School Speed Management Plan

August 2024



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1. Albury Primary School

Current Environment: Mt Nessing Rd 60kph 100kph from Queen St, Station St 60kph, Duke St 60kph (unsigned), Queen St 60kph (unsigned). 'school' warning signs on Mt Nessing Rd (2), Station St and Queen St

Proposed New Environment:

- Mount Nessing Rd: Remove 60/70kph sign and replace with new 30 + School Kura/70. Remove 60/100 sign and post. Install new 30 + School Kura/100 at the beginning of the bend.
- **Station St:** Remove 60/70 sign and post. Install new post at the end of the kerbed section with 30 + School Kura/70.
- **Queen St:** Remove existing School warning sign and replace with 30 + School Kura/60 on existing post.



2. Fairlie

Current Environment: Currently 50kph Streets past all of the schools. Crossing on School Road in front of Fairlie Primary School and a crossing on Kirke Street at the intersection of Kirke and Gall Street's.

Proposed New Environment:

- **School Road:** (Fairlie Primary School) 30 + School Kura/50 sign off State Highway 8 and towards the school past Martin Street.
- Hamilton Street: 30 + School Kura/50 sign off State Highway 8.
- Kirke Street: 30 + School Kura/50 sign off State Highway 8.
- Bank Street: Replace current school warning sign with 30 + School Kura/50 sign
- Gall Street, Taylor Street, Frayne Street & Gillingham Street: Enclosed within the 30kph zones from the above streets. These have no signage on them apart from the existing signage not being removed.



3. Lake Tekapo School

Current Environment: 50kph for Aorangi Crescent, currently have solar active warning signs in place.

Proposed New Environment:

• **Aorangi Crescent:** Replace active warning signs with 30 + School Kura/50 signs. Remove 50kph sign and post that is in the school 30 zone.



4. Twizel Area School

Current Environment: Mackenzie Drive and all side streets off it are 50 kph, including Mount Cook Street. Market Place West carpark is currently already a 30kph zone which is where the main entrance to the school is situated. Mackenzie Drive also has School warning signs outside the kindergarten and school crossing signs in place. Mount Cook Street has School Crossing signs in place. Tasman Street is a has 30kph signs which carries onto Mt Cook Street into Market Place West Carpark.

Proposed New Environment:

- Mackenzie Drive: New 30 + School Kura/50 sign at the end of the Long Vehicle Park. 30 + School Kura/50 to be installed on the existing School warning sign beyond Godley Street.
- Mount Cook Street: School Kura + Children sign to be installed in the existing 30kph zone at Tasman St end. New 30 + School Kura/50 sign installed at the Maryburn Road end of the Street.
- Godley Street, Tekapo Drive, Jollie Road: New 30 + School Kura/50 signs placed at the Mackenzie Drive end of these streets that intersect with school zone.
- **Nuns Veil Road:** Remove the 50/80 sign and replace it with a 30 + School Kura/80 on the existing post.
- Market Place West: School Kura placed on Mount Cook St carries through car park.

 New School Kura + children sign placed between the 2 carparks, this is already a 30kph zone so we do not need to display 30kph signs in this area.





5. Cannington Primary School

Current Environment: Cannington Road 100kph.

Proposed New Environment:

• **Cannington Road:** Install 2x 30 + School Kura/100 Signs at each more than 155m from school boundaries.



