30 July 2025

Time	Topic and Purpose	Presenter(s)	Format	Time allocated
9.30am	**Minor Transport Improvement Programme** The purpose of this session is to work through the project reports completed prior to presenting these at a future Infrastructure and Transport Committee Meeting.	**Robyn Denton**	**Open**	**90 Minutes**
Break 11.00am				
11.15am	**Costing Minor Transport Improvement Programme** The purpose of this session is to provide an estimate on costs for minor transport improvement projects initially and manage the costs for consultation, design, supervision, and construction in response to a request from Members during the 30th of April Council Meeting.	**Robyn Denton**	**Open**	**60 Minutes**
SESSION ENDS				

DISCUSSION TOPIC SUMMARY

Topic: Transport Projects – Macroscope proposals
Related Committee: Infrastructure and Transport
Business Unit/Group: Infrastructure and Assets
Key Staff Contact/s: Robyn Denton, and Martin Parkes
Status: Open
Briefing Date: 30 July 2025

PURPOSE OF TOPIC/INFORMATION

To provide a presentation on the additional options requested by Elected Members at the 18 June 2025 briefing for the following projects which were approved in the Part 2 Unsubsidised Minor Transport Improvements at the 11 March Infrastructure and Transport Committee:

- Ulster Street/Abbotsford Street – Intersection improvement
- Ruakiwi Road/Lake Domain Road/Lake Road – pedestrian crossing improvements

Approval of the Macroscope Design for these projects will be recommended to the 2 September 2025 Infrastructure and Transport Committee.

WHAT KEY THINGS SHOULD MEMBERS THINK ABOUT/ CONSIDER IN UNDERSTANDING THIS INFORMATION?

These projects have been approved via the development of Part 2 of the Unsubsidised Minor Transport Improvements Programme as approved at the 11 March 2025 Infrastructure and Transport Committee.

Based on the Transport Decision Making Framework these projects were assessed as being 'Yellow' and therefore require the presentation of a Project Report at an Elected Member Information Session ahead of seeking Macroscope Approval at a subsequent Infrastructure and Transport Committee meeting.

Funding for these projects is included in Year 2 of the Part 2 Unsubsidised Minor Transport Improvements programme.

KEY SUMMARY POINTS

Ulster Street/Abbotsford Street – Intersection improvement

- The recommended option presented at the 18 June 2025 briefing was an at-grade uncontrolled crossing with a large median island. This option partially mitigates the risk for pedestrians crossing Ulster Street. This option addresses the risk of failure to give way type crashes by physically preventing right turns and through movements on Abbotsford Street. This option improves bus service performance and bus stop access by consolidating existing stops and locating them closer to the new crossing point.
- Elected members asked staff to look for options that would provide greater safety and accessibility for pedestrians via traffic signals including signalisation of the full intersection
- Staff have developed four additional options and will present them for feedback from Elected members on which option they would like to have progressed.
- Further details of the options are included in the presentation.

Ruakiwi Road – Pedestrian Safety Improvement near Lake Domain Drive intersection

- The recommended option presented at the 18 June 2025 briefing was a raised signalised pedestrian crossing, which will provide additional intersection traffic calming by reducing operating speeds.
- The alternative to the raised crossing was the same as the preferred option but without the raised safety platform.
- Noting that approval has been granted for a new footpath project within the Part 2 Unsubsidised Minor Transport Improvement programme 2024/27, located on Lake Domain Drive, as part of a separate programme of works.
- Staff were requested to provide Elected Members with options for making improvements to the whole intersection of Lake Domain Dr, Ruakiwi Road and Tainui Street.
- A report was commissioned in the 2021/23 Long Term Plan to consider options for this intersection and that information will be presented to Elected members and includes three options including traffic signals and roundabout (pair or peanut).
- Further information is included in the presentation.

WHERE CAN MEMBERS FIND MORE INFORMATION?

A copy of the presentation will be sent to Elected Members ahead of the briefing.
A copy of the Project reports for each site was included in the 18 June 2025 briefing pack for Elected Members.

