

9. PAPANUI ROAD RIGHT TURN SIGNAL REQUEST AT BEALEY AVENUE/PAPANUI ROAD/ VICTORIA STREET INTERSECTION

General Manager responsible:	General Manager, City Environment Group, DDI 941-8608
Officer responsible:	Unit Manager, Transport and Greenspace
Author:	Sean Lewis, Traffic Systems Team Leader

PURPOSE OF REPORT

1. At the Fendalton/Waimairi Community Board meeting on 30 April 2012, the following request was made: *"...the Board decided to request staff to investigate the feasibility of a right hand turn arrow at the Papanui Road/Bealey Avenue intersection to alleviate traffic congestion during peak times, and that this report be presented to the 12 June 2012 meeting."*
2. The purpose of this report is to present to the Board the expected effects of installing this right turn signal, to highlight the on-street work which will be required, and to seek a recommendation to the Council on this matter.
3. This report will also be considered by the Hagley/Ferrymead Community Board on 1 August 2012, and a joint report will be presented to the Council, as this intersection is on the boundary of the two wards.

EXECUTIVE SUMMARY

4. Following the February 2011 earthquakes, there has been a steady increase in the volume of vehicles making a right turn from Papanui Road onto Bealey Avenue towards Riccarton. Pre-quake, staff had been resistant to installing right turn signals (green arrows) for Papanui Road because of the low traffic volumes and the inefficiencies associated with green arrows. With the changed travel patterns, and demands at this intersection, staff are now supportive of the installation of these right turn signals.
5. Installing green arrows requires time to be taken away from other green-time allocated at the intersection. This requires a conscious decision to remove green-time from each of the other approaches to the intersection, or to choose a specific approach to be disadvantaged.
6. It is not possible to reduce the green time given to Bealey Avenue, as this is a co-ordinated corridor, and the effects of reducing this green-time would impact the entire length of Bealey Avenue, and further. In this case, staff have made a conscious decision to reduce the green-time allocated to traffic exiting Victoria Street at Bealey Avenue. All modelling data presented is made with this assumption.
7. The modelling results show an increase in the average wait time for vehicles exiting Victoria Street at this intersection. This increase in average delays across the modelled time periods shows a general increase in average delays per vehicles of 40 seconds in the AM peak, 10 seconds in the interpeak period, and 75 seconds in the PM peak. **Attachment 1** has the modelled Levels Of Service (LOS) results per period.
8. If there is no change to the traffic volumes on Victoria Street, there will be longer delays for vehicles exiting Victoria Street at Bealey Avenue. It is expected that some drivers will avoid this approach to the intersection, preferring to use Montreal Street through to Bealey Avenue instead. This will reduce the demand at this approach, therefore reducing the delays experienced.
9. As part of the project, temporary signage will be erected at the Montreal Street approach to Victoria Street warning of the potential delays, and advising the recommended route.
10. This proposal requires the Bealey Avenue pedestrian crossing facilities to be split, creating what is called a staggered-crossing. Separate green-man time is given to crossing each half of the road. This makes the crossing safer for pedestrians, as they will have a facility in the centre median to stop and rest. The proposed new layout is shown in **Attachment 2**.

11. There will be more opportunities in each signal-cycle for pedestrians to cross these split sections of Bealey Avenue as pedestrians will be able to cross the shorter sections during several different signal phases. To permit these additional crossing opportunities, U-turns on Bealey Avenue will have to be banned.
12. Care will be taken to ensure that work performed while improving the waiting areas in the centre median will be done without harming the protected trees.

FINANCIAL IMPLICATIONS

13. The estimated costs of installing the right turn signals, and associated roading and street-light works is estimated to be \$160,000.

Do the Recommendations of this Report Align with 2009-19 LTCCP budgets?

14. The installation or removal of road markings, signs, and traffic signals is within the LTCCP Streets and Transport Operational Budgets, and would be programmed to be completed in the 2012/2013 financial year.

LEGAL CONSIDERATIONS

15. Subject to the Local Government Act 1974 and 2002. Subject to the Land Transport Rule 54002, Traffic Control Devices.
16. The Community Boards do not have the delegated authority from the Council to make alterations to traffic control facilities on an arterial road. Therefore, the Community Board must make a recommendation to the Council.

Have you considered the legal implications of the issue under consideration?

17. As above.

ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

18. Aligns with the Streets and Transport activities by contributing to the Council's Community Outcomes - Safety and Community.
19. The down-grading of the attractiveness of Victoria Street as a traffic through-route from Montreal Street to Bealey Avenue is in accordance with the 'Main Street' ambitions of the Draft Central City Plan.

Do the recommendations of this report support a level of service or project in the 2009-19 LTCCP?

20. As above.

ALIGNMENT WITH STRATEGIES

21. The recommendations align with the Council Strategies including the Pedestrian Strategy 2001, Road Safety Strategy 2004 and the Safer Christchurch Strategy 2005.

Do the recommendations align with the Council's strategies?

22. As above.

CONSULTATION FULFILMENT

23. As the improvements are network wide, and of minimal local effect, no consultation has been undertaken.

STAFF RECOMMENDATION

It is recommended that the Fendalton/Waimairi Community Board recommend that the Council approve:

- (a) That the pedestrian crossing facilities across Bealey Avenue at the intersection of Papanui Road and Victoria Street are realigned (refer **Attachment 2**).
- (b) That the U-turning of vehicles travelling east or west on Bealey Avenue at its intersection with Papanui Road and Victoria Street, be banned.

Both of these recommendations are required to ensure the green arrows for Papanui Road can be safely installed.