



Department of Transport

Department of Transport
Metropolitan Surface Transport
Metropolitan North West
12 Clarke Street
Sunshine Victoria 3020

Ms Rebecca Hudson
Coroner's Registrar
Coroners Court of Victoria
65 Kavanagh Street
SOUTHBANK VIC 3006

Dear Ms Hudson

INVESTIGATION INTO THE DEATH OF NORMAN MACKENZIE – COR 2017 001812

I note your correspondence on 2 November 2020 enclosing the Coroner's findings and recommendations arising from the inquest into the death of Mr Norman Mackenzie. The Department of Transport (DOT) takes this opportunity to express condolences to the family and friends of Mr Mackenzie for their loss.

Pursuant to Section 72(2) of the Coroners Act 2008 (Vic), DOT has prepared this submission to provide the Court a written response to the recommendations made in the State Coroner's report into the death of Mr Mackenzie. It is noted the Coroner has made six recommendations, one directed to the Transport Accident Commission and five as per DOT responsibility.

I provide the following responses to each of the five recommendations on behalf of DOT.

The Coroner's first recommendation is:

In order to reduce the number of people who walk when the light is red, Bicycle Network recommends the Coroner investigates:

- a) the effectiveness of crossings that adjust the time allowed to cross to the speed of the person walking (sometimes referred to as Puffin Crossings);*
- b) whether the light sequence at the Jacka Boulevard crossing allowed enough time for Mr MacKenzie to cross;*
- c) the possible introduction of a behaviour change program aimed at reducing the number of people walking who cross on red 'don't walk' lights.*

(a) The Coroner's Recommendation has been implemented

The pedestrian crossing where the fatal accident occurred has 'PUFFIN Detectors' installed since 2013. PUFFIN crossings detect pedestrians on the crossing and automatically extend the crossing time where necessary.

In line with VicRoads guidelines (TEM Vol 1 Part 26 – Supplement to AustRoads Guide to Traffic Management Part 6 – Section 8.2.3b), it is a DOT requirement that all new mid-block pedestrian operated signal (POS) crossings are installed with PUFFIN detectors. Older sites are generally retrofitted on a case-by-case basis when signal improvement works are undertaken. PUFFIN detectors are also commonly installed at other pedestrian crossings for various reasons that include; high pedestrian volumes, significant length of crossing, where vulnerable road users are noted or where particularly safety issues have been identified.

(b) The Coroner’s Recommendation has been implemented.

A review of the signal timing at this location determined there to be 13 seconds of walk and 13 seconds clearance time.

In line with VicRoads guidelines (TEM Vol 1 Part 29 – Supplement to AustRoads Guide to Traffic Management Part 9), DOT adopts a pedestrian walk speed of 1.2 m/s for the walk time and 1.5 m/s for the clearance time for pedestrian signal design.

Given the 20m width of the crossing, the 13 seconds clearance time ensures pedestrians who begin crossing at the end of the walk phase can safely complete their crossing. For pedestrians that begin at the start of the walk phase, ample opportunity is provided to safely complete their crossing.

It should be noted that signal design also includes an ‘all red’ time between phases, dependent on the vehicle speeds. Which in this case provides a further 2 seconds of time between the phases to act as an additional safety buffer.

(c) The Coroner’s Recommendation has been implemented.

All pedestrian crossings include signage at the push button that assist pedestrians to understand the correct use and interpretation of the various phases of pedestrian signalling. This promotes increased awareness and compliance among pedestrians at crossing points.

Additionally, DOT funds the *Starting out Safely Program*, a road safety education program aimed at primary school aged children that promotes among other things, road safety when crossing the road. For further information refer to: <https://childroadsafety.org.au/pedestrians/children-as-pedestrians/>

The Coroner’s second recommendation is:

Replace the pedestrian crossing where Mr MacKenzie was killed with an elevated crossing that links The Esplanade, St Kilda Triangle and St Kilda Foreshore.

The Coroner’s recommendation is under consideration.

The St Kilda Triangle Masterplan developed by the City of Port Phillip in 2016 identified the possible inclusion of a pedestrian overpass to link the future development of the St Kilda Triangle and the foreshore area.

DOT notes further investigation is required on the feasibility of an overpass and consideration to other alternate design to facilitate a safe crossing point at this location. At this stage, no available

timeframe exists for this masterplan, however DOT will continue to work with council to support pedestrian amenity initiatives.

Should you wish to discuss this project further, Damian Dewar - Manager City Strategy, Design and Sustainability of CoPP (Damian.Dewar@portphillip.vic.gov.au) would be pleased to answer any questions.