WHAT DIRECTION/FEEDBACK/INPUT DO YOU NEED FROM ELECTED MEMBERS

Staff will be seeking direction from EMs on the preferred option for each site and any additional information that will be required for inclusion in the report requesting Macroscope approval of these projects at the 2 September 2025 Infrastructure and Transport Committee meeting.

Purpose of Briefing

To present the work that has been completed investigating further options for improvements to the following locations following requests from Elected Members at 18 June 2025 briefing:

- Ulster St / Abbotsford St intersection safety improvements
- Ruakiwi Rd – pedestrian crossing improvements

To seek feedback on the proposals for inclusion in the report to the 2 September 2025 Infrastructure and Transport Committee which will recommend approval of the macroscope designs

Note: The project reports will be updated following direction from this meeting prior to presentation to the final decision on which option (if any) will proceed will be made at the Infrastructure & Transport Committee meeting.

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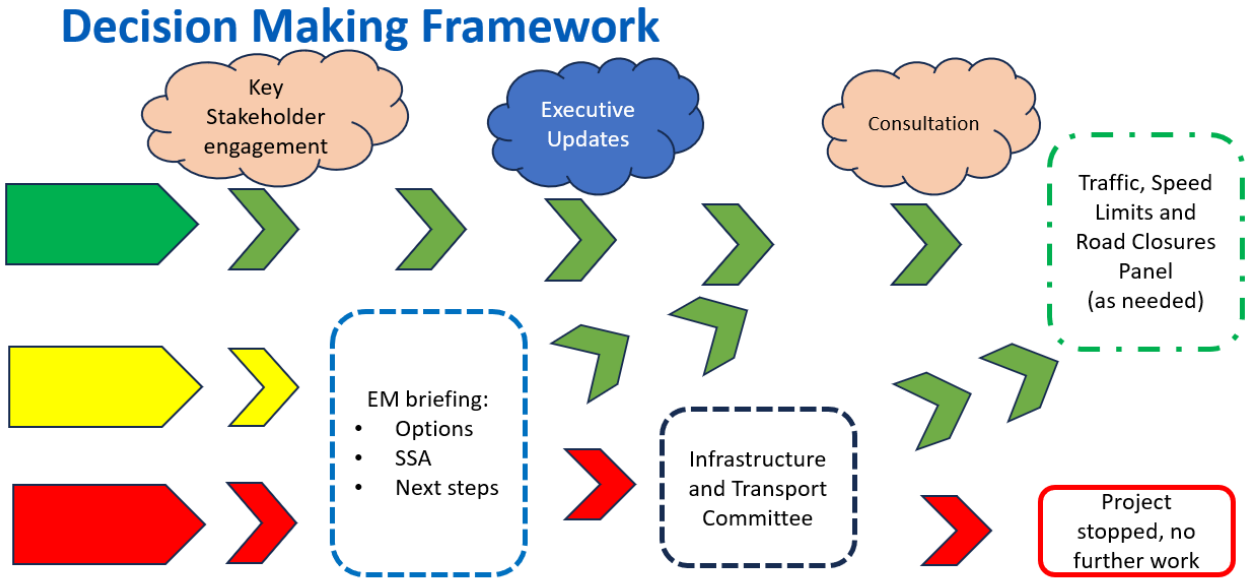
Background

11 March 2025 Infrastructure & Transport Committee approved Part 2 of the Unsubsidised Minor Transport Improvements Programme.

The list included several projects that had been assessed as “Yellow” projects in accordance with the Transport Decision Making framework.



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Ulster Street/Abbotsford Street intersection safety improvements

A quick recap on the background and issues for this site

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Ulster Street/Abbotsford Street intersection safety improvements

Between 2015 and 2024 there have been 28 crashes recorded at the intersection:

- 2 crashes resulted in serious injuries,
- 11 crashes resulted in minor injuries, and
- 15 crashes did not cause injuries
- Both serious injury crashes involved vehicles travelling straight through on Abbotsford Street colliding with vehicles on Ulster Street. Six of the minor injury crashes involved vehicles travelling straight through on Abbotsford Street colliding with vehicles turning to or from Ulster Street.
- These movements are over-represented in the crash record - 62% of injury crashes.

