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The purpose of this report is to inform the Council of a review of the performance of a zebra pedestrian crossing in Riccarton Road and the associated Riccarton Road/Main South Road/Yaldhurst Road intersection at Church Corner. The Council is to be asked to sanction the removal of the zebra pedestrian crossing and authorise the construction of an uncontrolled pedestrian crossing point 65 metres west of the traffic signals at Hansons Lane.

INTRODUCTION

The two sites under investigation have very high crash rates. The first is the Riccarton Road/Main South Road/Yaldhurst Road intersection and the second is the adjacent zebra pedestrian crossing.

THE PEDESTRIAN CROSSING

For many years there has been a significant volume of pedestrians crossing Riccarton Road at Church Corner. Since the opening of Countdown the numbers have increased substantially. The bulk of all pedestrian movements across Riccarton Road in this location are confined to three specific locations, namely: the traffic signals at Hansons Lane, the pedestrian crossing at the Yaldhurst Road intersection and an area "midblock" or halfway between these two facilities.

The zebra pedestrian crossing crosses Riccarton Road at the confluence of Main South Road and Yaldhurst Road. It passes through a central median (see diagram). It has a very poor crash history.

The problem at the pedestrian crossing is one common to many pedestrian crossings. Pedestrians step on to the crossing assuming traffic will stop for them. This situation is compounded by the multi lane nature of the roadway. Often the vehicle in the kerbside lane or the median lane will stop for the pedestrian and the vehicle in the inside or outside lane passes straight through. This is a potentially fatal scenario and one which causes significant concern. Together with this are the associated factors of a high speed, high volume traffic environment coupled with predominantly elderly crossing users. This becomes a lethal cocktail of factors, many of which are directly attributed to the current poor crash history at the site.

This is the only pedestrian crossing remaining in Christchurch which traverses a multi lane section of road.

In the past there has been strong opposition to removing the zebra crossing from the local community. The proximity to the retirement housing complex and the need for these elderly residents to cross at this end of the block rather than at the traffic signals at Hansons Lane is one of the reasons why the crossing remains.

PEDESTRIAN SURVEYS

A survey of pedestrian crossing movements was carried out on Tuesday June 16, 1998. The survey covered 3 separate 1-hour periods. The results are tabulated in the attachment. The key points emerging from the data are:

- Around 40 pedestrians on average per hour use the zebra pedestrian crossing.
- Around 80 pedestrians on average per hour use no facility and cross "midblock".
- Twice as many pedestrians cross "midblock" (between the zebra and the signals) than cross at the zebra crossing.
- Many pedestrians emerge from the Countdown walkway and cross Riccarton Road on that desire line.
- Most of the pedestrians crossing 'midblock" pause on the central median strip when crossing.

There were six instances over the 3-hour period surveyed where a vehicle travelling along Riccarton Road had to brake very suddenly to avoid a pedestrian crossing on the zebra crossing.

RICCARTON ROAD/MAIN SOUTH ROAD/YALDHURST ROAD INTERSECTION

The basic problem at the Riccarton Road/Main South Road/Yaldhurst Road intersection is that traffic turning right from Main South Road into Riccarton Road (through the Seagull Island) does not receive a very clear indication of which lane traffic approaching from Riccarton Road is in. The split in the lanes to either travel along Main South Road to Sockburn or west along Yaldhurst Road occurs very late. Many right turning motorists are caught out on the assumption that the approaching vehicle is travelling straight through onto Main South Road when in fact they are veering right onto Yaldhurst Road. The Riccarton Road/Main South Road/Yaldhurst Road intersection has a poor crash history.

CRASHES

Over the five year period 1993-1997 there have been 13 reported crashes at the intersection and 10 on or near the pedestrian crossing. Eight of these crashes have involved an injury and one at the crossing resulted in a serious injury to a pedestrian. Coupled with these figures is the regular occurrence of "near miss" situations which can be observed on a daily basis.

THE REVIEW

The City Streets Unit has reviewed the performance of the Riccarton Road/Main South Road/Yaldhurst Road intersection and environs. A proposal has been developed that tackles both problem areas. The proposal is targeted at achieving both short and longer-term safety benefits depending on the availability of finances.

In the first instance it is paramount that the zebra crossing is removed. In conjunction with this removal would be the installation of a bollard and chain barrier along the footpath on both sides of the road in the immediate vicinity of the crossing. This will deter pedestrians (and motorists) from assuming the crossing is still functioning which would create a potentially more dangerous situation than present. This action will provide immediate safety benefits. The effect of this action will be an increase in pedestrians crossing "midblock" and at the traffic signals at Hansons Lane. This is not considered to be an adverse effect, as this is where the majority of pedestrians currently cross without any accidents being recorded (see pedestrian survey data).

It is important to provide a pedestrian facility on the desire line of what is and will continue to be the bulk of pedestrian movements. As mentioned this is located "midblock". It is proposed to widen the central median and provide a pedestrian crossing point at this location. The existing traffic signals at Hansons Lane provide sufficient breaks in the traffic stream such that this facility will further improve safety for pedestrians crossing. This can be funded from the Black Spot Remedial Works programme for 1998/99.

In the longer term, and subject to the performance of the new crossing point, the issue of pedestrian actuated traffic signals at the crossing point may need to be explored. The signals could be implemented as a separate project or depending on finances the project could be expanded to address the accident problem at the Riccarton Road/Main South Road/Yaldhurst Road intersection.

The ultimate proposal (see attached plan) is estimated to cost around \$160,000 and has a benefit/cost ratio of around 4.0 using crash reduction savings only. This proposal extends the separation between west bound lanes at the intersection which will provide motorists exiting Main South Road with a better appreciation of which lane approaching traffic is in. It also incorporates the wider median on Riccarton Road to allow better storage and protection of pedestrians using the signals. Wider lanes are also included which will allow cycle lanes to be marked.

PRELIMINARY CONSULTATION

The proposal to remove the pedestrian crossing and provide a new crossing point midblock was presented to the Riccarton/Wigram Community Board's Traffic Committee on 21 July 1998. In attendance at that meeting were residents of the elderly persons housing complex located immediately adjacent the zebra crossing. These residents expressed their support for the proposal and welcomed the changes. They recognised (some personally experiencing) the dangers associated with the current facility. The Committee endorsed the recommendations contained in this report.

A leaflet will be distributed to residents and businesses outlining the proposals including the removal of the zebra pedestrian crossing and the establishment of an uncontrolled midblock pedestrian crossing point.

CONCLUSION

In the interests of road safety it is important that consideration is given to addressing the level of safety at the zebra crossing immediately. Implementing the ultimate proposal in entirety is not an option in the short term due to lack of finances. From a road safety perspective the longer the crossing remains the greater the threat of another injury.

The Pedestrian Advocate (Mike Thomson) comments as follows:

"In the interests of safety, the Zebra Pedestrian crossing should be removed immediately. Pedestrians should be encouraged to use the alternative crossing facilities. While it is acknowledged that this will be inconvenient to some of the users, safety must take priority."

Recommendation:

- 1. That the zebra pedestrian crossing on Riccarton Road 110 metres west of the Hansons Lane intersection be removed.
- 2. That an uncontrolled pedestrian crossing point be established 65 metres west of the Hansons Lane intersection.
- 3. That traffic improvements at the Riccarton Road/Main South Road/Yaldhurst Road intersection be evaluated as a subsidised safety work and given a priority listing for the next 5 year capital works programme.