

## 7. ROAD SAFETY COORDINATING COMMITTEE - SCHOOL ZONES SELECTION AND PRIORITISATION PROCESS

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The purpose of this report is to advise the recommendations of the Road Safety Coordinating Subcommittee in respect to the process by which three School Zones have been identified as candidates for installation, in the 2003/04 financial year, for electronic 40 km/h speed signs. The report as detailed below was considered by the Road Safety Coordinating Subcommittee at its meeting on 14 May 2003 and its recommendations are detailed below.

### BACKGROUND

A School Zone consists of flashing red/orange electronic signs and static fluorescent yellow/green warning signs. The 40 km/h electronic signs are positioned on each approach to the School Zone on the road outside the school(s). They operate at the beginning and the end of the school day, and require motorists to reduce their speed to 40 km/h. They seek to reduce the speed of motorists at times when children are travelling to and from school and reinforce motorists' awareness of the surrounding road environment and the importance of driving appropriately and considerately in the vicinity of schools.

Electronic signs are one of a number of traffic control devices designed to improve the safety of children. It is hoped that eventually 40 km per hour will become a standard outside all schools.

### PROCESS

There are 153 schools in Christchurch. Each school, including those who already have School Zones, was scored according to nine factors. These factors were:

1. The Road Environment

Issues considered included the visibility for approaching motorists; the level of activity generated by the school and by adjacent land uses; and the amount of congestion outside the school.

2. Community Interest

The amount of concern about the safety of children going to and from school that has been raised with the Council was considered.

3. Kerbside Activity

The amount of parking activity outside the school was considered.

4. Volume of Trucks

The percentage of trucks in the traffic stream passing the school was considered.

5. Cyclist Activity

The number of cyclists riding to the school was considered.

6. Operating Speed

The speed of vehicles passing the school at peak crossing times was considered. The LTSA Traffic Note 37 states that School Zones are not warranted where operating speeds are below 45 km/h.

7. Traffic Volume

The average daily total of vehicles passing the school was considered. Typically the traffic volume during the morning peak traffic hour, when children are arriving at school, is 10% of the daily traffic volume.

## 8. Road Crossing Activity

An assessment of school related road crossing activity numbers and duration was made. The LTSA Traffic Note 37 states that a school does not warrant a School Zone unless there are at least 50 school children crossing the roadway at school arrival and leaving times.

## 9. Road Status

The road network classification of the road outside the school's main entrance was considered. A local road is likely to be used by motorists who live locally and are aware of the road environment outside the school, whereas motorists using an arterial road may be passing through on a longer journey and have little or no knowledge of the road environment in the vicinity of the school.

Each factor was rated one to four, where one indicated minor activity and four indicated a significant problem. This scoring system identified 48 schools with scores of 21 and above and included the schools that already have School Zones. The inclusion of these schools gave assurance of the validity of the process.

Schools with existing School Zones, schools with traffic signals and schools where there has been significant redesign of the road to assist cyclists and pedestrians, were removed from the list of potential School Zone candidates. As a result of this process 20 zone candidates remained. Of these, Chisnallwood Intermediate/Avondale School on Breezes Road scored significantly higher than the other 19.

The scoring process did not clearly differentiate between the remaining 19 candidates for School Zones, and would require further refinement. To assist with the selection process, crash analysis by the Land Transport Safety Authority was carried out on these 19 School Zone candidates. All crashes occurring in school peak times, morning and afternoon, cyclists and pedestrian crashes involving children 5 to 17 years, occurring at school peak times, and crashes at school peak times where speed was considered a factor, were analysed. This further reduced the candidates to nine School Zones.

As stated above Breezes Road at Chisnallwood/Avondale was clearly identified as having priority for a School Zone.

The other nine School Zone candidates selected were considered to be of equal priority. Out of these nine School Zones Breezes Road at Aranui Primary/Aranui High and Innes Road at Our Lady of Fatima School/Mairehau Primary were selected because of:

- A very high community concern regarding the safety of children on these roads.
- Two schools will benefit from the implementation of the School Zone.
- Each road has had recent fatal accidents during school peak times near the school.
- Alternative traffic management or safety remedial works at these sites are not practical.

Only these two School Zones have all four of these factors.

Further in-depth analysis will be undertaken to gain a more precise ranking for the remaining 7 School Zones, along with any other sites that may emerge for consideration.

### **Recommendation:**

1. That School Zones be established in the 2003/04 financial year on:
  - Breezes Road at Chisnallwood Intermediate/Avondale School,
  - Breezes Road at Aranui Primary/Aranui High,
  - Innes Road at Our Lady of Fatima School/Mairehau Primary.
2. That the remaining School Zones proposed be subject to further analysis to prioritise them for inclusion in the capital works programme in the following financial years.
3. That staff report in due course to the Christchurch Road Safety Co-ordinating Committee on schools to be selected for implementation in later years.