7. BEALEY/FITZGERALD/LONDON TRAFFIC SIGNALS

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The purpose of this report is to obtain approval to seek the community views on a proposal to remark the lanes at the intersection and alter the phasing of the traffic signals. The report provides background to the project and discusses options that could improve safety and reduce delays at the intersection. This report recommends that the community view be sort regarding the proposal to remark the lanes and alter the phasing at the above intersection.

BACKGROUND

Bealey Avenue and Fitzgerald Avenue are both major arterial roads forming part of an extended ring road system to bypass the city centre. Bealey Avenue currently carries around 22,300 vehicles per day and Fitzgerald Avenue carries around 21,500 vehicles per day.

Together with Whitmore Street, they also link the north and eastern parts of the city with the CBD. Whitmore Street is a minor arterial route while London Street is a local road. Whitmore Street carries around 21,600 vehicles per day.

Cycle and pedestrian activity at the intersection is minor. There are two bus routes, the Queenspark (70) and Kianga (48) services which travel through the intersection from the city via Fitzgerald Avenue and Whitmore Street.

Safety issues have been an important consideration at this intersection. 33 crashes have been reported at the intersection between 1997 and 2001. Of these crashes, 13 involved minor injuries and 20 were recorded as non-injury accidents. The most regular problem (16) involved vehicles turning right from Whitmore Street into Bealey Avenue colliding with straight through northbound vehicles on Fitzgerald Avenue. A recently emerging problem appears to be northbound vehicles on Fitzgerald Avenue colliding with vehicles in front of them. This information reflects the problems that are being experienced with the lane layout at the traffic signals.

DISCUSSION

The crashes at the intersection appear to result from poor geometry on the approach to the right turn bay on Fitzgerald Avenue, poor visibility from the right turn bay on Whitmore Street to through vehicles on Fitzgerald Avenue and confusion as to the intensions of vehicles approaching the intersection on Fitzgerald Avenue for both right turning vehicles from Whitmore Street and following vehicles on Fitzgerald Avenue.

Two options were considered suitable from previous crash reduction study workshops:

- Option one included altering and extending the right turn bay on Fitzgerald Avenue to allow better access to it, the removal of two trees on the median to improve visibility for right turn vehicles on Whitmore Street, lengthening and marking chevrons on the approach to the splitter island on Fitzgerald Avenue at the free left turn lane, and improve the lane delineation.

- The second option (see plan attached), which is the one that has been adopted, provides a separate signal phase for the two dedicated right turn lanes from Whitmore Street, the left turn from Fitzgerald to Bealey Avenue has a 'Give Way' control and improved cycle and pedestrian facilities are proposed.

The adopted option with the two dedicated right turn lanes does not require the removal of any trees from the median and does not increase traffic delay. At present the southbound lanes in Whitmore Street are configured with a right turn lane, two straight through lanes and a left turn lane. The discharge into Bealey Avenue has been reduced from three to two lanes to provide a cycle facility and it reverts to the three lanes to the west of Churchill Street. Because of the dedicated right turn phase this will not reduce the capacity along this section of Bealey Avenue.

The proposal that has been adopted requires the removal of on-street parking on the east side of Whitmore Street for an additional 50 metres. There will also be the removal of an additional 80 metres of on-street parking on the west side of Fitzgerald Avenue.

The 'Give Way' control for left turning traffic from Fitzgerald Avenue into Bealey Avenue will improve safety without increasing delays. Chevron markings alongside the median will reduce lane widths and will give better guidance to southbound vehicles.

The cycle lanes through the intersection will provide a better facility. It is proposed that they will be coloured red.

CONCLUSION

The proposed improvements to the traffic signals will remove opposing traffic for right turning vehicles on Whitmore Street and north bound vehicles on Fitzgerald Avenue. The changes improve safety for left turning vehicles on Fitzgerald Avenue. Motorists making this turn will face a 'Give Way' sign. Cycle lanes will be included on all approaches to the intersection. The project will also include realignment of the pedestrian crosswalks to reduce the length of roadway to be crossed and place the pedestrians in a more prominent position to improve visibility for turning motorists.

The proposed new lane configurations will improve traffic flow through this major junction and improve safety for all road users.

Staff Recommendation:

1. That consultation be undertaken with those property owners who will be effected by the removal of on-street parking.

2. That the community be advised of the proposed changes to the lane marking and traffic signal phasing at the Bealey Avenue/Fitzgerald Avenue/Whitmore Street intersection.

Chairman's Recommendation: That the above recommendation be adopted.