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Ulster Street/Abbotsford Street intersection safety improvements

4-leg priority (Give Way) controlled intersection with the following characteristics:

- Posted speed limit is 60km/hr. Observed peak hour operating speeds approx. 50km/h for each direction of travel.
- No formal pedestrian crossing facilities.
- Footpaths on all approaches.
- Overall site width, boundary to boundary, is 20 metres on Abbotsford Street and 30 metres on Ulster Street.
- Abbotsford Street:
  - 2-lane road
  - no dedicated cycling facilities
  - pedestrian refuge islands at the intersection
- Ulster Street:
  - 4-lane road with a flush median and right-turn bay.
  - painted on-road cycle lanes.
  - pedestrian refuge islands approximately 85 metres from the intersection

Road Name	ONF	Estimated AADT (veh/day) & HV
Ulster Street	Urban Connector (M1,P3)	15,000 (est.2023), 5% Heavy
Abbotsford Street (east)	Local Street (M5,P4)	2,600 (est.2021), 2% Heavy
Abbotsford Street (west)	Local Street (M5,P4)	2,700 (est.2021), 4% Heavy

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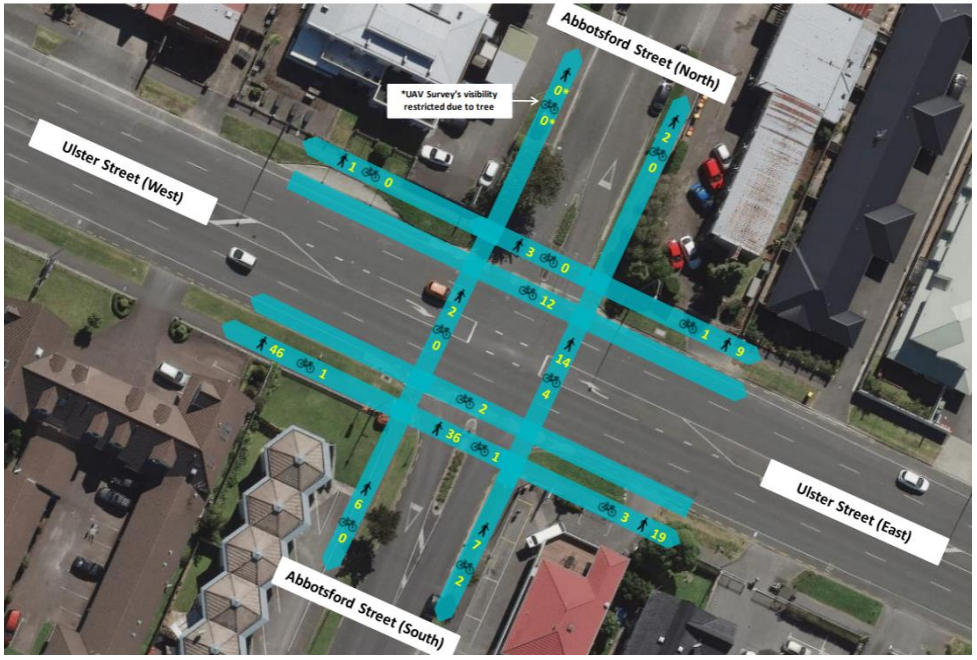
Ulster Street/Abbotsford Street intersection safety improvements