The Coroner's third recommendation is:

Increase visual cues about the possibility of bike riders at high volume points like pedestrian crossings with:

- a) raised separation of the bike lane;*
- b) on ground markings; and*
- c) eye level signs.*

(a) The Coroner's recommendation will not be implemented.

This recommendation will not be implemented because on-road bike lanes are generally constructed at-grade with the road level. Road width constraints often require that bike lanes incorporate bus stop bays, loading bays and other part time uses that extend from the traffic lane. Raised separation of bike lanes would prevent these other uses that are necessary to the operation of the road network.

However, wherever feasible, DoT advocates for the construction of off-road separated bike lanes. This separates vehicular traffic from bike riders improving sight lines for pedestrians and improving cyclist safety by separating them from vehicular traffic.

It should be noted however that raised bike lanes near pedestrian crossings may have the unintended consequence of encouraging pedestrians to wait in the bike lane. This can lead to additional hazards and increase the risk of pedestrian-cyclist related conflict.

The Bay Trail, a shared use path, extends along the foreshore at this location. However, it is common practice for many cyclists who use this route to choose to remain on road due to the reduced number of conflicts with pedestrians and where bike riders wish to travel at speeds that may be inappropriate for a shared use path.

(b) The Coroner's recommendation has been implemented.

Measures in line with the Coroner's recommendation have previously been implemented. Available design standards (AustRoads Guide to Road Design part 4 Figure B 8) dictate that bike lanes include bike symbols prior to and following a signalised intersection. A review by DOT identified that bike symbols were in place on both arrival and departure and in each of the crossings.

Available satellite data indicates that the bike symbols have been in place since the bike lane was first installed, from at least September 2012.

(c) The Coroner's recommendation is under consideration.

Where uncontrolled crossings between bike paths and footpaths intersect, 'Watch for Bike riders' (G9-57) signs are commonly incorporated. However, in line with its standard practice, DOT does not incorporate such signs at signalised crossings by default given the separation of cyclist and pedestrians movements facilitated by the traffic signals.

Nonetheless, where crash trends or other observations indicate a common occurrence of non-compliance, additional signage may be considered appropriate to improve awareness and encourage increased compliance.

It should be noted that overuse of such signage can negatively impact its efficacy across the network and as such is generally only used where a negative safety trend or other evidence would warrant its use.

Notwithstanding the accident in question, the 5-year casualty crash record to December 2019 does not indicate existing patterns of pedestrian non-compliance or a trend of bicycle related accidents at this location. DOT will continue to monitor this location to determine if increased signage is warranted.

The Coroner's fourth recommendation is:

Implement a behaviour change program to increase the number of people looking out for bike riders who are under passing stationery traffic.

The Coroner's recommendation has been implemented.

As detailed in response to recommendation 3(a), DOT includes bicycle symbols at pedestrian crossings to demarcate bike lanes and in turn increase awareness of bike riders at these locations.

See additional information provided in response to recommendation 5, detailing the Travel Happy - Share the Road campaign.

The Coroner's fifth recommendation is:

Implement a behaviour change program to encourage bike riders to take greater caution when under passing in high risk situations like intersections and crossings.

The Coroner's recommendation has been implemented.

Measures in line with the Coroner's recommendation have previously been implemented. First launched in 2015, then again in 2019, the "Travel Happy - Share the Road" campaign aimed to promote awareness among all road users and encouraged users to be aware of one another and actively share the road space. Awareness of and among bike riders and pedestrians was targeted as a key objective of the campaign given the particular vulnerability of these road users. Additionally, information promoted via social media channels and provided on the VicRoads website highlights the importance of awareness of pedestrians by bike riders, particularly at locations of increased risk including intersections, crossings, shared paths and shared zones.

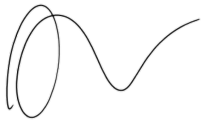
For further information on the *Share the Road* campaign refer to:

<https://www.vicroads.vic.gov.au/safety-and-road-rules/driver-safety/drivers-and-sharing-the-road>.

The following link provides additional information highlighting the importance of pedestrian awareness among bike riders refer to: <https://www.vicroads.vic.gov.au/safety-and-road-rules/cyclist-safety/sharing-the-road>.

DOT trusts that the information provided is of assistance to the Coroner and would be pleased to answer any further questions regarding this matter. Should you require further information or access to any of the Guidelines referred to, please contact Ms Hazel Lirios, Team Leader Movement and Safety Central, Metropolitan North West, DOT on 9313 1169.

Yours sincerely

A handwritten signature in black ink, consisting of a large, stylized 'A' followed by a wavy line that tapers to the right.

ALAN FEDDA

EXECUTIVE DIRECTOR

METROPOLITAN NORTH WEST, METROPOLITAN SURFACE TRANSPORT

24/12/2020