

9. LINWOOD AVENUE/WORCESTER STREET INTERSECTION DESIGN

General Manager responsible:	General Manager City Environment, DDI 941 8608
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PURPOSE OF REPORT

1. This report is in response to a request from the Hagley/Ferrymead Community Board about the Linwood Avenue/Worcester Street intersection design, if it can be reopened and to review the traffic function of Worcester Street regarding traffic flow from Cathedral Square to Linwood Avenue.

EXECUTIVE SUMMARY

2. The Linwood Avenue/Worcester Street intersection is effectively two 'T' intersections in close proximity to one another, with one leg of the Worcester Street intersection at an acute angle, thus the alignment of the junction is such that it has necessitated the right turn out of the Worcester Street to be prohibited. Worcester Street is classified as a Local Road in the City Plan and Linwood Road as a Major Arterial Road. This classification is reflected in the traffic volumes on the two roads, viz; Worcester Street at present carries some 3,000 vehicles per day (vpd) and Linwood Avenue over 10,000 vpd.
3. The Council reconstructed the intersection in 1982 and at that time it also addressed the issues with regard to the junction of Olliviers Road onto Worcester Street and this junction was given a threshold treatment to further discourage its use by traffic. These works were designed to simplify this complex junction. Since that time, further improvements were made for pedestrians and some minor changes to the traffic islands to further discourage through vehicles on Worcester Street from passing through the intersection. The original concerns which were apparent at the junction and necessitated the original improvements are best illustrated in **table 1** below which lists the number of incidents:

Table 1. Show the Number of Reported Incidents

<u>Period</u>	<u>Number of crossing incidents</u>	<u>Number of other incidents***</u>
1981-83 *	5	3
1984-86	1	3
1987-89	5	2
1990-92	6	10
1993-95	9	6
1996-98**	5	5
1999-2001	-	2
2002-04	-	3
2005-07	-	4
2008-10	-	5

Note: * In 84 the first improvements were made
 ** In 98 the second improvements were made
 *** Incidents include all reported incidents but prior to 1988 most of the results involved injury

The table shows that the number of vehicle crossing incidents on Worcester Street has been addressed. While, there has been a smaller reduction in the other incidents around the intersection, there is no particular pattern to these events but alcohol, speed, inattention and failure to 'give way' are issues which are common to many of the events.

4. Traffic volume conditions in Worcester Street have varied little since records at the junction have been kept. The table below shows the results from a counting station on Worcester Street to the east of Fitzgerald Avenue and are shown in **table 2** below.

Table 2 Seven Day Traffic Counts on Worcester Street

<u>Period</u>	<u>Vehicles per Day</u>
2000	3616
2003	3751
2006	3703
2009*	3041

Note: * Latimer Square Closed to Through Traffic

5. Apart, from an issue with some larger two axle trucks experiencing difficulty in negotiating the junction (many similar large vehicles are also precluded from much of the central city), there are further issues with encouraging greater use of Worcester Street. These are highlighted as follows:
 - (a) It would generate additional traffic movements through a residential area.
 - (b) Encouraging more traffic movements along Worcester Street is likely to require the introduction of additional traffic signals along this route at Linwood Avenue and Woodham Road junctions resulting in additional operating cost and extra capital costs on the Council.
 - (c) Part of Worcester Street between Fitzgerald Avenue and Linwood Avenue has been already reconstructed with wider berms reflecting the both the residential character of the locality and its local road traffic function.
 - (d) Encouraging more traffic movements along Worcester Street is likely to require an alternative intersection layout at its intersection with Linwood Avenue to overcome the issues with the alignment of Worcester Street.
6. Given the above staff are of the opinion that no changes should be made to the junction of Worcester Street and Linwood Avenue and that Worcester Street should continue to operate as a local road with no works being undertaken that would increase traffic volumes.

FINANCIAL IMPLICATIONS

7. The Council, because of costs, safety and providing a range of living environments follows a roading hierarchy which is detailed in the City Plan. Worcester Street is classified as a local road similar to Olliviers Road. Both roads have controls placed on them to restrict traffic which reflects their situation and the complex nature of the junction. The controls that are currently in place to either restrict traffic or to improve safety and provide different types of residential environments are appropriate. To depart from the existing situation will introduce significant costs.
8. No funds have been set aside in the LTCCP budgets to provide any specific improvements to the junction of Worcester Street and Linwood Avenue or to significantly change the nature and operation of Worcester Street.

LEGAL CONSIDERATIONS

9. There are no changes proposed and therefore as no changes are proposed, there are no legal implications.

ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

10. No changes are proposed and therefore there are as there are no changes to the existing character of the roads the function of the road is consistent with Council practices.

ALIGNMENT WITH STRATEGIES

11. The function of Worcester Street is consistent with Councils current strategies and the City Plan.

CONSULTATION FULFILMENT

12. Not required.

STAFF RECOMMENDATION

It is recommended that the Hagley/Ferrymead Community Board receive the report.

CHAIRPERSON'S RECOMMENDATION

For discussion.