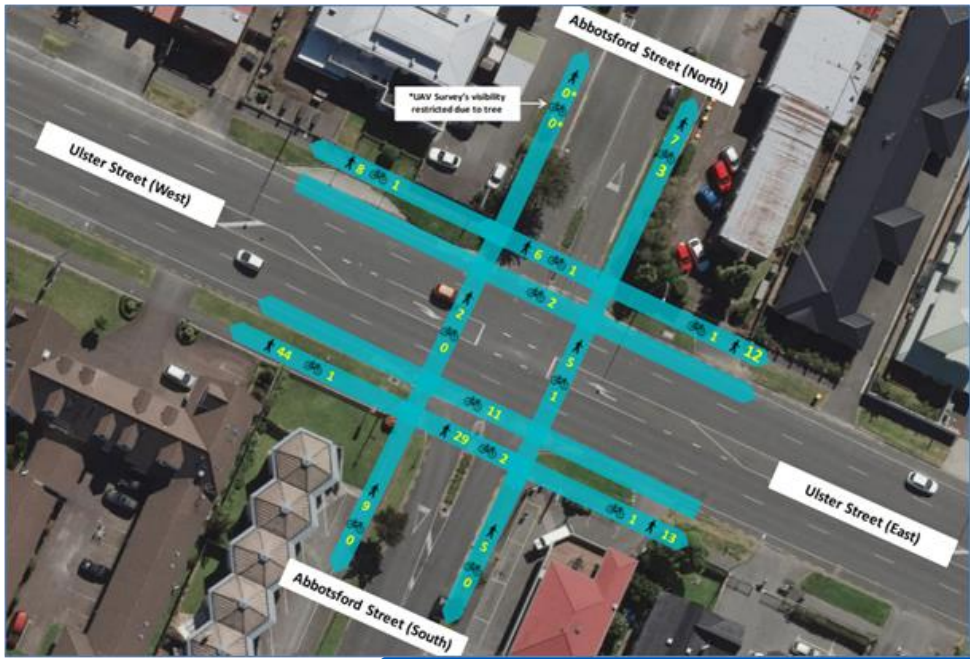
3 pedestrian and cycle surveys were undertaken:

- 10 October 2023 - Staff observation
- 10 October 2023 - Video Camera data collections
- 15 August 2024 - Staff observation

Observations 10 October 2023 - 7.50am to 8.50am



Observations 10 October 2023 - 4.45pm to 5.45pm



Ulster Street/Abbotsford Street intersection safety improvements

Pedestrian and cycle information

Observations 15 August 2024

Staff completed an additional pedestrian and cyclist survey on 15 August 2024 from 3pm to 4pm to observe school travel.

Staff counted pedestrians who crossed Ulster Street at or between the existing refuge islands (approx. 80 metres north and south of Abbotsford Street).

- 23 pedestrians crossed Ulster Street north of Abbotsford Street
- 25 pedestrians crossed Ulster Street south of Abbotsford Street

Staff also observed the following behaviour:

- 5 near misses due to drivers proceeding straight or heading right from Abbotsford Street failing to give way to vehicles on Ulster Street.
- Drivers waiting to proceed straight or turn right from Abbotsford Street block the exit from Abbotsford Street causing delay to drivers behind wanting to turn left, which creates pressure to turn quickly when a gap may not be suitable.
- 4 primary aged children crossed Ulster Street unaccompanied.

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Ulster Street/Abbotsford Street intersection safety improvements

Customer Requests

- Complaints received about the lack of safe opportunities to cross Ulster Street from Tama Potaka MP, Whitiora Primary School, StudyFit and Te Maapura.
- Hamilton West MP Tama Potaka posted a video on Facebook on 18 April 2023 with the following text, "*As the MP for Hamilton West, I am deeply concerned about the safety of children in emergency housing on Ulster Street. Everyone in Hamilton West deserves a safe environment to grow up and grow old in. We need to implement infrastructure for safety on Ulster Street to make it a safer place for all*.".
- School Travel Planning staff have been working with Whitiora School. A survey completed found the main safety concern was the lack of safe crossings, with Ulster Street identified as the most unsafe location.

Engagement

- The owner of Ulster Street Superette, Ulster Lodge Motel, and Motel Six provided feedback indicating their strong support for improvements to the intersection. Videos of crashes and near misses at the intersection recorded from security cameras at the businesses have been provided to HCC staff.

