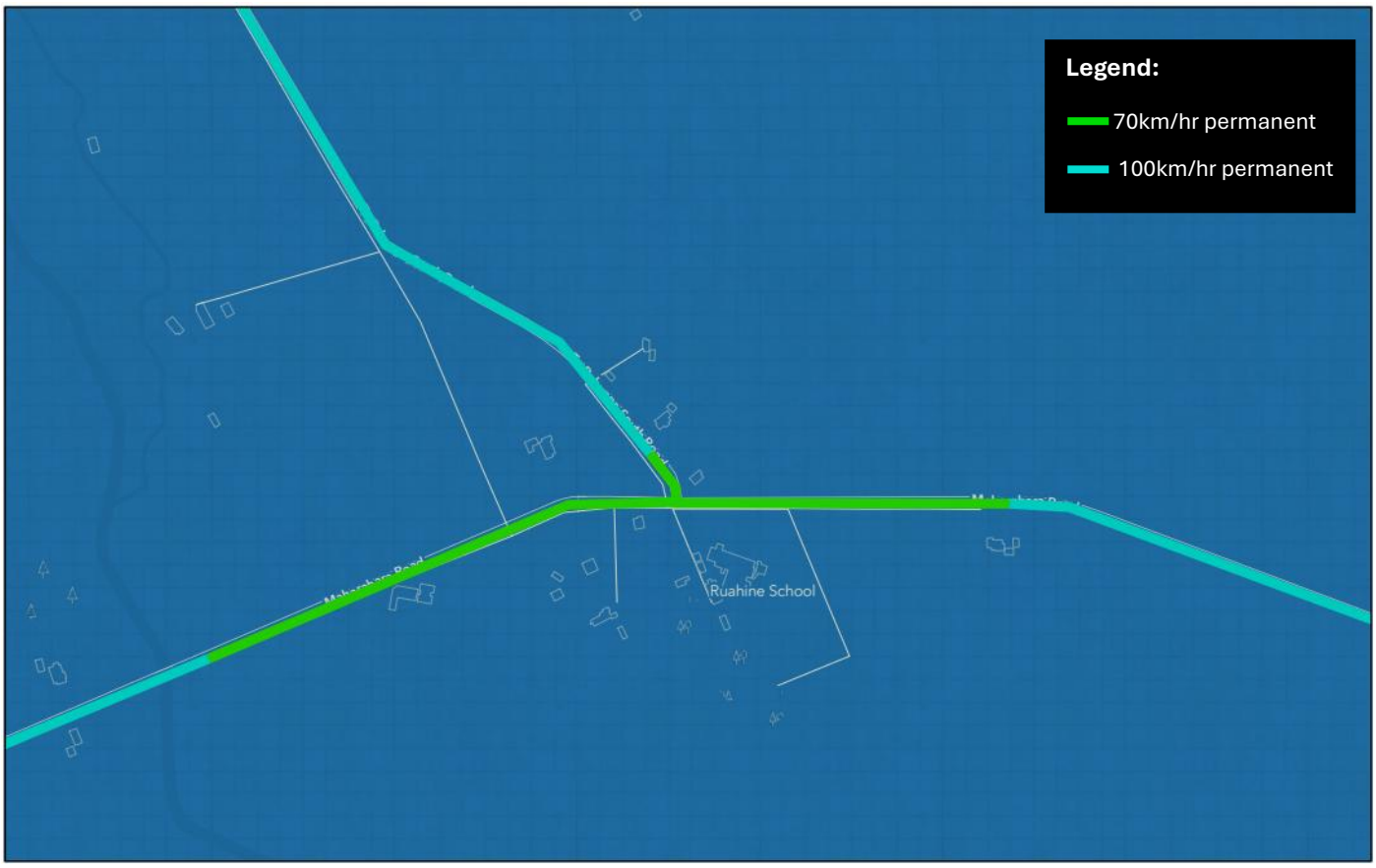
Ruahine School

Current: 70km/hr permanent speed zone outside Ruahine School on both Maharahara and Te Rehunga South Roads (green line), 100km/hr permanent speed zone beyond this area (blue line).



Option 1: Extend the permanent 70km/hr zone further along Te Rehunga South Road (green line) and introduce a 30km/hr variable speed zone within 150m from the school gate (dotted red line). This would create a buffer zone for traffic to reduce speed from 100km/hr to 70km/hr before they reach the 30km/hr variable speed zone during school travel times.

