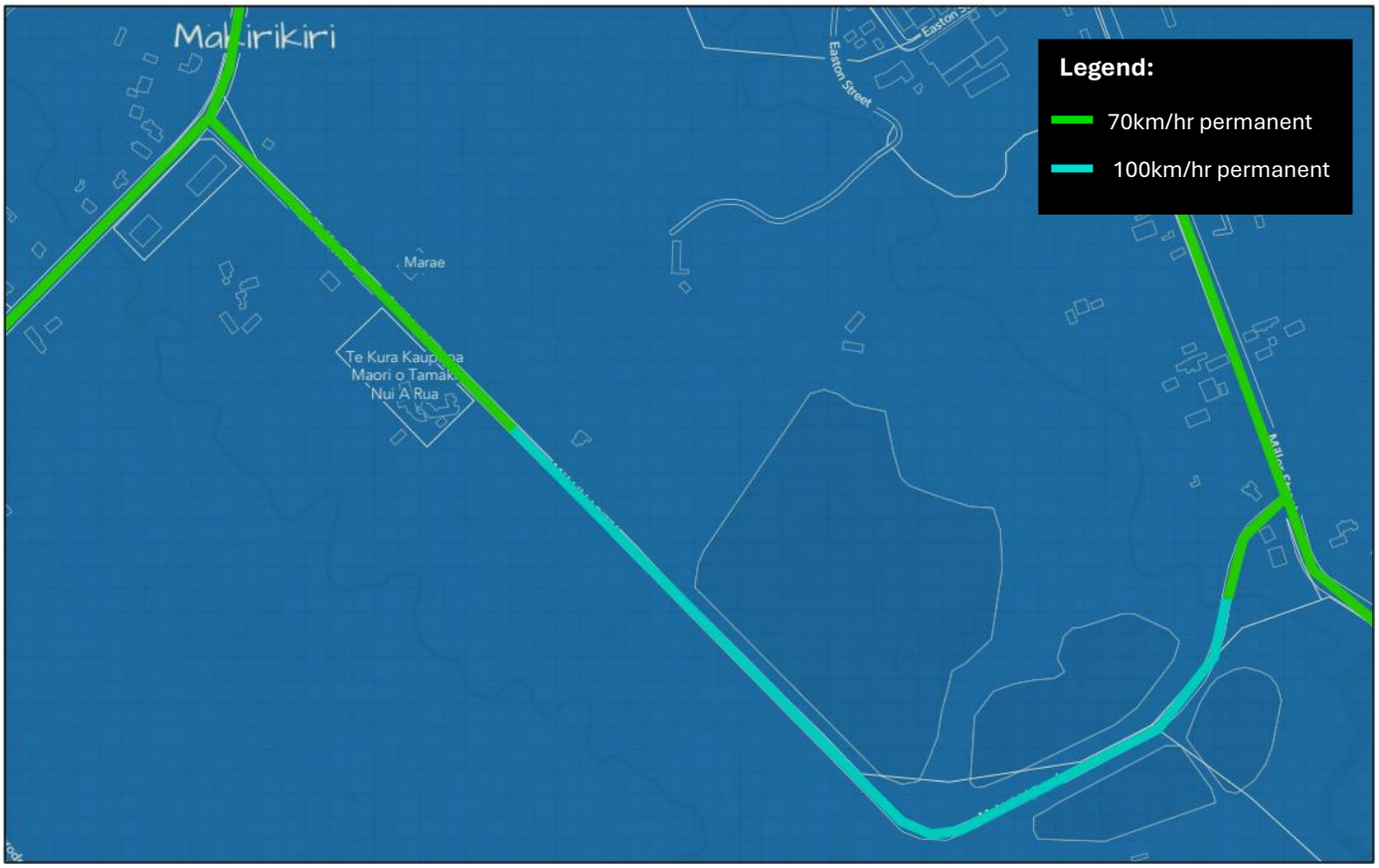
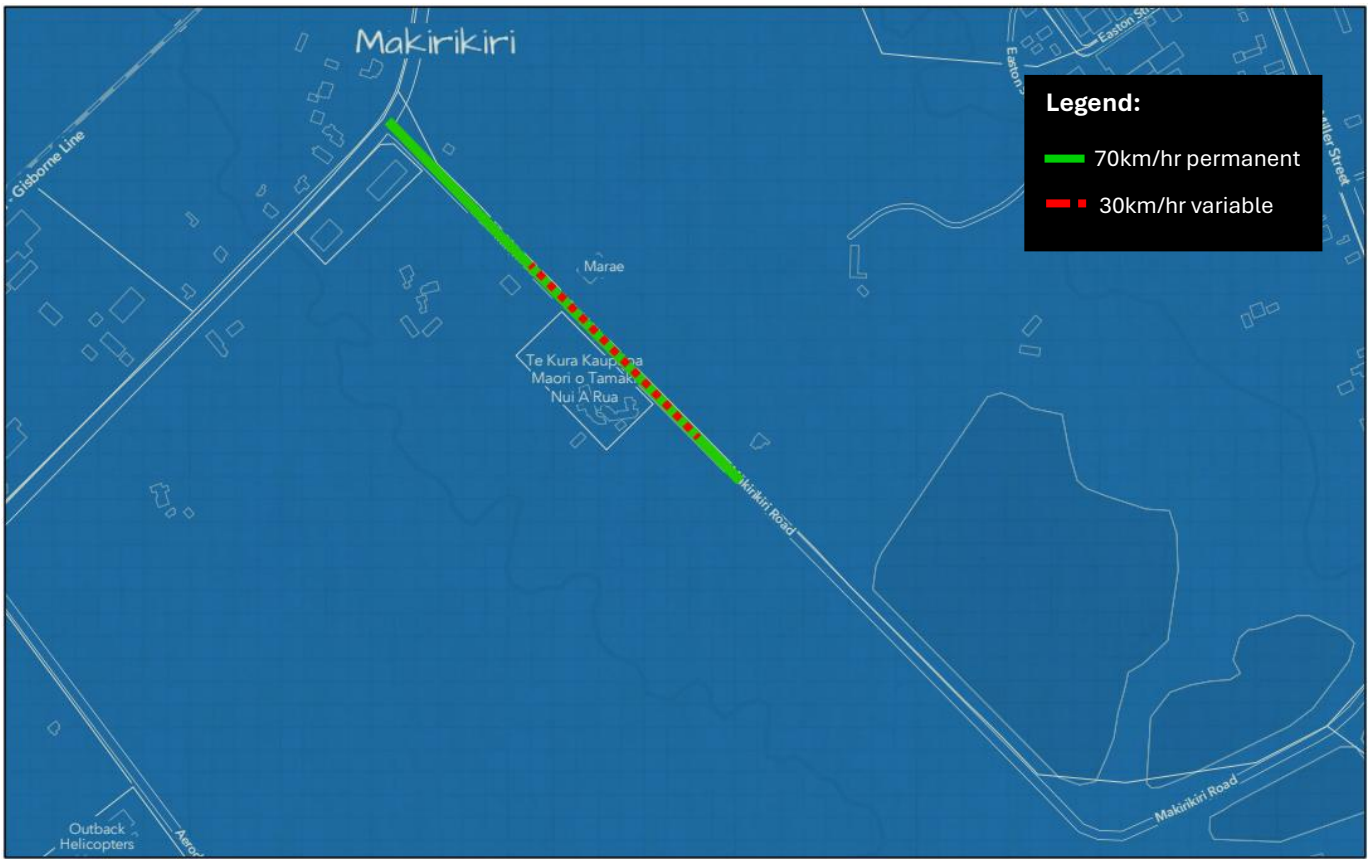
Te Kura Kaupapa Māori O Tamaki Nui A Rua