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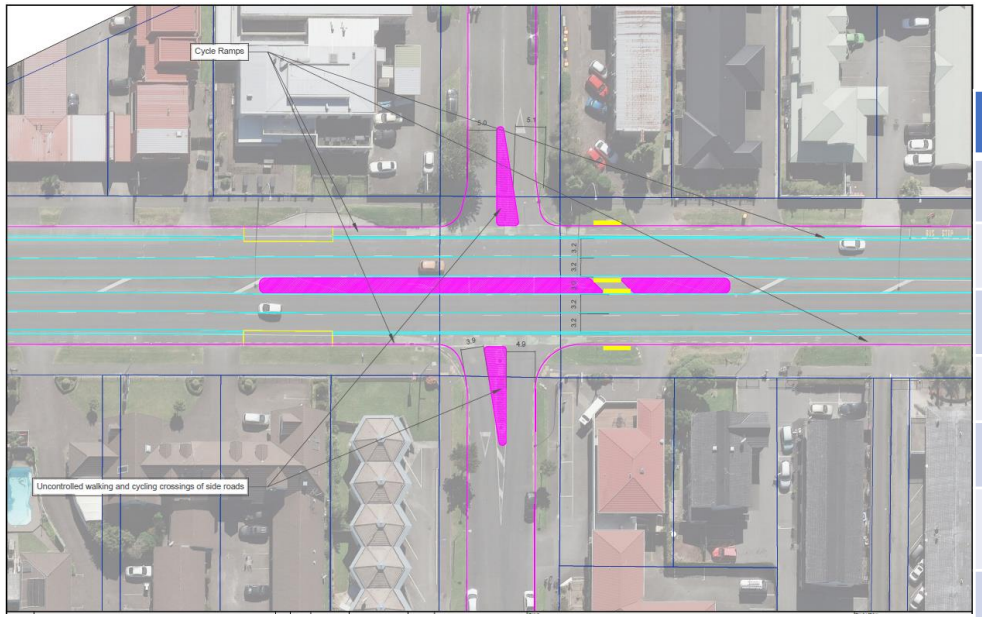
Original Proposal recommended at 18 June 2025 briefing



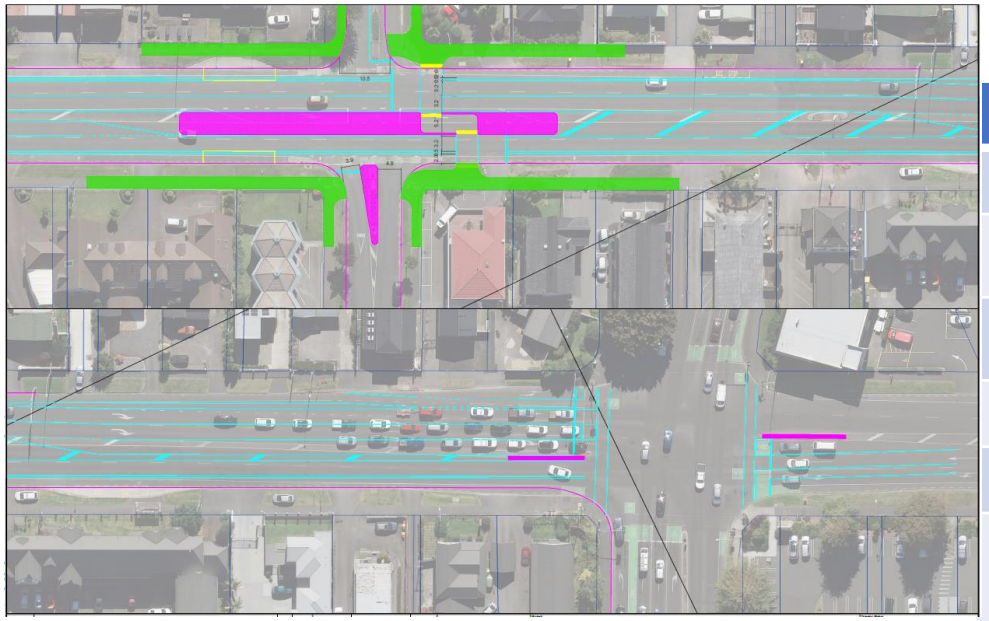
Other issues:

- Least improvement for pedestrians
- Road to be resealed in 26/27, minimises ghost marking issues.

