

IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

Court Reference: COR 2009 3471

FINDING INTO DEATH WITH INQUEST

Form 37 Rule 60(1)
Section 67 of the Coroners Act 2008

Inquest into the Death of: MARK WINTER

Delivered On:	16 July 2012
Delivered At:	Coroners Court of Victoria Level 11, 222 Exhibition Street, Melbourne 3000
Inquest Hearing Dates:	30 January 2012 1 February 2012
Findings of:	JACINTA HEFFEY, CORONER
Representation:	Ms S. Hinchey, appeared on behalf of DOT and VicTrack Mr R. Taylor, appeared on behalf of VicRoads Mr C. Wighton, appeared on behalf of Transport Safety Victoria Mr T. Burns, appeared on behalf of Veolia Transport Ms N. Norris appeared on behalf of the Mornington Peninsula Shire Council
Police Coronial Support Unit	Leading Senior Constable Greig McFarlane

I, JACINTA HEFFEY, Coroner having investigated the death of MARK WINTER

AND having held an inquest in relation to this death on 30 January, 2012 and 1 February, 2012

At MELBOURNE

find that the identity of the deceased was MARK WINTER

born on 20 April 1985

and the death occurred on 15 July 2009

at railway level crossing about 30 metres south of Edithvale Railway Station

from:

1 (a) INJURIES SUSTAINED IN A MOTOR VEHICLE COLLISION WITH A TRAIN

in the following circumstances:

1. Mark Winter aged 24 years had held a probationary licence for approximately 2 years. He was 6 ft 7" tall and drove with the seat pulled back. He was driving his parents' car with which he was familiar. On this date, he was on his way from his home in Carrum Downs to visit two children in Chelsea whom he was tutoring in English and Maths. He had been doing this every Wednesday since late 2008. According to his father he was a careful driver, was familiar with the area and had good hearing and sight (assisted by spectacles, which he was wearing at the time). On this day he had left home in good time to reach his appointment. The accident occurred at approximately 5.00pm.
2. The last part of the route he took that day had him driving north along Station Street parallel to the railway line. At the intersection of Edithvale Road and Station Street, Edithvale Road crosses over the railway line and intersects with the Nepean Highway which runs parallel with Station Street on the other side. Mr Winter was apparently planning to enter the Nepean Highway by turning left (west) at the intersection of Station Street and Edithvale Road which would take him over the level crossing. The crossing at that point is an "active" level crossing and has both flashing lights/bells and a boom gate.
3. Mr Winter turned left from the slip lane. There were no other cars ahead of him in the slip lane. He then collided with the boom gate which had lowered in anticipation of the arrival of a southbound six carriage passenger train. This train was empty of passengers and was travelling express to Frankston, not taking passengers due to a door fault which had been detected. Consequently, it had not stopped at Edithvale Station immediately to the north of

the level crossing. At the time of the collision, as gleaned from the train's data logger, it was travelling at just over 57 kilometres per hour when the emergency brake was activated at 17.02 hours. It took 16 seconds to come to a halt and from the time of activation of the brake travelled 156 metres. Allowing for reaction times (in applying the brake) and the time for the air pressure in the brake to drop, it can be calculated that the brake was activated when the train had travelled some 20 metres past the point of collision. Further information from the data logger reveals that the train's horn had been sounded five times over 686 metres of track, the last two of which were at 129m and 48m north of the level crossing.

Mr Winter's car made contact with the lowered boom, firstly on the front passenger side and then the car pushed the boom up and proceeded three metres onto the rail track. The distance from the kerb on the slip lane to the boom gate is approximately one and a half car lengths.

