

5. PATTEN STREET SAFETY ISSUES

General Manager responsible:	General Manager City Environment
Officer responsible:	Transport and City Streets Manager
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PURPOSE OF REPORT

1. The purpose of this report is in response to a petition received by the Hagley/Ferrymead Community Board 9 March 2005 meeting concerning road safety issues.

EXECUTIVE SUMMARY

2. A resident of Patten Street presented a petition signed by 24 people identifying the following areas of concern:
 - (a) The speed of traffic.
 - (b) The street is used as a through route and has heavy traffic volumes. The street is used by cyclists, buses and is on a school route.
 - (c) The deep gutters mean drivers park further out onto the road.
 - (d) There is no centre line on the road.
3. Following the meeting the Board requested a report from the Transport and City Streets Unit outlining:
 - (a) Current traffic volume statistics.
 - (b) Current accident statistics.
 - (c) Measures that can be undertaken on the kerb and channel in the interim.
 - (d) When reconstruction on the street is due to be completed.

Investigation

4. Patten Street is a local road 476 metres long with an 11.1 metre wide carriageway connecting Retreat Road to Woodham Road.
5. Cowlshaw Street runs off to the west to connect with Avonside Drive. A 7 day 24 hour traffic and speed survey was conducted from Monday 13 June to Sunday 12 June 2005, with the following results.

Traffic Flows

6. Average 7 day Traffic Flow = 1260 vehicles.
7. The City Plan Appendix 2 section 8/51 paragraph 6 provides a method of determining the typical-daily flows on local roads based on the number of household units. Each household unit is deemed to generate 10 vehicle movements per day.
8. There are 56 residential properties on Patten Street and 69 on Cowlshaw Street. If 50% of residents from Cowlshaw Street used Patten Street for direct access it could then be estimated that traffic generated by the occupiers of these two streets would be as follows.
$$(56 + \frac{1}{2} \times 69) \times 10 \text{ vehicle movements} = 905$$
9. This means approximately 360 on 30% vehicles are cut through.
10. Traffic counts have been undertaken for 371 Local Roads in Christchurch. The volumes range between 97 and 7,800 vehicles per day. Over 134 Local Roads have traffic volumes greater than Patten Street.

Traffic Speeds

11. Traffic Speeds were determined simultaneously with the traffic volumes.

85% speed (km/h)	54
AVERAGE SPEED KM/H	45
% exceeding 50km/h	30
% Exceeding 60km/h	4

12. The recorded speeds for these streets are at the low end of the scale for the average local Christchurch Street.

Vehicle classification

13. The 7 day vehicle count can differentiate between class of vehicle travelling down the road.
14. When the buses are excluded from the count insignificant numbers of heavy vehicles are recorded.

Avonside LATMS

15. The Local Area Traffic Management Scheme for Avonside was prepared in 1995. The following features for Patten Street were recorded:
 - (a) The No 11 city to Dallington bus service travels down Patten Street.
 - (b) Realignment of the intersections of Patten Street with Retreat Road and Woodham Road, to slow the speed of vehicles entering the street because Patten Street is part of a bus route speed humps cannot be incorporated as part of the realignment.

Traffic Safety

16. Land Transport New Zealand provides precise details of the location for all reported crashes on Christchurch roads. There have been no crashes recorded along Patten Street in the period 2000-2005. However, there was one minor injury crash in 2003 at the intersection of Patten Street with Retreat Road.

Project Assessment

17. Issues identified during the preparation of the Avonside LATMS have been addressed. However, the Council receives many applications to address safety or speeding on city roads. Resolution of these problems invariably requires capital funding. Because funding for these projects is very limited, it is critical that the Council spends money in the most cost effective manner in the locations where the greatest benefits can be obtained.
18. For this reason, a prioritisation process has been adopted by the Council to rank the projects. This is independent of capital requirements. New projects are rated against eight factors giving a score out of 100. The factors are weighted to reflect the severity of the situation ie traffic speed and volume account for 45% of the final score.
19. New projects are then entered onto the list of existing Neighbourhood Improvement Works projects with placement determined by the rating score.
20. The score obtained for Patten Street is 32 points.
21. Projects achieving a total rating of less than 40:
 - (a) Indicates that the work is of a low priority.
 - (b) Not shown schematically on LATMS.
 - (c) Project is reassessed within 10 years.
22. In this instance this street does not currently warrant further consideration for traffic calming.

Engineering Solutions

23. The above assessment system is used citywide to determine if there is a case for retrofitting traffic calming devices to address speeding, shortcutting or safety. In this instance there is not a proven case.
24. Speeding, short cutting and safety are all within acceptable limits.
25. Thresholds at either end of Patten Street have been constructed and these have proven to be effective for reducing cornering speeds and short cutting of traffic.
26. Any further engineering changes would also need to be bus friendly.
27. Patten Street will eventually be reconstructed but it is not on the five year programme for renewal.
28. At the appropriate time, the community will be involved in developing innovative solutions, which could enhance further the character of this street and accommodate additional safety features.

29. Centre lines have been considered but they are only installed on Local Roads if there are significant bends.

STAFF RECOMMENDATIONS

It is recommended:

- (a) That the petition submitters be thanked for their presentation, and be informed of the report's findings.
- (b) That no further action be taken.

CHAIRPERSON'S RECOMMENDATION

For discussion.