Current: 70km/hr permanent speed zone outside the school on Makirikiri Road (green line), 100km/hr permanent speed zone beyond this area on Makirikiri Road (blue line) for just over 1km before reverting back to 70km/hr prior to intersection with Miller Street.



Option 1: Extend the permanent 70km/hr zone slightly further along Makirikiri Road and introduce a 30km/hr variable speed zone within 150m from the school gate.



Cost Impact Analysis for **Option 1**:

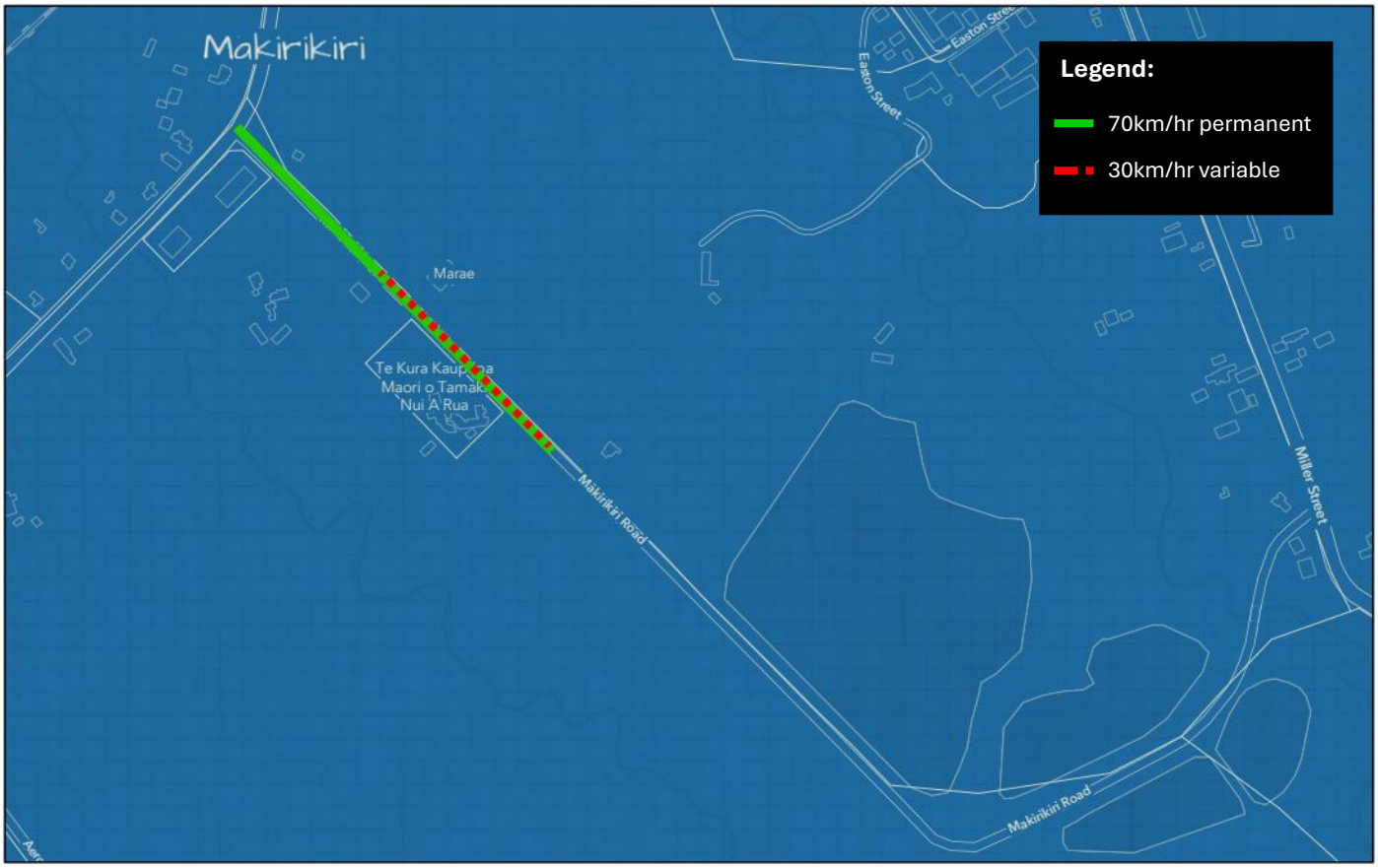
Inputs	
Route/Section name	Makirikiri Road
Urban or Rural	Rural
Distance (km)	0.15
Annual Average Daily Traffic (AADT)	610
Expected annual traffic growth (0-7%)	2
Current posted speed limit (kph)	100
Proposed new posted speed limit (kph)	70
Current mean travel speed (kph) - [only if known]	72.6
Years 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)	0.01
Increase/Decrease in average individual heavy vehicle trip time (minutes.seconds)	0.01
Increase/Decrease in average annual aggregate travel time (hours)	97
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	$0.001 m

Benefits and Risks of **Option 1:**

Benefits	Risks
• Reduces confusion for drivers when variable speed zone signs are installed • Additional costs are minor to move permanent speed sign • Lower speed limit of 70km/hr remains which increases safety outside of school travel periods • Extends lower permanent speed zone, resulting in traffic reducing speeds earlier (thus improving safety for school)	• Subject to NZTA approval • Does not address safety concerns raised for single lane bridge and out of context corners further along Makirikiri Road.

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**:

