

8. BLIGHS ROAD: VARIABLE SPEED LIMIT



General Manager responsible:	General Manager City Environment, DDI 941-8656
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PURPOSE OF REPORT

1. The purpose of this report is to recommend that the Council approve a new variable speed limit and include it in the Christchurch City Speed Limits Register.

EXECUTIVE SUMMARY

2. The Council has a programme of installing 40 km/h variable speed limits (known as "school zones") outside schools according to a prioritisation process. To date 17 schools have benefited from this treatment. A further school, Waimairi Primary School on Tillman Avenue, has been selected as a school that would benefit from having a 40/50 km/h variable speed limit installed. One "school zone" is required for the school on Blighs Road. The "school zone" will operate on school days, for no more than forty-five minutes in the morning at a time between 8am and 9am and for no more than 45 minutes in the afternoon at a time between 2.30pm and 3.30pm.
3. Now that the Council has adopted the Christchurch City Council Speed Limits Bylaw 2005, it can resolve to make these new variable speed limits. Accordingly infrastructure for these variable speed limits cannot be commissioned until they have been formally approved by the Council.

FINANCIAL IMPLICATIONS

4. The funding for the current round of school zones will effectively be managed from the 2007/08 budget. Estimated costs currently stand at \$30,000 for this new school zone.

Do the Recommendations of this Report Align with 2006-16 LTCCP budgets?

5. The recommendations of this report align with 2006-16 LTCCP budgets.

LEGAL CONSIDERATIONS

6. The proposed variable speed limit complies with the conditions specified and published by the Director of Land Transport New Zealand in the *New Zealand Gazette* (2/6/2005, No. 86, p. 2051) approving a variable speed limit of 40 km/h in school zones and setting out conditions for those speed limits.

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

7. A Council resolution is required to implement the speed limit restrictions and traffic management changes.

ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

8. This report's recommendations support the project objectives as outlined in the 2006-16 LTCCP.

Do the recommendations of this report support a level of service or project in the 2006-16 LTCCP?

9. This project aligns with the Transport and Greenspace Unit's Our Community Plan 2006-2016.

A Well Governed City
Consistent - the consultation process created an opportunity for community input.

A Safe City
Consistent - improvement in vehicle and pedestrian safety

ALIGNMENT WITH STRATEGIES

10. This project is consistent with key Council strategies including the Road Safety Strategy, Pedestrian Strategy and Safe Routes to School Strategy.

Do the recommendations align with the Council's strategies?

11. The recommendations align with the following strategies:

CCC Pedestrian Strategy 1999 and 2001
Christchurch Road Safety Strategy 2004
Pedestrian Strategy 2001

CONSULTATION FULFILMENT

12. The Waimairi School's Board of Trustees have been informed in writing of the proposed variable speed limits and have expressed support in writing of the installation of variable speed limits at their school. Information newsletters have been made available to all the families of children attending the schools. Property owners and residents have received a newsletter about the signage to be installed outside their properties; these properties have also been visited, and given a minimum of 14 days to make submissions about these. The written submissions received from property owners and residents in response to the newsletter are set out in Attachment 1. No submissions requiring actions needing to be addressed were received.
13. Before the Council can set a variable speed limit pursuant to Clause 5(1) of the Christchurch City Speed Limits Bylaw 2005, the public consultation requirements set out in Section 7.1 of the Land Transport Rule Setting of Speed Limits 2003 Rule 54001 must be complied with. Section 7.1(2) provides that the persons that must be consulted before the Council sets a speed limit are:
 - (a) road controlling authorities that are responsible for roads that join, or are near, the road on which the speed limit is to be set or changed; and
 - (b) a territorial authority that is affected by the existing or proposed speed limit; and
 - (c) any local community that the road controlling authority considers to be affected by the proposed speed limit; and
 - (d) the Commissioner of Police, and
 - (e) the Chief Executive Officer of the New Zealand Automobile Association Incorporated, and
 - (f) the Chief Executive Officer of the Road Transport Forum New Zealand; and
 - (g) other organisation or road user group that the road controlling authority considers to be affected by the proposed speed limit; and
 - (h) The Director of Land Transport New Zealand.
14. Section 7.1(3) of the Rule provides: *A road controlling authority must consult by writing to the persons in 7.1(2) advising them of the proposed speed limit and giving them a reasonable time, which must be specified in the letter, to make submissions on the proposal.* In terms of Section 7.1(2)(a) and 7.1(2)(b) there are no road controlling authorities or territorial authorities that are required to be consulted in respect of any of the proposed variable speed limits.
15. The representatives of the Commissioner of Police, the Director of Land Transport New Zealand, the Chief Executive Officer of the New Zealand Automobile Association Incorporated and the Chief Executive Officer of the Road Transport Forum of New Zealand have received written advice of the proposed new variable speed limit in accordance with Section 7.1(2)(d), (e), (f) and (h). No other organisation or road user group is considered affected by the proposed speed limits. No neighbouring road controlling authority is affected. Support for the proposed variable speed limits has been received in writing from the New Zealand Police and from Land Transport New Zealand.