6. Schedules

6.1 Signs, Posts & Removals

	Posts				School / Kura + 30				Other*	Sign
	Exist.	New	Rem.	50	60	70	80	100	Other	Removal
Albury	2	2	2	-	1	2	-	1	-	4
Fairlie	1	4	-	5	-	-	-	-	-	1
Tekapo	2	0	1	2	-	-	-	-	-	3
Twizel	3	7	1	6	-	-	1	-	2	3
Cannington	0	2	0	-	-	-	-	2	-	0
Total	8	15	4	13	1	2	1	3	2	11

6.2 Albury

Road/Street	RP (m)	Sign	Status	Post	Note
Mt Nessing Road	109	60/70	Remove	Keep	
Mt Nessing Road	109	30+SK/70	New	Existing	
Mt Nessing Road	361	60/100	Remove	Remove	
Mt Nessing Road	514	30+SK/100	New	New	
Queen Street	256	School	Remove	Keep	
Queen Street	256	30+SK/60	New	Existing	
Station Street	20	60/70	Remove	Remove	
Station Street	35	30+SK/70	New	New	

6.3 Fairlie

Road/Street	RP (m)	Sign	Status	Post	Note
School Road	60	30+SK/50	New	New	
School Road	600	30+SK/50	New	New	
Bank Street	56	30+SK/50	New	Existing	
Bank Street	56	School	Remove	Keep	
Kirke Street	33	30+SK/50	New	New	
Hamilton Street	53	30+SK/50	New	New	

6.4 Tekapo

Road/Street	RP (m)	Sign	Status	Post	Note
Aorangi Crescent	49	Act. School	Remove	Keep	
Aorangi Crescent	49	30+SK/50	New	Existing	
Aorangi Crescent	236	50	Remove	Remove	
Aorangi Crescent	266	Act. School	Remove	Keep	
Aorangi Crescent	266	30+SK/50	New	Existing	

6.5 Twizel

Road/Street	RP (m) Sign	Status	Post	Note
Mackenzie Drive	965	30+SK/50	New	New	
Mackenzie Drive	1604	School	Remove	Existing	
Mackenzie Drive	1604	30+SK/50	New	Existing	
Mount Cook Street	420	AW School	New	New	
Mount Cook Street	367	50/30	Remove	Remove	
Mount Cook Street	50	30+SK/50	New	New	
Jollie Road	35	30+SK/50	New	New	
Nuns Veil Road	51	50/80	Remove	Keep	
Nuns Veil Road	51	30+SK/80	New	Existing	
Tekapo Drive	35	30+SK/50	New	New	
Godley Street	35	30+SK/50	New	New	
Market St West	133	AW School	New	New	

6.6 Cannington

Road/Street	RP (m)	Sign	Status	Post	Note	
Cannington Road	7485	30+SK/100	New	New		
Cannington Road	7920	30+SK/100	New	New		

7. References

https://www.nzta.govt.nz/assets/resources/traffic-control-devices-manual/docs/part-1-general-requirements.pdf

Warning signs

Warning signs should be located sufficiently in advance of an unusual or hazardous situation for a road user to react in an appropriate manner. Longitudinal distances in advance of the hazard are the same for both permanent and temporary warning signs.

The distance between the warning sign and the hazardous situation should be:

- the distance required to reduce (decelerate) the vehicle operating speed from the 85th percentile vehicle speed at the location of the sign to either the speed required at the situation or hazard which depending upon the hazard encountered, may require anything from a small speed reduction (eg a moderate curve) to a significant speed reduction (eg a sharp curve great than 90 degrees),
- to a stop, eg when the sign is an advance warning of the Stop or Give Way control
 at the next intersection.

Austroads *Guide to traffic management* part 10 states that the maximum distance between an advance warning sign and the hazard or decision point should generally not exceed the equivalent of approximately 15 seconds of travel to reflect the short-term memory refractory period. General guidance relating to the location of warning signs contained in part 10 is set out in table 7.1. The range of distances for each road environment reflects the type of speed of reduction deemed necessary and allows some flexibility in sign location.

In addition to the distances set down in table 7.1, table 7.2 provides general guidance on the deceleration distances for light vehicles (such as cars and utilities) on a level grade, to assist with sign placement. For information relating to the deceleration distances required for heavy vehicles, refer to Austroads *Guide to road design* part 4a.

Designers should be aware of the different braking capabilities of heavy vehicles and this should be taken into account when setting out sign locations, as should the impact of gradients on braking.