Cost Impact Analysis for **Option 1**:

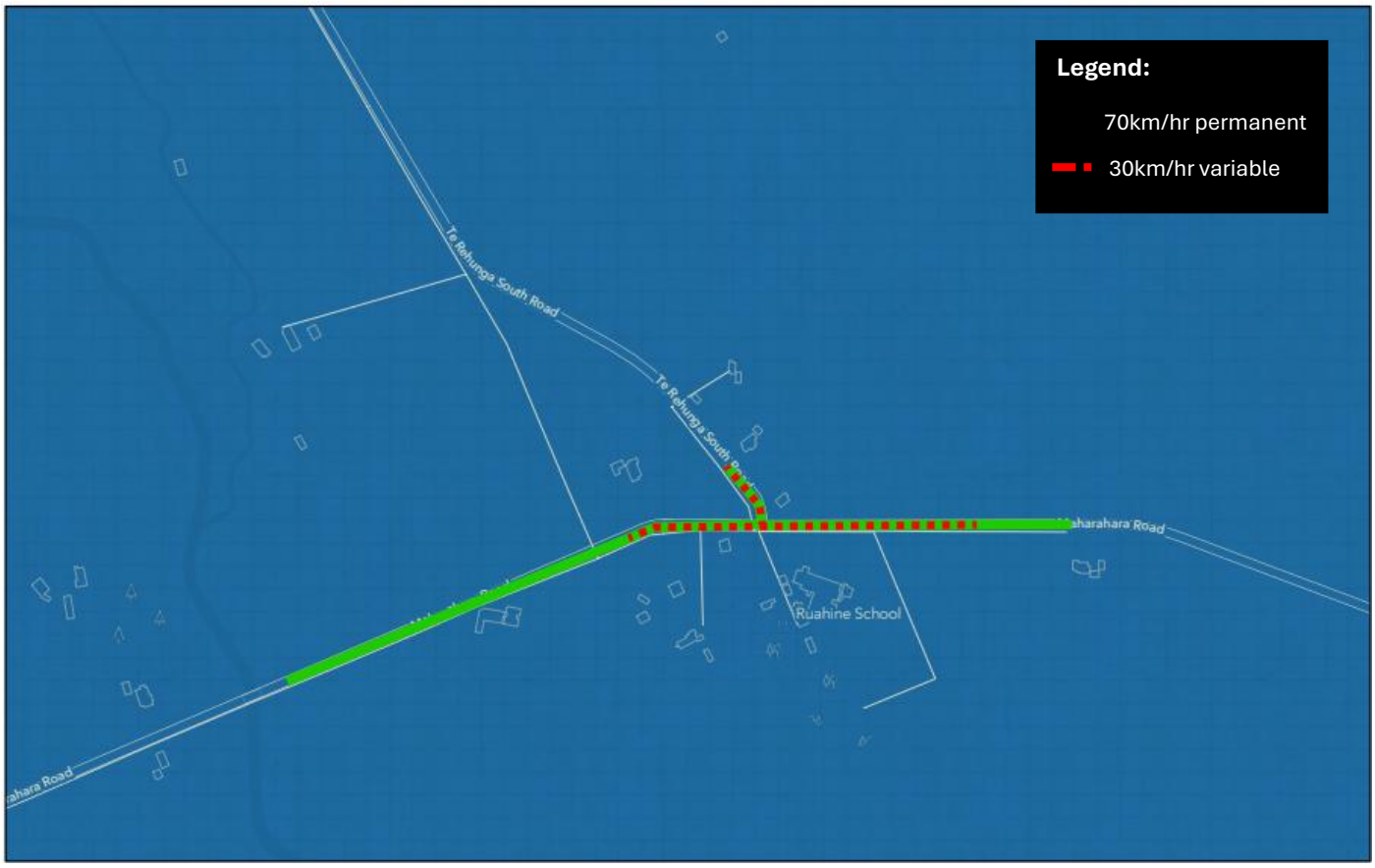
Inputs	
Route/Section name	Te Rehunga South
Urban or Rural	Rural
Distance (km)	0.154
Annual Average Daily Traffic (AADT)	67
Expected annual traffic growth (0-7%)	1
Current posted speed limit (kph)	100
Proposed new posted speed limit (kph)	70
Current mean travel speed (kph) - [only if known]	66.5
Years of crash data (maximum 5)	5
Fatal crashes during data period	0
Serious injury crashes during data period	0
Minor injury crashes during data period	0
Non-injury crashes during data period	0
Is crash data from the Crash Analysis System (CAS)?	Yes
Implementation cost ($m)	0.001

