The demand for bus services together with bus passenger numbers will inevitably increase as the population grows and people are encouraged to make better use of public transport.

While buses are considered to have a low probability of experiencing a crash, the consequences, including the potential loss of life are substantial given the high number of occupants on board at any one time.

Seatbelt compliance was poor and there was a prevailing culture of not buckling up. A real shift in public perception about bus safety is necessary as is the importance of wearing the available seatbelt, as required by current law. The importance of seatbelts for school children travelling on high speed coaches, whilst an ancillary issue, has also been highlighted in this inquest.

The absence of any form of child restraint being available on buses is unsatisfactory. While there may be operational and practical difficulties associated with fitting child restraints, I am confident that they could be overcome through sensible collaboration and co-operation between all interested parties.

In a recent coronial finding into an Egyptian bus crash in which five Victorians died, Coroner Spanos commented that "the wearing of seatbelts could potentially have prevented ejection from the bus and saved some lives and ameliorated some injuries."¹¹

It is also apparent from the evidence of Mr Lambert that seat belts are not an isolated measure to protect bus occupants in the event of a crash and a different approach to bus window design may be possible whereby they flex and contain occupants rather than break as was the case here.

¹¹ Coronial findings nos.219-223/2006

This new Bus Safety Act appears to be a significant reform in transport safety in Victoria and offers a proactive approach to risk identification and management in the bus industry. The concept of “shared responsibility” between bus operators, regulators and patrons emphasises the move towards a bus safety culture, which should address many of the safety issues identified by this investigation.

I find:

Ms Sabrina Brady, Madison Dobie and Mr Justin Pomery may have survived and their unfortunate deaths prevented had they all been properly restrained.

Recommendations

Pursuant to section 72(2) of the **Coroners Act 2008**, I make the following recommendations connected with this death.

1. I recommend that VicRoads review their road maintenance system in light of this finding, and the Comments and Recommendations from Pettet/ Guajardo and implement a “best practice” system for inspecting, monitoring, auditing, funding and repairing road surfaces to minimise the risk of crashes. This system should also incorporate specific considerations relating to the incidence of extreme climate events and road surface management.
2. I recommend that the Victorian Government ensures that VicRoads is adequately resourced to ensure the implementation and sustainability of these Recommendations relating to road maintenance and risk.
3. I recommend that the Bus Industry Confederation of Australia in conjunction with Transport Safety Victoria, develop a policy for drivers operating buses with seat belts fitted, to play a recorded audio message or make an announcement at certain intervals, advising bus passengers of their requirements to wear the seat belt provided. Such messages would need to emphasise the importance of seat belts in the event of a crash, and the applicable penalties for failing to comply.
4. I recommend that the Bus Industry Confederation of Australia in conjunction with Transport Safety Victoria, introduce a policy for stickers to be provided on all seats of buses fitted with seat belts in order to improve compliance. Such stickers should emphasise the importance of seat belts in reducing the risk of injury, and monetary penalties associated with non-compliance.
5. I recommend that Transport Safety Victoria introduce a requirement for child restraints to be made available on all buses operating in Victoria that are subject to ADR68/00.

6. I recommend that in the event child restraints are made mandatory for buses subject to ADR68/00 in Victoria, the Department of Transport review the Road Rules 2009 to define the responsibilities for ensuring that a child is suitably restrained in a bus.

7. I recommend that Transport Safety Victoria in conjunction with the relevant road safety agencies such as Victoria Police and VicRoads, ensure that a comprehensive strategy is developed to improve seat belt compliance and passenger awareness of the importance of seat belts.

8. I recommend that Transport Safety Victoria monitor seatbelt compliance rates on buses operating in Victoria to evaluate the effectiveness of initiatives taken (as recommended above) to improve compliance.

9. I recommend that the National Transport Commission work in conjunction with the Bus Industry Confederation of Australia to investigate bus occupant safety measures in addition to seat belts, including retentive window glazing.