4. An autopsy was conducted which concluded that the cause of death was injuries sustained in a motor vehicle accident. No anatomical features were identified that might have contributed to the accident. Toxicological analysis revealed the absence of any alcohol or drugs. Suicide can be ruled out. The Investigating Member Senior Constable Trevor Bergman spoke with the general practitioner that Mr Winter had attended since 1991 and he described him as cheerful, with no history of major illness or depression.
5. A mechanical inspection of the car conducted by Victoria Police found it to have been roadworthy at the time of the collision. Furthermore, the examination revealed that the brake lights were not illuminated at the time of impact.
6. At the time of the accident the road was dry, the weather fine and the traffic was peak hour traffic. Witnesses stated that Mr Winter was turning left slowly.
7. There is no suggestion that the train drivers (a trainee and instructor) were behaving in any way that might have contributed to the accident and the rail infrastructure was operating as designed.
8. The focus of the coronial inquiry was primarily concentrated on the following three areas:
 - (a) The left hand turn red arrow facing northbound traffic on Station Street applicable to drivers intending to turn left across the level crossing to proceed to the Nepean Highway;

- (b) Vegetation along the area of land between the rail infrastructure and Station Street south of Edithvale Road potentially obscuring visibility of flashing wig-wag level crossing lights; and
- (c) Sun glare potentially affecting visibility of the features of the physical features of the level crossing.

The enquiry was assisted by witnesses who had authored various reports addressing these issues which were tendered in evidence.

9. The left hand turn arrow issue

- (a) The left hand turn arrow facing northbound traffic in Station Street (a different cycle operates with respect to the left hand turn arrow facing southbound traffic on the Nepean Highway) is activated when the traffic light controller receives a “call” from the railway equipment warning that a train is approaching. When the boom gate descends to horizontal, the left hand turn arrow then extinguishes. At all other times the left hand turn arrow is inactive.
- (b) Anthony Fitts, Manager Traffic Systems (East) for VicRoads told the court that the left hand arrow is illuminated once a “call” is received by the traffic signal controller that a train is approaching. This commences what is known as the “train track clearance phase” the purpose of which is to prevent any vehicles from entering the level crossing and to allow vehicles already in that area to clear the level crossing. The train track clearance phase at this level crossing lasts 16 seconds by which time the boom gates are lowered to horizontal. The red arrow is then extinguished.
- (c) During the subsequent “train phase” the intersection of Edithvale Road and Station Street is effectively a T intersection with Station Street as the T. The traffic control signals in Station Street assume a cycle allowing initially for through traffic north and south along Station Street, followed by red lights. The red light which has been facing Edithvale Road during that time remains red for a short time (to enable pedestrians to cross Edithvale Road and Station Street) until the illumination of green left and right arrows for traffic to enter Station Street to travel north and south. After this, the cycle recommences with green lights facing north and south in Station Street with durations in the cycle dependent on traffic density.

(d) As Mr Fitts pointed out in his evidence and in his report:

“Without knowing the time at which the first call that a train is approaching was received by the traffic signal controller and the time at which the booms horizontal call was received by the traffic signal controller, it is not possible to say how long the red arrow remained illuminated. This depended on the progress of the train”¹

- (e) I take this to mean that it is not possible to say at what point prior to the arrival of the train that the red arrow was extinguished. It follows that it is not possible to know what stage in the cycle referred to above were the traffic control signals directing north-south traffic in Station Street when Mr Winter entered the level crossing intersection.
- (f) The Inquest was concerned to investigate whether the extinguishment of the red arrow might not send a “false message” to traffic intending to turn left across the level crossing from the slip lane in Station Street to the effect that a left hand turn is now safe to execute. Whilst the illumination of the red left turn arrow may serve an appropriate function, the question still remains as to whether it might not encourage a driver to believe that it is now alright to proceed and execute the turn.
- (g) In most cases (which explains the fact that there have been no previous reported crashes at this level crossing) the descended boom gate, the flashing lights and (although not designed for drivers) the sounds of the train horn and bells, will all work to alert car drivers who might have been misled by the extinguishment to the imminent arrival of a train and the driver will be able to stop in time to avoid a collision.
- (h) The possibility that Mr Winter had been so misled depends on calculating where he was in Station Street at the time the red arrow was extinguished. This is not at all clear from witness accounts. A witness Daniel Proh made a statement on 29 July 2009 according to which he estimated that the boom gates came down a minute or two after the red arrow came on, facing him in the left hand slip lane on the Nepean Highway, diagonally opposite the direction from which Mr Winter entered the level crossing intersection. This conflicts with the evidence of Mr Fitts who gave evidence that the lowering of the boom took no longer than 17 seconds. Thereafter, he stated that after the boom gates came down, it was another two or three minutes before he heard the horn of the

¹ Exhibit G

approaching train. Eyewitnesses are notoriously inaccurate in terms of assessing periods of time and it is not uncommon to find a number of witnesses with equal visibility to an event confidently expressing remarkably divergent opinions as to timing.