Option 1 – Uncontrolled crossing

Criteria	Score
Delay for drivers	No change
Delay for pedestrians and cyclists	+2 (large reduction in detour)
Comfort for drivers	No change
Comfort for pedestrians and cyclists	+1
Bus passenger access	+1 (better crossings, closer to intersection)
Safety improvement	+2 (removes crossing and turning movements by vehicles)
Network impact	+1 (minor decrease in rat-running past school gate)
Cost	~$400k

Overall Score: +7



Other issues:

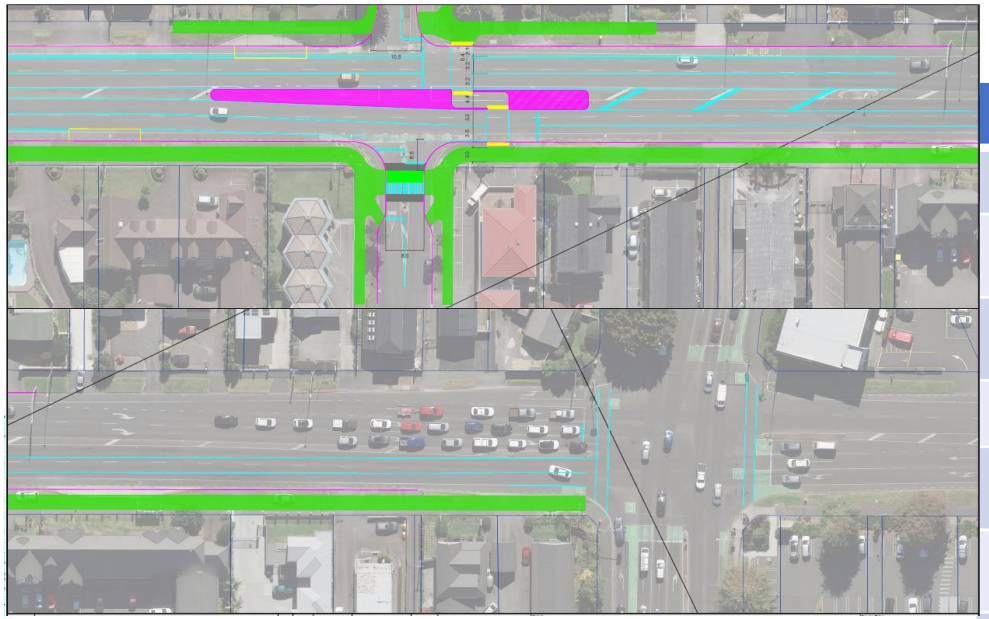
- Crossing may need to be moved slightly further south to minimise risks at driveway on eastern side
- Road to be resealed in 26/27, minimises ghost marking issues.
- This options includes a small buildout near Pak'n'Save to push cyclists out between straight through and left turn lanes.
- Will need to be reviewed again when BRT comes through

Option 2 – Two-stage signals (lane drop)

Criteria	Score
Delay for drivers	-1 (average delay of a couple of seconds)
Delay for pedestrians and cyclists	+3 (large reduction in detour+ instant amber)
Comfort for drivers	0 – no change
Comfort for pedestrians and cyclists	+3 (signal control and safer waiting area)
Bus passenger access	+1 (better crossings, closer to intersection)
Safety improvement	+2 (removes turning and crossing movements, safe crossing for pedestrians and cyclists)
Network impact	-1 (minor increase in rat-running past school gate – traffic signals in Ulster will provide gaps in traffic)
Cost	$800 - 900k

Overall Score: +7

Option 3 – Two-stage signals (no lane drop)



Other issues:

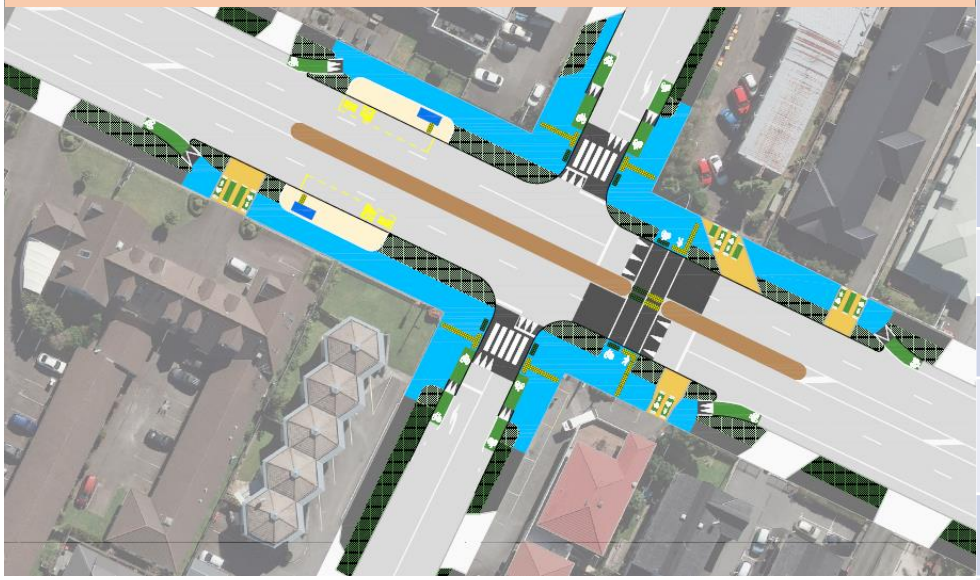
- Crossing may need to be moved slightly further south to minimise risks at driveway on eastern side
- Road to be resealed in 26/27, minimises ghost marking issues.
- Ramps on side road designed for 40km/h comfortable negotiation speed (1:20 gradient)