Signature:



Heather Spooner
Coroner
30 March 2011



Distribution List:

1. Stephen Lucas, Managing Director – Warrnambool Bus & Motor Company
2. Michael Apps, Executive Director - Bus Industry Confederation of Australia
3. Ian McCallum, Chief Investigator Transport Safety
4. Alan Osborne, Director - Transport Safety Victoria
5. The Hon. Mr Terry Mulder MP, Minister for Public Transport and Minister for Roads
6. Jim Betts, Secretary – Department of Transport
7. Simon Overland, Chief Commissioner - Victoria Police
8. Gary Liddle, Chief Executive - VicRoads
9. Nick Dimopoulos, Chief Executive - National Transport Commission

ATTACHMENT 'A'

VicRoads Letter

In the Inquest of:

Sabrina Michelle Brady 2038/09

Madison Lee Dobie 2039/09

Justin Ross Pomery 2040/09



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23 December 2010

Remo Antolini
Coroner's Assistants Unit
Coroners Court
Level 11
222 Exhibition Street
MELBOURNE VIC 3000

Dear Remo

Re: Inquest into the deaths of Brady and others

The Coroner has asked VicRoads to describe how it responded to Recommendations 2 and 3 in the Inquest into the Deaths of Pettet and others on the South Gippsland Hwy at Koo Wee Rup in January 2001.

Recommendation 2 was:

That improvements need to be made to the data collection and computer software systems at VicRoads to ensure that all data collected whether from the public, internal reports on problems with maintenance or the state of the road, accident information, etc, be able to be automatically cross referenced to ensure that, as a minimum, the extent of the problem is recognised and the risk evaluated and managed (within the bounds of practicality and resources).

It is essential that the data systems actually work to proactively identify and manage the information in a timely way.

VicRoads responded to this recommendation by introducing the Enquiry Tracking System (ETS). The ETS is used to record and track enquiries and complaints from the public received via VicRoads' call centres and customer service centres and its website, including complaints and enquiries about road hazard management. Enquiries and complaints about the state of the road are tracked and monitored. The risk is evaluated and actions required to mitigate the problem are identified. The ETS also captures information about crashes and other incidents that are notified to VicRoads.

Each enquiry or complaint is allocated to a VicRoads officer for action, and the system sends reminders of the action items until the matter is dealt with and closed off.

Please notify us if this communication has been sent to you by mistake. If it has been, any client legal privilege is not waived or lost and you are not entitled to use it in any way.

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DLA Phillips Fox offices are located in Adelaide Auckland Brisbane Canberra Melbourne Perth Sydney and Wellington.



Recommendation 3 was:

That VicRoads examine the issue of establishing a well resourced special rapid response team(s) in each region supporting road maintenance teams and surveillance officers and helping to identify and dealing with managing identified areas of increased risk as a result of road surface maintenance problems.

The teams would be managed by a centralised unit answerable to the Chief Executive Officer.

The teams in each region would need to be multi-disciplinary (engineers, risk managers, analysts, etc), have special skills and expertise in identifying areas of risk (with the ability to have on-site access to relevant VicRoads data systems relating to road safety planning and maintenance) countermeasures, signally or in combination in a timely manner (ie temporary road signage, speed limit reduction, etc)

Such a unit could also assist with in the training of maintenance teams and surveillance officers to help them identify other potential areas of risk potentially encountered in the daily routine of maintenance work and thereby further assisting in better targeting areas of increased risk. Subcontractors also need to be trained in any new procedures to help in the risk management process.

Finally, safety needs to be the focus of the unit's work and any problems also need to be considered from the motorist's perspective.

VicRoads considered this recommendation along with all the recommendations directed at it in the Pettet Inquest. It has not implemented the system described by the Coroner in the Pettet Inquest. However, VicRoads aimed for similar outcomes by developing its skid resistance policy. This policy provides for VicRoads to respond to a member of the public, municipality, or VicRoads who expresses a concern that a road surface is contributing to crashes or the potential for crashes. As part of the process under this policy, VicRoads analyses the crash history of the location, carries out site inspections, and if it is determined that road safety could be enhanced by improving skid resistance, then skid resistance is measured to enable a business case to be prepared for funding the improvement. Independently of this policy, VicRoads also carries out inspections of locations on arterial roads where fatal crashes have occurred, as well as carrying out regular maintenance inspection under the Road Management Plan. You will recall that Mr Miles gave evidence touching upon these issues at the inquest hearing.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Rachel Walsh'.