- (i) The only evidence as to the location and movement of Mr Winter's vehicle shortly prior to his entering the level crossing intersection is that of trainee driver Otto Kocsis who in his statement said that about 10 metres from the intersection he saw Mr Winter's car approaching the corner of the intersection travelling north. *"The car had slowed down to drive around the corner. It was travelling at about the normal speed a person would drive around a left hand corner..."* . Other eyewitnesses saw the collision only. Photo Number 13 on Page 100 of the Inquest Brief, taken at a lower height than the driver's view point suggests that Mr Kocsis would have had a good view, indeed a better view, of Mr Winter entering the intersection than the photo suggests. However, at the commencement of the second day of the Inquest, I was informed that Mr Downes, who had taken the statement from Mr Kocsis, had clarified with him that morning that indeed Mr Kocsis was only able to say that he saw Mr Winter's vehicle entering the intersection and was unable to say whether it was stationary or moving immediately before entering the intersection.
- (j) If Mr Winter had been stationary at the stop line when the red arrow was extinguished he would have been in a position to observe the wig-wag flashing lights as this would not have been occluded by vegetation at that point. He would also have been in a position to assess the amount of sun-glare, shield his eyes and exercise appropriate caution. On balance and for these reasons, I consider it is highly unlikely that he would have entered the intersection in these circumstances. As to precisely where his vehicle was at the time the arrow went off cannot in my view be ascertained as the time of the arrival of the train relative to the extinguishment of the red arrow cannot be established. However, one imagines it would be a period of some seconds at least. According to the report of Ian McCallum² at page 14, the crossing is designed to provide a minimum warning time to motorists and pedestrians of 25 seconds prior to a train entering the crossing. If the train had arrived in the minimum time, then, assuming Mr Winter was travelling at 60 kph for the 8 seconds after the left red arrow was extinguished, his car would have covered 16.67 metres per second and this would place him 133.36 metres away when the arrow

² Exhibit J.

went off, clearly in a position to see it extinguish. This is, however, no more than a possibility and depends on variables not objectively ascertainable.

10. The issue of the vegetation along the area of land between the railway infrastructure and Station Street south of Edithvale Road.

- (a) Another issue that arose was the possibility that the presence of vegetation may have occluded Mr Winter's vision of the "active" features of the crossing, namely the flashing wig-wag lights and the boom gate.
- (b) The Report authored by Mr Ian McCallum³ on behalf of the Office of the Chief Investigator at page 21 states that *"Because the vegetation between Station Street and the rail line obscured the rail crossing warning lights until a motor vehicle driver was about 30 metres from the crossing, the opportunity, in terms of time, for the driver had to observe the lights would have been diminished."*
- (c) In evidence, Paul Downes, Senior Investigator with Connex, stated that he assessed the location at which visibility was affected due to vegetation as being about three car lengths from the white line across Station Street at the traffic controls. Under cross-examination Mr Downes agreed that 25- 30 metres of distance would be sufficient to enable a driver, in the absence of other factors, to react to the boom gates being lowered.
- (d) Senior Constable Trevor Bergman, the Investigating Member, on the day after the accident, performed a re-enactment of the route taken by Mr Winter. In his estimation, the vegetation on his left consisting of a group of shrubs or small trees in his view completely obscured his view of the red flashing level crossing lights until he was within ten metres of the stop line. Mr Downes' calculation of 25-30 metres was to the actual level crossing. So the two views are reasonably consistent.
- (e) The Infrastructure Lease between the Director of Public Transport and Melbourne Transport Enterprises Pty. Ltd contains the Vegetation Management Plan⁴ which recites the responsibilities of Connex (which had contracted its vegetation management to MainCo to be regularly monitored by Connex). According to the Plan, three discrete areas are identified for monitoring and, where necessary, action, all of which are

³ Exhibit J.