Table 7.1 Longitudinal location of warning signs (Source: Austroads *Guide to traffic management* part 10)

Road en	vironment	A (m)	B (m)
Rural	$V_{85} \le 70 \text{km/h}$	80 - 120	50
	V ₈₅ >70 - 90km/h	120 - 180 180 - 250	60 70
Urban	V ₈₅ >90km/h Business and residential roads	30 - 100	30
Urban	Arterial roads	As per rural	As per rural

Warning signs continued

Note:

V₈₅ is the 85th percentile speed measured 1.5 to 2 times 'A' in advance of the hazard.

A - distance from sign to hazard.

B - minimum distance between successive signs having different messages.

Table 7.2 Deceleration distances for light vehicles (cars or utilities)

85th percentile speed at sign		Deceleration distance (m), between the sign location and the unusual or hazardous situation to achieve a speed of:						
location (km/h)	0	20	30	40	50	60	70	80
50	60	55	45	30	-	-	-	-
60	80	75	65	50	30	-	-	-
70	100	95	80	70	55	35	1-	-
80	120	110	105	95	80	65	40	-
90	140	135	125	115	100	90	70	45
100	170	160	155	145	130	120	100	80

Warning signs should also be located where approaching road users have an uninterrupted view of them over a distance of at least 120m in rural areas and at least 60m in urban areas.

Guide, service, tourist and general interest signs These signs are positioned according to their function, but in general they can also be located where approaching road users have an uninterrupted view of the sign over a distance of at least 120m in rural areas and at least 60m in urban areas.

Specific location details are given in part 2 of the TCD manual

https://www.nzta.govt.nz/assets/resources/speed-management-guide-road-to-zero-edition/speed-management-guide-road-to-zero-edition-additional-technical-information.pdf

Minimum road lengths for speed limits

Schedule 1 to the Land Transport Rule: Setting of Speed Limits 2022 (the Rule) specifies minimum lengths for specified speed limits, which are informed by average travel time over the stretch of road concerned. These are set out in Table 2.

Table 2: Road lengths for speed limits

Speed limit (km/h)	Minimum length (m)
50	500
60	600
70	700
80	800
90	2,000
100	2,000
110	As approved by the Director of Land Transport under clause 4.4 of the Rule

As specified in clause 4.6 of the Rule, exceptions to the minimum lengths in Table 2 apply in case of one or more of the following:

- the requirement is impracticable for the road
- the section of road is a road outside a school
- a lower speed limit is applied to a section of road as part of a variable speed limit.

Notwithstanding, it is desirable for all speed limits, regardless of type, to comply with minimum lengths wherever possible. RCAs need to carefully consider potential effects if they are considering implementing short road length or multiple changes in speed limit along a road or street.

Under clause 4.7 of the Rule, a speed limit may apply to a road length shorter than that referenced above if set at the same speed limit of an adjoining 'main' road. This can apply even if the speed limit on the short length is not specified in a speed management plan or subject to Director of Land Transport approval via the Alternative Method (under clause 2.6 of the Rule).

Table 3: Recommended road lengths for 30km/h and 40km/h speed limits

Speed limit (km/h)	Minimum length (m)
30	300
40	400

The recommended road lengths for 30km/h and 40km/h speed limits need to be considered in context. There are stretches of road of less than 300m in urban environments where such a speed limit can be applicable. These stretches may be streets linking collector or arterial roads or where such a speed limit complements traffic calming approaches.

Any decision to set a 30km/h or 40km/h speed limit should be informed by wider road network considerations such as risks associated with higher operating speeds on approaches.

The recommended distances for 30km/h and 40km/h speed limits (that is, 300m and 400m respectively) align with best practice experience with achieving road user compliance with school permanent and variable speed limits. Road users tend to disregard shorter distances as the speed limit sign at the end of the restriction can be visible before the sign at the beginning of the restriction has been passed, while longer distances lose their effectiveness.