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ATTACHMENT 'B'

Fitting and Wearing of Seatbelts

In the Inquest of:

Sabrina Michelle Brady	2038/09
Madison Lee Dobie	2039/09
Justin Ross Pomery	2040/09

Requirement to wear seatbelts in Victorian Buses

Rule 265 of both the *Road Safety (Road Rules) Regulations 1999* (“former Rules”) and its successor, the *Road Safety Road Rules 2009*¹ (“current Rules”) require that a passenger in a motor vehicle of 16 years or older is to “occupy a seating position that is fitted with a seatbelt; and...must wear the seatbelt properly adjusted and fastened,” when the vehicle is either moving or stationary (but not parked). Moreover, both the former and current Rules do not specify the categories of motor vehicles to which Rule 265 applies, and thus would extend to passengers on a ME bus.

Driver’s Obligations

Both the former and current Rules place an onus on the driver of the motor vehicle² – but not being a bus or taxi – to ensure that each passenger who is 16 years old or older complies with Rule 266 which details the requirement for persons aged under 16 years old to be seatbelt restrained in motor vehicles, and specifies the type of restraint (which is age dependent).

Another piece of legislation worth considering is the *Bus Safety Act (Vic) 2009*, which came into operation on 31 December 2010. Section 15 of that Act provides that an ‘operator’ (see footnote 3 for the definition)³ of a bus service must so far as is reasonably practicable ensure the safety of the bus service. This concept of ensuring safety is detailed further in section 14, whereby a bus service operator must eliminate all risks to safety so far as is reasonably practicable; and where it is not reasonably practicable to eliminate risks to safety, to reduce those risks so far as is reasonably practicable. In determining what is reasonably practicable, section 14(2) sets out a list of matters that must be considered in determining what is reasonably practicable in relation to ensuring safety⁴.

The following pages contain extracts from relevant legislation.

¹ Which came into operation on 9 November 2009

² The definition of “motor vehicle” in the *Road Safety Act 1986*, means “a vehicle that is used or intended to be used on a highway and that is built to be propelled by a motor that forms part of the vehicle...”.

³ An ‘operator’ is defined as “the person who is responsible for controlling or directing the operations of a bus service in connection with a business or activity for, or involving, the transport of passengers by road by that bus service, but does not include a person who merely— (a) arranges for the registration of a bus; or (b) maintains or arranges for the maintenance of a bus”. Given this definition (and the reference to “driver” in other parts of the Act), it does not appear that the definition of “operator” includes the bus driver.

⁴ These matters include: (a) the likelihood of the hazard or risk concerned eventuating; (b) the degree of harm that would result if the hazard or risk eventuated; (c) what the person concerned knows, or ought reasonably to know, about the hazard or risk and any ways of eliminating or reducing the hazard or risk; (d) the availability and suitability of ways to eliminate or reduce the hazard or risk; (e) the cost of eliminating or reducing the hazard or risk.

Extract of relevant legislation

Vehicle Standard (Australian Design Rule 68/00 – Occupant Protection in Buses) 2006

1. SCOPE

- 1.1. The function of this ADR is to specify, for certain omnibuses, requirements for seatbelts, the strength of 'Seats', seat-anchorages, seatbelt 'Anchorage' and 'Child Restraint Anchorage', and provisions for protecting occupants from impact with 'Seat' backs and accessories on 'Seats' and armrests.

...

2. APPLICABILITY AND IMPLEMENTATION

- 2.1. Subject to the following clause, this ADR applies to the design and construction of vehicles as set out in the table below.
- 2.2. This ADR does not apply to 'Route Service Omnibuses', or omnibuses with less than 17 'Seats' including the driver and crew, or vehicles in which all passenger 'Seats' have a 'Reference Height' of less than 1.0 metre.

ROUTE SERVICE OMNIBUS - an omnibus specially designed with spaces for standing passengers.

- 2.3. Vehicles certified to the requirements of an acceptable prior rule, as shown below in the Applicability Table for a particular category, are deemed to comply with this rule.

3. APPLICABILITY TABLE

Vehicle Category	ADR Category Code	UNECE Category Code	Manufactured on or After	Acceptable Prior Rules
Heavy omnibus	ME	M3	1 July 1994	nil

...

4. DEFINITIONS

- 4.1. Refer to Vehicle Standard (Australian Design Rule Definitions and Vehicle Categories) 2005.

5. REQUIREMENTS

5.1. All 'Seats' with a 'Reference Height' greater than 1.0 metre, other than driver's 'Seat', must meet the requirements set out in this rule.