Criteria	Score
Delay for drivers	-1 (average delay of a couple of seconds)
Delay for pedestrians and cyclists	+3 (large reduction in detour+ instant amber)
Comfort for drivers	0 – no change
Comfort for pedestrians and cyclists	+3 (signal control and safer waiting area)
Bus passenger access	+1 (better crossings, slightly closer to intersection)
Safety improvement	+2 (removes crossing and turning movements)
Network impact	-1 (minor increase in rat-running past school gate – traffic signals in Ulster will provide gaps in traffic)
Cost	$1,200k

Overall Score: +7

Option 4 – Single-stage signals

Previous concept for illustrative purposes only. Would remove in lane bus stops and raised safety platform in Ulster St could be optional



Criteria	Score
Delay for drivers	-2 (average delay of a couple of seconds)
Delay for pedestrians and cyclists	+3 (largest reduction in detour, may be slightly longer wait that staggered)
Comfort for drivers	0 assuming no raised safety platform on Ulster
Comfort for pedestrians and cyclists	+4 (signal control)
Bus passenger access	+1 (better crossings, slightly closer to intersection)
Safety improvement	+3 (removes crossing and turning movement, best facility for pedestrians as don't have to wait in centre of road)
Network impact	-1 (minor increase in rat-running past school gate)
Cost	$1,500k

Other issues:

- Crossing distance is slightly less than 15m approaching recommended maximum for single stage crossing
- Bus stops can be changed to kerbside to match existing
- Road to be resealed in 26/27, minimises ghost marking issues.
- **Raised safety platform** designed for 40km/h comfortable negotiation speed (1:20 gradient) – **Ulster Street can be optional**

Overall Score: +8 if at grade

Option 5 – Full signalisation

Criteria	Score
Delay for drivers	-4 (average delay of a 15-20 seconds)
Delay for pedestrians and cyclists	0 (largest reduction in detour but ~60s wait times)
Comfort for drivers	0 no change
Comfort for pedestrians and cyclists	+2 (signal control, but large crossing distances)
Bus passenger access	+1 (better crossings, closer to intersection)
Safety improvement	+1 (small improvement – all turns still occur)
Network impact	-4 (likely large increase in rat-running on Richmond and Abbotsford, likely impact on signals to the south)
Cost	$2,000k

Other issues:

- Road to be resealed in 26/27, minimises ghost marking issues.

Overall Score: -4

Recommended Option

Based on the analysis completed and the feedback from the community and elected members staff are recommending the following options:

Option 4 with estimated cost of $1.5M

– single stage signalized pedestrian crossing across Ulster Street at Abbotsford Street

- solid central median along Ulster Street to remove vehicle turning movements

- bus stops remain kerbside

- off road shared paths along Ulster Street and across Abbotsford Street to provide safe facilities for pedestrians and cyclists – with raised safety platforms across Abbotsford Street

Safest option with raised safety platform across Ulster Street

Alternative option at grade and without raised safety platform across Ulster Street