STAFF RECOMMENDATION

It is recommended:

- (a) That the Council agree that it is satisfied that the consultation undertaken by the Council in respect of the proposals to set the new variable speed limit of 40 km/h specified below meets the requirements of Section 7.1 of the Land Transport Setting of Speed Limits Rule 2003.
- (b) That pursuant to Clause 5(1) of the Christchurch City Speed Limits Bylaw 2005 a variable speed limit of 40 km/h apply on Blighs Road, outside Tillman Avenue, 205 metres long commencing at a point 20 metres south-west from the intersection of Condell Avenue and extending in a north-easterly direction to a point 20 metres north-east from the intersection of Windermere Street.
- (c) That the steady state LED display 40 km/h legend in the variable speed limit sign be illuminated on any school day during the following times:
 - (i) 35 minutes before the start of school until the start of school, and
 - (ii) 20 minutes at the end of school, beginning no earlier than five minutes before the end of school; and
 - (iii) 10 minutes at any other time when at least 50 children cross the road or enter or leave vehicles at the roadside.
- (d) That the abovementioned variable speed limits come into force on the date of adoption of this resolution.

BACKGROUND ON THE WAIMAIRI SCHOOL SPEED ZONE

16. The proposed school speed zone will be installed as part of a proposal that involves the full reconstruction of Blighs Road between Papanui Road and Idris Road, undergrounding of overhead services and upgrading of street lighting. This work was approved for tender and construction by the Council at its meeting on 18 December 2006.

THE OBJECTIVES

17. The objectives of a school zone are to:
- (a) Slow approaching motorists, who are driving too fast for the conditions (pedestrians hit by a vehicle travelling at 70 km/hr have a 95 % risk of death, whereas this risk decreases dramatically at lower speeds ie 5% risk at 30 km/hr).
 - (b) Raise awareness of the approaching motorist (a motorist, in an alert state, can potentially react up to 1 second faster than, when not in an alert state. For example, at 65 km/hr, vehicles are travelling at 18 metres per second-a distance that may be critical to saving a pedestrian casualty).
 - (c) Creating a safer environment for children, needing to cross a roadway at the school.
18. There is a need to establish a set of selection criteria so that each school can be compared and prioritised. The criteria have been established as:

Road Environment

19. Issues to be addressed are land use, road engineering, approach visibility, traffic growth potential, and urban fringe and alignment issues. Sites are scored according to the following, where zero is considered an ideal environment, and ranging to four being considered a difficult road environment.
20. An example of an ideal road environment can be:
- (a) A roadway with good approach visibility ie visibility not obstructed by horizontal or vertical alignment changes.
 - (b) Zero distractions created by advertising clutter on the roadside.
 - (c) No land uses which generate activity such as entering or exiting traffic from sites or heavy parking demand, not associated with the school.
21. Where the ideal road environment does not exist, school frontage roads will be assessed for a school zone, based on the following scoring rationale:
- 0 = ideal road environment
 - 1 = low level of distractions, low level of other land use traffic generation, and average approach visibility.
 - 2 = medium level of distractions, medium level of other land use traffic generation, and low approach visibility
 - 3 = high level of distractions, high level of other land use traffic generation. And poor approach visibility
 - 4 = Very high level of distractions, very high level of other land use traffic generation, and very poor approach visibility.
22. While it may be debated that an ideal road environment, is conducive to a higher speed environment, and therefore should be scored high, rather than low, the ideal road environment reduces the potential for approaching vehicles, to be operated by unaware motorists. The scoring for other criteria accounts for speed and other issues. Waimairi School scored four in this category.

Kerbside Activity

23. Consideration of activity outside the school:

0 = A minimal problem.

1 = low/median activity, ie activity is similar to surrounding land use parking activity.

2 = full demand ie all available kerbside occupied.

3 = full demand with some parking disturbance ie double parking, reversing.

4 = a situation of chronic parking congestion and manoeuvring. Roadway may effectively be narrowed to one lane.

24. The degree of parking activity may create a situation whereby the approaching motorist is distracted by this activity. Children may attempt crossing the roadway by walking out, between parked cars. Double parking further compromises the inter visibility, by the physical obstruction to sight lines. While not a desirable activity, the reality is that children may be on the roadway, when getting into/out of cars, on the driver's (road side) of the vehicle. Waimairi School scored three in this category.

Number of Heavy Vehicles (Trucks, Buses etc)

25. Assessment of the number of heavy vehicles passing the school gate were:

0 = virtually none

1 = low

2 = low/medium

3 = medium/high

4 = very high

26. Where heavy vehicles are present, the potential risk to child safety increases. There have been a number of child fatalities where the child has collided with a heavy vehicle. While the vehicle operator is not necessarily at fault, the fact is that, heavy vehicles are unforgiving, when colliding with a person. Waimairi School scored three in this category.

Cyclists

27. Assessment of cyclist activity within the zones, where:

0 = indicates very few cyclists

1 = low level

2 = medium level

3 = high level

4 = very high level, at locations with Intermediate / Secondary schools adjacent

28. Where a greater number of cyclists occur, travelling to and from school, children tend to bunch (riding two, sometimes, three abreast). Also, in greater numbers, the probability of unexpected manoeuvres (sudden changes of direction/road crossings etc), can increase. Waimairi School scored two in this category.