5.4. Seatbelt Assemblies

5.4.1. Each 'Seat' must be equipped with a 'Seatbelt Assembly'.

5.4.2. The 'Seatbelt Assembly' of front-facing 'Seats' must be a 'Lap-Sash Belt' equipped with an 'Emergency Locking Retractor' as specified in ADR 4/....

...

5.5. Seatbelt Anchorages

5.5.1. 'Seats' must be equipped with seatbelt 'Anchorages' which for:

5.5.1.1. all front-facing 'Seats' must have anchorages for pelvic and upper torso restraint, as specified in clause 11, and

...

5.6. Provision for Child Restraints

5.6.1. At least six 'Seats' in the vehicle must be provided with 'Child Restraint Anchor Fittings' or, at the 'Manufacturer's' option, 'Child Restraint Anchorages' and 'Child Restraint Anchor Fittings' meeting the requirements specified in ADR 34/... .

...

Road Safety Act 1986:

bus means a motor vehicle which (together with any trailer attached to it) seats more than 12 adults (including the driver);

S. 3(1) def. of
bus
inserted by
No. 89/1991
s. 4(1)(b).

motor vehicle means a vehicle that is used or intended to be used on a highway and that is built to be propelled by a motor that forms part of the vehicle but does not include—

- (a) a vehicle intended to be used on a railway or tramway; or
- (b) a motorised wheel-chair capable of a speed of not more than 10 kilometres per hour which is used solely for the conveyance of an injured or disabled person; or
- (c) a vehicle that is not a motor vehicle by virtue of a declaration under subsection (2)(b);

Road Safety (Road Rules) Regulations 1999 (note these Regulations have been superseded by the *Road Safety Road Rules 2009* on 9 November 2009)

265. *Wearing of seatbelts by passengers 16 years old, or older*

- (1) A passenger in or on a motor vehicle that is moving, or is stationary but not parked, must comply with this rule if the passenger is 16 years old, or older.

Penalty: 5 penalty units.

Note *Motor vehicle* is defined in the Road Safety Act 1986, and *park* is defined in the dictionary.

266. *Wearing of seatbelts by passengers under 16 years old*

- (1) The driver of a motor vehicle (except a bus or motor bike) that is moving, or is stationary but not parked, must ensure that this rule is complied with for each passenger in or on the vehicle who is under 16 years old.

Penalty: 5 penalty units.

Note *Bus* and *motor vehicle* are defined in the Road Safety Act 1986, and *motor bike* and *park* are defined in the dictionary.

- (2) If the passenger is under 1 year old, and not exempt from wearing a seatbelt under rule 267, the passenger must be restrained in a suitable approved child restraint that is properly fastened and adjusted, unless the driver is exempt from this subrule under subrule (5).

Note *Approved child restraint* is defined in subrule (7).

- (3) If the passenger is at least 1 year old but under 16 years old, and not exempt from wearing a seatbelt under rule 267, the passenger must be restrained in a suitable approved child restraint that is properly fastened and adjusted, or occupy a seating position fitted with a suitable seatbelt and wear the seatbelt properly adjusted and fastened, if a suitable approved child restraint, or a seating position fitted with a suitable seatbelt, is available in the motor vehicle for the passenger.
- (4) If the motor vehicle has 2 or more rows of seats, the passenger must not be in the front row of seats unless the passenger is restrained in a suitable approved child restraint or occupying a seating position fitted with a seatbelt.
- (5) The driver of a public minibus or taxi is exempt from subrule (2) in relation to a passenger if—
- (a) there is no suitable approved child restraint available in the minibus or taxi for the passenger; and
- (b) if the minibus or taxi has 2 or more rows of seats—the passenger is not in the front row of seats.

Note *Public minibus* and *taxi* are defined in the dictionary.

267. *Exemptions from wearing seatbelts*

- (1) A person is exempt from wearing a seatbelt if the Corporation has certified that it would be impracticable, undesirable or inexpedient for the person to wear a seatbelt.
- (2) A person in or on a motor vehicle is exempt from wearing a seatbelt if—
 - (a) the person is engaged in the door-to-door delivery or collection of goods, or in the collection of waste or garbage, and is required to get in or out of the vehicle, or on or off the vehicle, at frequent intervals; and
 - (b) the vehicle is not travelling over 25 kilometres per hour.