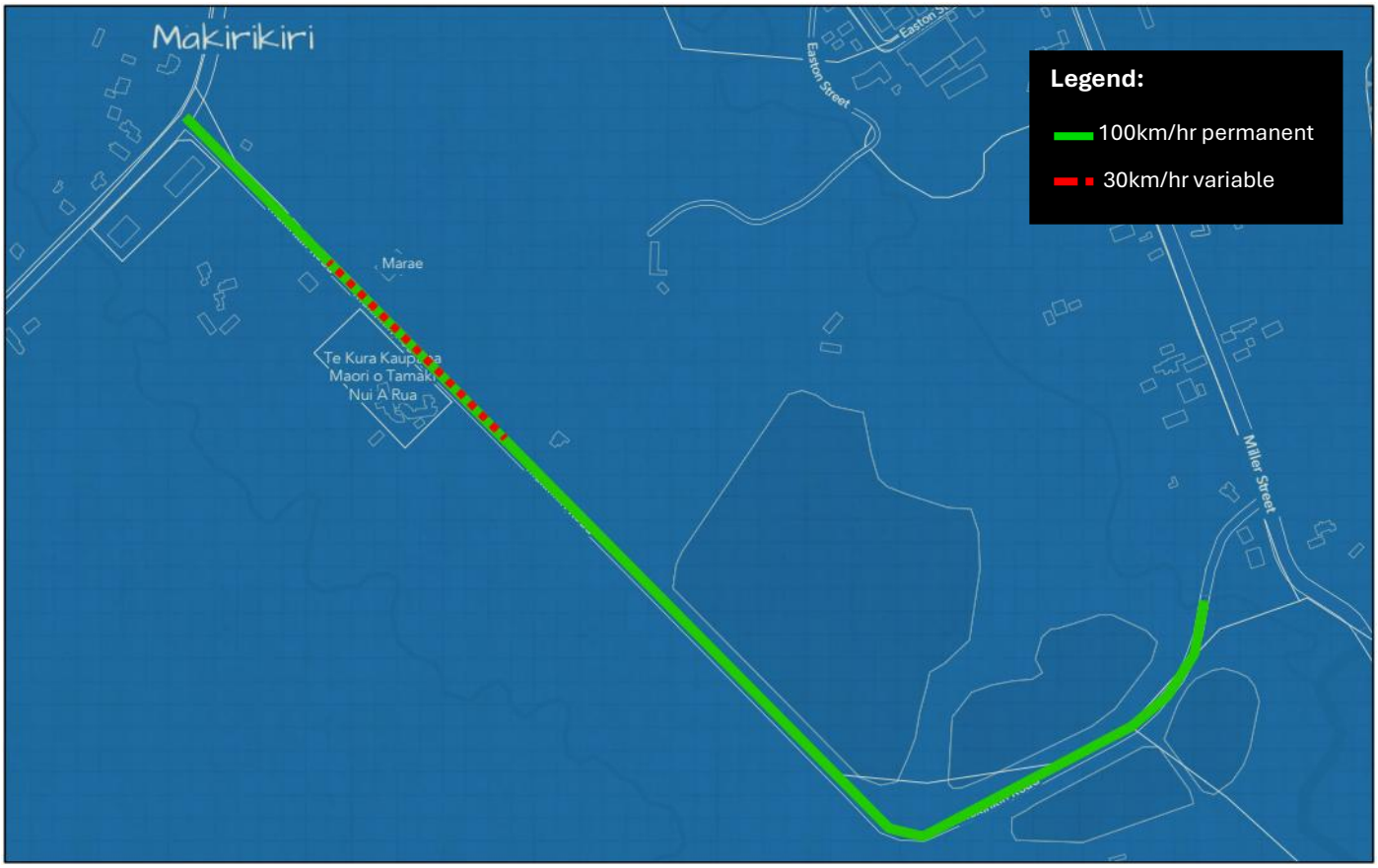
Inputs	
Route/Section name	Makirikiri Road
Urban or Rural	Rural
Distance (km)	0
Annual Average Daily Traffic (AADT)	610
Expected annual traffic growth (0-7%)	2
Current posted speed limit (kph)	100
Proposed new posted speed limit (kph)	100
Current mean travel speed (kph) - [only if known]	72.6
Years of 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

Benefits and Risks of **Option 2:**

Benefits	Risks
• Permanent speed zone area can remain the same	• Additional cost and risk for trailing a new mechanical 'dual' speed sign, which transitions from 70km/hr to 30km/hr during school travel times, powered through solar unit. This type of sign has not been used for speed zones before, and ongoing maintenance cost is unknown. • Subject to NZTA approval • Does not address safety concerns raised for single lane bridge and out of context corners further along Makirikiri Road.

Option 3: Extend the permanent 70km/hr zone along the remainder of Makirikiri Road to where the existing 70km/hr zone is, after the single lane bridge just before Miller Street intersection.



Cost Impact Analysis for **Option 3**:

Inputs	
Route/Section name	Makirikiri Road
Urban or Rural	Rural
Distance (km)	1.269
Annual Average Daily Traffic (AADT)	610
Expected annual traffic growth (0-7%)	2
Current posted speed limit (kph)	100
Proposed new posted speed limit (kph)	70
Current mean travel speed (kph) - [only if known]	72.6
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)	0.12
Increase/Decrease in average individual heavy vehicle trip time (minutes.seconds)	0.12
Increase/Decrease in average annual aggregate travel time (hours)	818
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
• 70km/hr is consistent along remaining stretch of Makirikiri Road (just over 1km) which currently reverts to 100km/hr until after the single lane bridge. • Improves safety for school, reduces risk from out of context corners and single lane bridge on Makirikiri Road • Only one speed limit change during school travel periods, reducing confusion	• Subject to NZTA approval