

15 November 2017

Rachael Harris

fyi-request-6729-d1f31085@requests.fyi.org.nz

Dear Rachael

Request made under the Official Information Act 1982

Thank you for your email of 20 October 2017 requesting the following information under the Official Information Act 1982:

Please provide all data relating to crash incidents at the new intersection at State Highway 1 and Memorial Road, Christchurch, constructed 2017 and connecting motorists to Christchurch Airport. Please also provide all data relating to changes in the intersection layout from the first day of the intersection opening, and any proposed future changes.

From 1 January to 30 October 2017, at the intersection of Memorial Avenue and State Highway 1S (SH 1S) in Christchurch, there were two minor injury crashes, in which two people had minor injuries, and five non-injury crashes. Of these seven crashes, failure to give way or stop (7 crashes), poor observation (3 crashes), and poor judgement (1 crash) were considered to be factors.

Please note the following:

- This data is provided from the road traffic crash database; Crash Analysis System (CAS) and is current as at 30 October 2017.
- Data is limited to police reported crashes that occurred on the intersection of Memorial Avenue and SH1S in Christchurch.
- As multiple crash factors can be associated with a crash, the crash factors provided above will not total to the number of crashes.
- New Zealand Traffic crash data covers all NZ roadways or places where the public have legal access with a motor vehicle.
- Due to the police reporting time frame and subsequent data processing there is a lag from the time of a crash to full and correct crash records within CAS, therefore 2017 data is provisional.
- Due to the nature of non-fatal crashes it is believed that these are under-reported, with the level of under-reporting decreasing with the severity of the crash.

Regarding the intersection layout, several reviews have been undertaken to assess the operation of the intersection and the visibility of signals. It has been assessed against similar signalised intersections in other countries. The signal designers have reviewed the light cycle times while the Christchurch Transport Operations Centre have made recommendations for cowls, tubes that go over the lights and extend in front of the lights reducing visibility of the lights from the sides, and louvres, sloping slats that restrict the angle drivers can see the lights. NZ Transport Agency safety officers have reviewed the visibility and operational aspects of the intersection; and the Transport Agency design/construction team have observed the behaviour of motorists and how the intersection is operating.

The issue of motorists reading the far side green signals, when the nearest signals are on red, hence running through a red light, has been addressed by increasing the size, orientation and location of nearside signals to make them more prominent, while masking the farside signals as much as possible.

Below is a list of actions the Transport Agency has undertaken. Attachments 1 and 2 are diagrams that can be read alongside the list below and should aid understanding.

1. Changed the aspects (traffic lights) from 200mm to 300mm diameter on aspects 3, 10, 14, 18, 19, 20, 30 and 31; a total of 8. The larger lights have been installed on the approach side of the intersection to make them stand out.
2. Installed 300mm cowls and louvers on 6 green lights on poles 4, 8, 19, 21, 25 and 28 and ensured they are tilted appropriately. These are on the departure lights on the far side of the intersection and have been installed to reduce the brightness of the green when viewed from the first set of lights.
3. Installed 300mm cowls and louvers on 4 No reds on poles 1, 2, 12 and 17 and ensured they are tilted appropriately.
4. Memorial Avenue approaches have been fully opened to four lanes and road markings updated to reflect this.
5. Aspects 19 and 20 have been cantilevered out from the poles for better visibility.
6. Investigated the option of putting a mast arm at location 19 and 20. Design has been completed for a 2.5m outreach and this will be implemented in the coming weeks.

If you would like to discuss this reply with the Transport Agency, please contact Chris Collins, Senior Project Manager, Project Delivery, by phone on 021 814 627.

Yours sincerely



Helen Aki

Senior Manager – Research and Analytics