Note *Motor vehicle* is defined in the Road Safety Act 1986.

- (3) A person is exempt from wearing a seatbelt if—
 - (a) the person (or, for a passenger, the driver of the vehicle in which the person is a passenger) is carrying a certificate signed by a registered medical practitioner certifying that because of—
 - (i) medical unfitness; or
 - (ii) physical disability—it is impracticable, undesirable or inexpedient that the person wear a seatbelt; and
 - (b) the person is complying with the conditions (if any) stated in the certificate; and
 - (c) the certificate shows the date on which the exemption expires.
- (4) However, a person is not exempt under subrule (3) from wearing a seatbelt if the person (or, for a passenger, the driver of the vehicle in which the person is a passenger) does not immediately produce the certificate mentioned in the subrule for inspection when a police officer or authorised person asks the person (or the driver) whether the person is exempt from wearing a seatbelt.

Note *Authorised person* and *police officer* are defined in the dictionary.

- (5) A passenger in a police or emergency vehicle is exempt from wearing a seatbelt.

Note *Emergency vehicle* and *police vehicle* are defined in the dictionary.

Road Safety Road Rules 2009 (came into operation on 9 November 2009):

265 Wearing of seatbelts by passengers 16 years old, or older

(1) A passenger in or on a motor vehicle that is moving, or that is stationary but not parked, must comply with subrule (2) if he or she—

(a) is 16 years old or older; and

(b) is not exempt from wearing a seatbelt under rule 267.

Penalty: 10 penalty units.

(2) The passenger—

(a) must occupy a seating position that is fitted with a seatbelt; and

...

(c) must wear the seatbelt properly adjusted and fastened.

(3) The driver of a motor vehicle (except a bus or taxi) that is moving, or that is stationary but not parked, must ensure that each passenger in or on the vehicle who is 16 years old or older complies with subrule (2), unless the passenger is exempt from wearing a seatbelt under rule 267.

Penalty: 10 penalty units.

266 Wearing of seatbelts by passengers under 16 years old

(1) The driver of a motor vehicle (except a bus or motor bike) that is moving, or is stationary but not parked, must ensure that this rule is complied with for each passenger in or on the vehicle who is under 16 years old.

Penalty: 10 penalty units.

...

(2A) If the passenger is 6 months old or older, but is less than 4 years old, he or she must be restrained in a suitable and properly fastened and adjusted—

(a) rearward facing approved child restraint; or

(b) forward facing approved child restraint that has an inbuilt harness.

...

(3) A passenger who is under 4 years old must not be in the front row of a motor vehicle that has 2 or more rows of seats.

(3A) A passenger who is 4 years old or older, but is less than 7 years old, must not be in the front row of a motor vehicle that has 2 or more rows of seats unless all of the other seats in the row or rows behind the front row are occupied by passengers who are also under 7 years old.

...

(5) Subject to subrule (5A), the driver of a public minibus or taxi is exempt from subrules (2), (2A) and (2B) in relation to a passenger if—

(a) there is no suitable approved child restraint available in the minibus or taxi for the passenger; and

(b) if the minibus or taxi has 2 or more rows of seats—the passenger is not in the front row of seats.

Note

Public minibus and *taxi* are defined in the dictionary.

267 Exemptions from wearing seatbelts

- ...
- (1A) A person in or on a motor vehicle is exempt from wearing a seatbelt if—
- (a) the seating position that he or she occupies is not fitted with a seatbelt; and
 - (b) there is no requirement for that seating position to be fitted with a seatbelt; and
 - (c) all passengers in the vehicle who are exempt from wearing a seatbelt are complying with subrule (8).
- (1B) Subrule (1A) does not apply to a person who is under 7 years old.
- (1C) To avoid doubt, subrule (1A) does not authorise a passenger to whom subrule 266(3) or (3A) applies to occupy a seat in the front row of seats in a vehicle that has 2 or more rows of seats.
- ...
- (8) If a vehicle does not have seatbelts or approved child restraints fitted to all its passenger seating positions, a passenger who is exempt from wearing a seatbelt under this rule must not occupy a seating position that is fitted with a seatbelt or an approved child restraint if the result would be that a passenger who is not exempt from wearing a seatbelt under this rule would be required to occupy a seating position that is not fitted with a seatbelt or an approved child restraint.