Outputs	
Increase/Decrease in expected mean vehicle operating speed (kph)	12.0
Increase/Decrease in average individual light vehicle trip time (minutes.seconds)	0.02
Increase/Decrease in average individual heavy vehicle trip time (minutes.seconds)	0.02
Increase/Decrease in average annual aggregate travel time (hours)	13
Historic average number of fatal crashes per year	0.0
Historic average number of serious injury crashes per year	0.0
Historic average number of minor injury crashes per year	0.0
Historic average number of non-injury crashes per year	0.0
Increase/Decrease in expected number of fatal crashes per year	0.0
Increase/Decrease in expected number of serious injury crashes per year	0.0
Increase/Decrease in expected number of minor injury crashes per year	0.0
Increase/Decrease in expected number of non-injury crashes per year	0.0
Implementation cost	$0.001m

Benefits and Risks of **Option 1:**

Benefits	Risks
• Less confusion for drivers when variable speed zone signs are installed • Additional costs are minor to move permanent speed sign • Lower permanent speed limit of 70km/hr remains which supports safety outside of school travel periods	• Subject to NZTA approval

Option 2: Keep the 70km/hr permanent sign where it is but look at replacing with a new mechanical 'dual' speed sign which reverts from 70km/hr permanent to 30km/hr variable during school drop off and pick up times.



Cost Impact Analysis for **Option 2**:

Inputs	
Route/Section name	Te Rehunga South
Urban or Rural	Rural
Distance (km)	0
Annual Average Daily Traffic (AADT)	67
Expected annual traffic growth (0-7%)	1
Current posted speed limit (kph)	70
Proposed new posted speed limit (kph)	70
Current mean travel speed (kph) - [only if known]	66.5
Years of crash data (maximum 5)	5
Fatal crashes during data period	0
Serious injury crashes during data period	0
Minor injury crashes during data period	0
Non-injury crashes during data period	0
Is crash data from the Crash Analysis System (CAS)?	Yes
Implementation cost ($m)	0

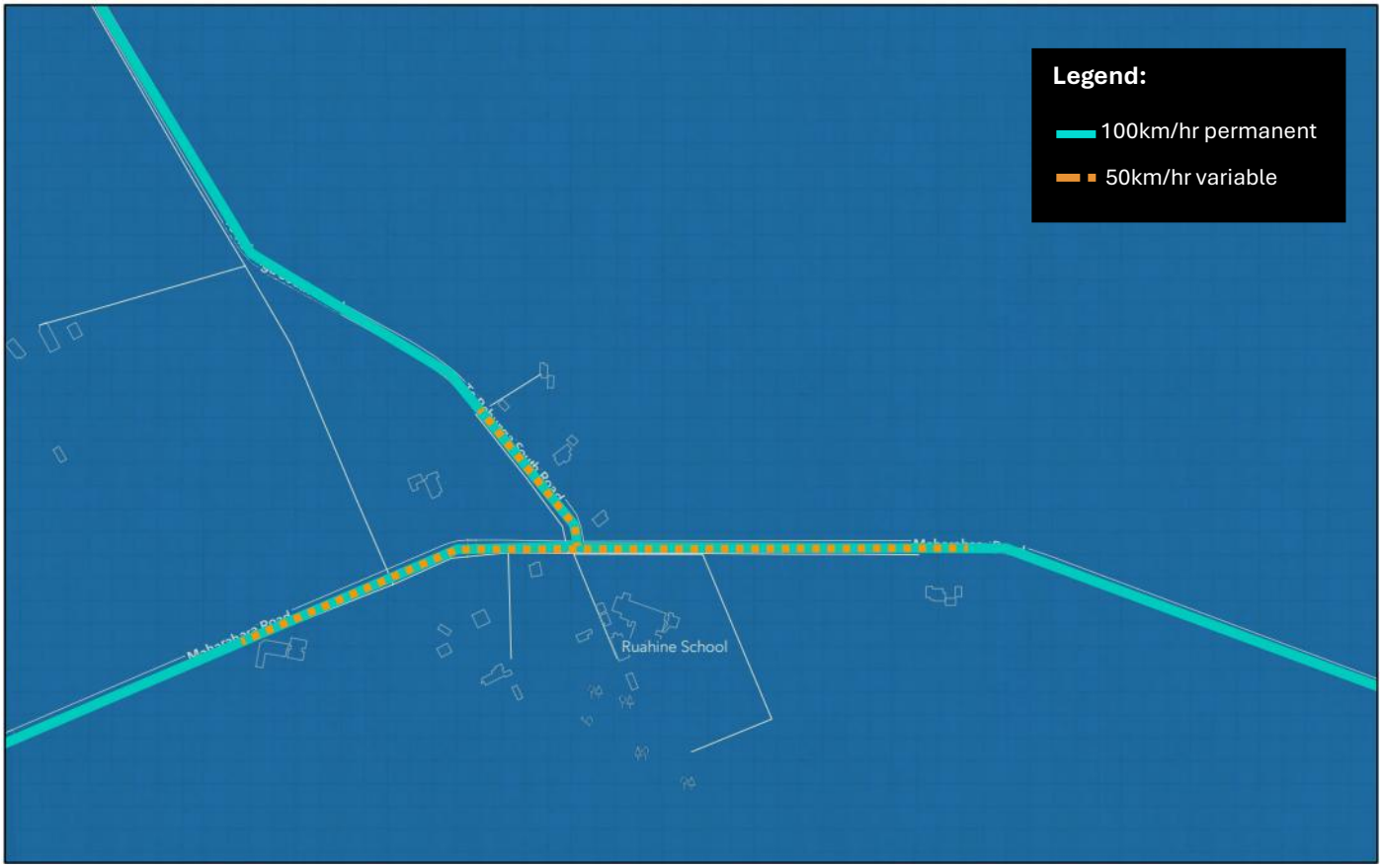
Outputs	
Increase/Decrease in expected mean vehicle operating speed (kph)	0.0
Increase/Decrease in average individual light vehicle trip time (minutes.seconds)	0.00
Increase/Decrease in average individual heavy vehicle trip time (minutes.seconds)	0.00
Increase/Decrease in average annual aggregate travel time (hours)	0
Historic average number of fatal crashes per year	0.0
Historic average number of serious injury crashes per year	0.0
Historic average number of minor injury crashes per year	0.0
Historic average number of non-injury crashes per year	0.0
Increase/Decrease in expected number of fatal crashes per year	0.0
Increase/Decrease in expected number of serious injury crashes per year	0.0
Increase/Decrease in expected number of minor injury crashes per year	0.0
Increase/Decrease in expected number of non-injury crashes per year	0.0
Implementation cost	$0.000m