⁴ Exhibit C.

contained within the track easement leased by the Victorian Government to Connex. The easement boundary ends at what is described as “the property line”.

- (f) It is clear from a reading of the document that the vegetation to be addressed is that within the property line, that may otherwise constitute a hazard to train drivers, railway personnel and trains, in terms of visibility from the train driver’s perspective, and fire dangers. At page 16 at 8.3 the document reads:

This entire area shall be cut or treated for many of the reasons detailed previously, such as:

- *Maintenance of visibility at highway, access, occupation and pedestrian crossings*
- *Maintenance of visibility at curves*
- *Provision of clear visibility to signs and signals*
- *Reduction of physical hazards to train crews and track maintenance personnel who must work in this area*
- *Reduction of fire hazard.*

- (g) A letter was tendered from Ligeti Partners Solicitor for the Kingston City Council⁵ to the effect that a survey conducted on behalf of the Council was unable to establish the precise boundary between the rail and road reserves. The Council engages Citywide to clear the vegetation 300mm back from the kerb in Station Street, including pruning, on an annual basis. The Court was informed at the conclusion of the evidence that where vegetation which is not on the rail reserve may impose a visual impediment to motorists as opposed to train drivers, the Rail Operators are required to communicate this information to the relevant road authority for action.

- (h) It was submitted that the occluding effect of the vegetation may have “been of assistance in screening out the sun on the approach to the level crossing”. If, however, the end effect of this is that on clearing the vegetation area in the short time and distance prior to the level crossing the sun glare would have been so sudden that it may not have afforded Mr Winter time to adjust to the instant blindness occasioned by the glare.

⁵ Exhibit F.

11. The Sun-glare issue

- (a) The Investigating Member Senior Constable Bergman described the sun-glare that day as a “very rare event”. He returned to the scene at the same time the following day and turned left from Station Street across the level crossing at the same time as Mr Winter would have done. *“I was struck by the intense sun glare which blinded me. The sun glare was directly behind the only set of flashing red level crossing lights facing me. It was too bright to take a photograph of. I found it was not possible to see the lights due to the sun....”*
- (b) When cross-examined by Counsel for Connex about the lack of other fatalities at the crossing in the preceding 18 years, the hundreds of cars that must have performed the same manoeuvre as Mr Winter and the suggestion that it must have been inexperience on the part of Mr Winter which led to the accident, Senior Constable Bergman responded that *“in that time, there’s been hundreds of cars each day, but that’s in totality of the whole of every day, night, day time. We actually take into account that this actual circumstance, where the sun is actually setting in exactly the same spot, at exactly that time of day, because it can’t be any – it can’t be five, probably ten minutes before, or even as I said in my statement I got there a couple of minutes later and the sun had already set, even a couple of minutes past if you actually narrow it down to that specific time each year, which is only a very short time and the fact that it’s the middle of winter and a lot of times I imagine...it will be cloudy, overcast, then if you narrow it down to that time, and how many actual cars go up there and turn left at that time, instead of having hundreds and all that it actually might be very few cars that are actually in that circumstance.....”*⁶
- (c) Mr Winter’s parents in their submission responded to the allegation that their son’s possible inexperience as a driver was a contributing factor with details of his driving experience. In my view, the evidence of Senior Constable Bergman that he had been driving along that road for over 20 years but who nevertheless found it not possible to see the flashing lights due to sun glare, is a sufficient answer to that allegation.

And Senior Constable Bergman was not alone in this observation. In his report Mr Downes at page 10 expressed the view that it was likely that *“while turning left, sudden exposure to sun glare*

⁶ Transcript pp.104-105.

through the gap between buildings took the deceased by surprise causing disorientation and rendering him unable to properly assess the status of the active level crossing.”