Motor Vehicle Operating Speeds

29. Assessment of the 85th percentile speed of vehicles at the school crossing at peak times, where:

0 = below 45 km/h school zone not warranted below 45 km/h in L.T.S.A. Note 37.

1 = 45-49 km/h

2 = 50-54 km/h

3 = 55-60 km/h

4 = 60-69 km/h

5 = 70-79 km/h

6 = 80 km/h, and above

30. The stopping distance increases exponentially, with an increase in vehicle speed. This creates a potential safety risk to the cyclist or pedestrian, as identified in the opening statement of objectives, and the comment relating to alertness /reaction time. Waimairi School scored two in this category.

Motor Vehicle Volume

31. Assessment of the average daily total, where:

0 = below 3,000 vehicles
1 = 3,000-4,000 vehicles
2 = 4,000-6,000 vehicles
3 = 6,000-8,000 vehicles
4 = 8,000+ vehicles

32. In Christchurch, the traffic volume during the morning peak traffic hour, when school children are arriving at school, is typically 10% of the daily traffic volume. For example, a road with 6,000 vehicles per day, will have about 600 vehicles per peak morning hour, or one vehicle every six seconds, on average, passing the school when children are arriving. These volume rates give an indication of the level of road use activity at the critical time and the relative difficulty of gap selection etc. Waimairi School scored four in this category.

Level of Crossing Activity

33. Assessment of school related road crossing activity, numbers and duration, where:

0 = usually zero pedestrians ie dropped off by car or do not need to cross the roadway.
1 = low 1-19 school pedestrians
2 = medium 20-50 school pedestrians
3 = high above 50 school pedestrians

34. Where there is relatively low activity, school staff can generally manage children crossing the roadway. Waimairi School scored three in this category.

Road Status

35. Assessment of the road network classifications, where:

1 = Local
2 = Collector
3 = Minor Arterial
4 = Major Arterial

36. The status of the road provides an indication of the general awareness of passing motorists. For example, a local road generally has motorists who live locally with a high awareness of the road environment outside the school. A major arterial road may have a significant number of motorists passing, who are on a longer journey, with no local knowledge of the road environment. Waimairi School scored three in this category.

Community Interest

37. An issue to be addressed is the level of community involvement and sensitivity, where a score of zero indicates no community concern raised to Council, to a score of 4 which reflects substantial community lobbying, ie political involvement and meetings held. Waimairi School scored three in this category.

THE OPTIONS

Option 1

38. There are two options; the preferred option is to install a temporary 40 kph speed limit using electronic and static signage that operates during the daily opening and closing periods of Waimairi School.

Option 2

39. Maintain the status quo and do nothing.

ASSESSMENT OF OPTIONS

The Preferred Option

40. Waimairi School using the above criteria ranks third in the present school prioritisation. As this section of Blighs Road about to be reconstructed it has been deemed prudent by Council staff to install the Waimairi School zone as part of the reconstruction to prevent the digging up of newly sealed footpaths in the near future and to save costs.

	Benefits (current and future)	Costs (current and future)
Social	Improved pedestrian safety for school children.	Nil.
Cultural	Nil.	Nil.
Environmental	Nil.	Additional roadside signage.
Economic	Nil	Capital expenditure and maintenance.

Extent to which community outcomes are achieved:

Primary alignment with community outcome *“Our City provides a choice of housing, easy mobility and access to open spaces, and a range of utilities that allow people to enjoy an acceptable quality of life”* by providing a safe transportation network.

Impact on the Council’s capacity and responsibilities:

No impact

Effects on Maori:

It is considered that there are no effects on Maori.

Consistency with existing Council policies:

Consistent with the Road Safety Strategy particularly in respect to designing and managing roads with appropriate speed environments and providing safe facilities for pedestrians.

Views and preferences of persons affected or likely to have an interest:

All affected parties have been contacted and all responses indicated support of the proposal.

Other relevant matters:

Nil.

Maintain the Status Quo

41. Maintaining the status quo or doing nothing will achieve nothing for the community. The Waimairi School has requested that something be done to lower vehicle speeds on this section of Blighs Road when school children are crossing the road. To do nothing will maintain a possibly hazardous situation.

	Benefits (current and future)	Costs (current and future)
Social	Nil	Potential for pedestrian crossing crashes with time.
Cultural	Nil	Nil
Environmental	Nil	Nil
Economic	No capital expenditure or on going maintenance costs.	Nil

Extent to which community outcomes are achieved:

Maintaining the status quo is not aligned to any Community Outcomes.

Impact on Council's capacity and responsibilities:

No impact

Effects on Maori:

It is considered that there are no effects on Maori.

Consistency with existing Council policies:

Maintaining the status quo is not consistent with the Road Safety Strategy or the CCC Financial Plan and Programme 2004 and conflicts with the objectives of the asset management plan.

Views and preferences of persons affected or likely to have an interest:

Given that feedback in support was received for the option distributed for public consultation it is considered that there is some support for not maintaining the status quo.

Other relevant matters:

Nil.