Note: Cost Impact Analysis for this option is not applicable as the permanent speed limit area would not change. Cost is also still to be confirmed for this option.

Benefits and Risks of **Option 2:**

Benefits	Risks
• Permanent speed zone area can remain the same • Lower speed limit of 70km/hr remains which supports safety outside of school travel periods	• Additional cost and risk for trialling a new mechanical 'dual' speed sign, which transitions from 70km/hr to 30km/hr during school travel times, powered through a solar unit. This type of sign has not been used for speed zones before, and ongoing maintenance cost are expected to be much higher than static signage. • Subject to NZTA approval (including sign type).

Option 3: Revert the existing permanent 70km/hr zone back to 100km/hr and classify Ruahine School as a Category 2 school with a 50km/hr variable speed limit during school drop off and pick up times (to be consistent with some other rural schools).



Cost Impact Analysis for **Option 3**:

Inputs	
Route/Section name	Te Rehunga South
Urban or Rural	Rural
Distance (km)	0
Annual Average Daily Traffic (AADT)	67
Expected annual traffic growth (0-7%)	1
Current posted speed limit (kph)	70
Proposed new posted speed limit (kph)	100
Current mean travel speed (kph) - [only if known]	66.5
Years of crash data (maximum 5)	5
Fatal crashes during data period	0
Serious injury crashes during data period	0
Minor injury crashes during data period	0
Non-injury crashes during data period	0
Is crash data from the Crash Analysis System (CAS)?	Yes
Implementation cost ($m)	0.001

Outputs	
Increase/Decrease in expected mean vehicle operating speed (kph)	12.0
Increase/Decrease in average individual light vehicle trip time (minutes.seconds)	0.00
Increase/Decrease in average individual heavy vehicle trip time (minutes.seconds)	0.00
Increase/Decrease in average annual aggregate travel time (hours)	0
Historic average number of fatal crashes per year	0.0
Historic average number of serious injury crashes per year	0.0
Historic average number of minor injury crashes per year	0.0
Historic average number of non-injury crashes per year	0.0
Increase/Decrease in expected number of fatal crashes per year	0.0
Increase/Decrease in expected number of serious injury crashes per year	0.0
Increase/Decrease in expected number of minor injury crashes per year	0.0
Increase/Decrease in expected number of non-injury crashes per year	0.0
Implementation cost	$0.001m

Benefits and Risks of **Option 3:**

Benefits	Risks
• Permanent and variable speed limits are consistent with most other rural schools. • Only one speed limit change during school travel periods, reducing confusion • Category 2 school designation means the 50km/hr variable speed zone can be up to 300m from school gates, instead of 150m for Category 1 schools.	• Higher speed limit of 100km/hr outside of school travel periods = higher risk when it comes to safety of school children and pedestrians. • Subject to NZTA approval