CONCLUSION

12. Having considered the evidence and the submissions, I have come to the conclusion that of the three areas listed above, the most likely and immediate cause of this tragedy was the glare from the sun which momentarily blinded Mr Winter as he turned left into the level crossing intersection. I am satisfied that this was a unique set of circumstances as so clearly recounted by Senior Constable Bergman and extracted above.
13. Mr Winter may have had a radio on. His father told Senior Constable Bergman that this would not be uncommon, and this may have prevented him from hearing the bells. However, the feature of bells at a level crossing is a feature designed to attract the attention of pedestrians, not motorists. Accordingly, in my view the presence or absence of a radio turned on is of no significance.
14. The active features at this intersection, namely the flashing wigwag lights and the lowered boom gates were the critical features.
15. Were it not for the sun-glare, even the obscuring effect of the vegetation would be unlikely to have caused the accident as from all accounts there was sufficient time and distance (some 25-30 metres) from the clearance of the vegetation to the crossing within which to observe the flashing lights and boom gate and to come to a stop. The fact that Mr Winter's brakes were not activated supports the view that he was taken by surprise. That he continued was probably a spontaneous response as the boom gate lifted over his bonnet and had the train not been so close continuing on might have saved him.
16. **The significance of the red arrow light** in this instance is difficult to assess. There remains the possibility that Mr Winter was able to observe the red light from a distance, that he saw it extinguish and then saw green traffic lights replacing the red traffic lights. He had travelled the same route at the same time every Wednesday for some time. The train in question was not following the usual time-table for that time of day being defective and travelling express to Frankston. He may have mis-interpreted the extinguishment of the red arrow as indicating it was safe to turn left *to continue over the crossing*. His awareness and experience of the red light arrow is unknown.

17. Alternatively, Mr Winter may not have been close enough to see the red arrow extinguish and saw only green traffic lights. Being unable to see the flashing wigwag lights due to the presence of the vegetation he may have considered it safe to turn left to cross the level crossing but was then blinded by sun-glare. Whichever way his approach is constructed, the presence of the sun glare is the predominant feature. Without it on this scenario he would have had time to observe the flashing lights and the boom gate as he turned and had a car length and a half to come to a stop.
18. Had the red arrow light remained illuminated, it is extremely likely that as a responsible driver Mr Winter would have stopped at it and not turned left. Whilst there remains the possibility that red-arrow lights operated in this cycle may cause a driver may mis-construe the extinguishment of them, I consider that consideration should be given to upgrading the cycle to the effect that the light remains illuminated until the boom gates rise after the passage through of the train. It would seem that there is nothing to contra-indicate such an action apart from cost.
19. It is noted that VicRoads accepts the recommendation contained in the Report of the Chief Investigator in this respect both in relation to this and to other similarly configured level crossings and considers it "appropriate" to modify the left-turn arrow on the north bound slip lane of Station Street to hold traffic when the boom gate is down. This is subject to funding and will be considered on a case by case basis along with other competing priorities. **I make the formal recommendation that this proposal remain active and subject to regular review.**
20. **The vegetation issue** is of marginal importance in my view in that as I have said, sufficient time was afforded in this case to see the flashing lights in a timely manner. However, it is clear that visibility of the active features of the level crossing should always be unimpeded. The offending tree in this case has been removed and the facts of this case have hopefully alerted the Kingston City Council and Metro to the importance of communicating with each other in the event that vegetation along the unclear boundary line is observed to be obscuring visibility of the level crossing.

RECOMMENDATIONS

Pursuant to section 72(2) of the **Coroners Act 2008**, I make the following recommendation(s) connected with the death:

I refer to and repeat Paragraph 19 hereof.

I direct that a copy of this finding be provided to the following:

Mr Warren and Linda Winter, Next of Kin

Mr Malcolm Winter, Interested Party

Senior Constable Trevor Bergman, Investigating Member, Moorabbin Highway Patrol

Mr Barry Armistead, acting for National Investigations

Ms Rosemaree Gullo, Minter Ellison Lawyers, acting for DOT and VicTrack

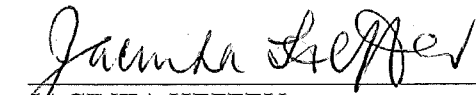
Mr Chris Wighton, Transport Safety Victoria

Mr Richard Plunkett, VicRoads

Mr Paul Downes, Connex/Metro

Ms Nicole Norris, Ligeti Partners Lawyers, acting for Kingston City Council

Signature:



JACINTA HEFFEY
CORONER

Date: 16 July 2012