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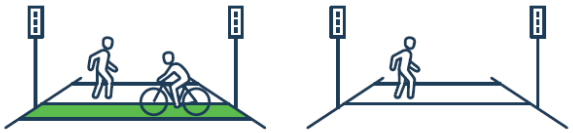
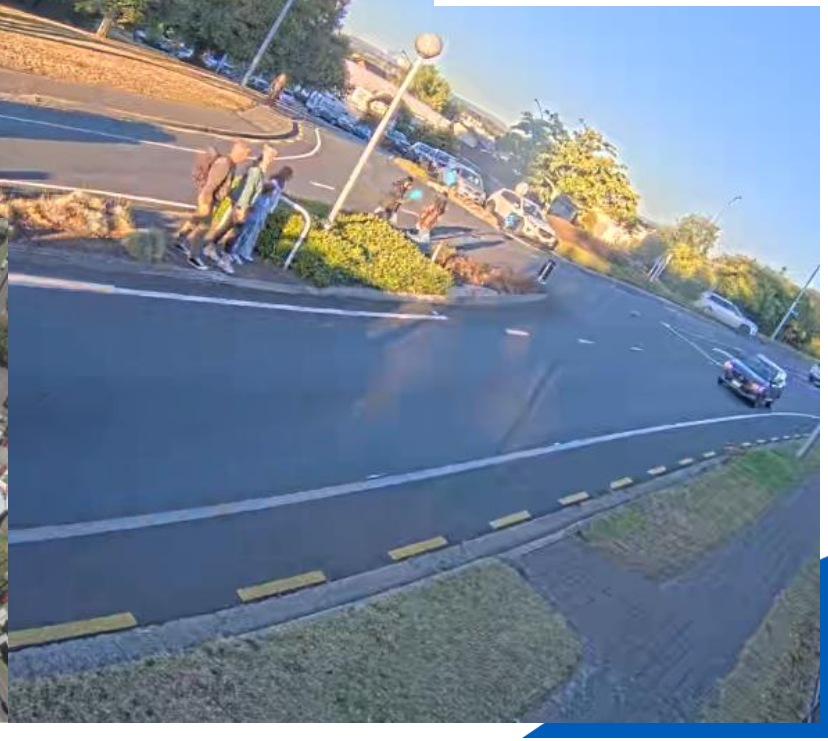
Ruakiwi Road – pedestrian crossing improvements

A quick recap on the background and issues for this site





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Ruakiwi Road – pedestrian crossing improvements

Crash Data

A ten-year crash search has shown 18 reported crashes:

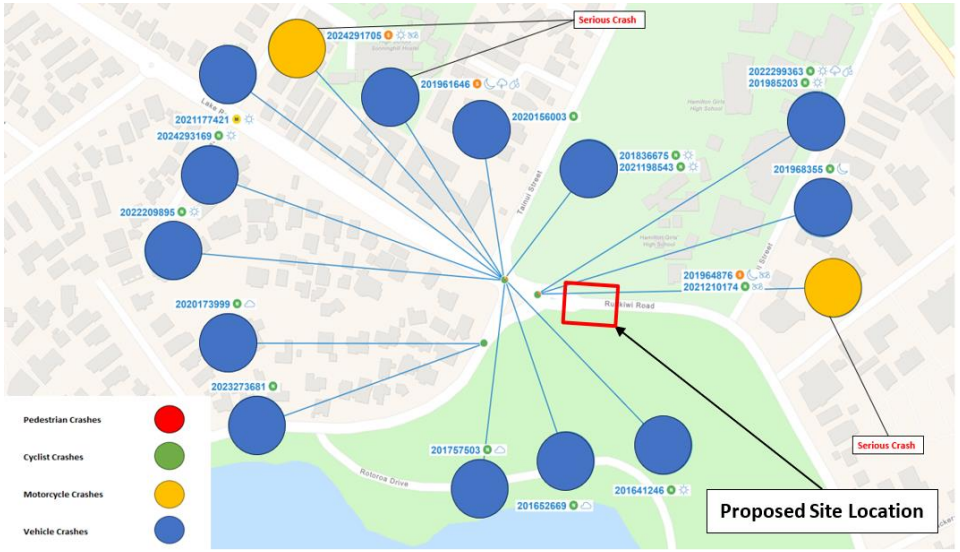
- 3 Serious injury crashes
- 1 minor injury crashes
- 14 non-injury crashes

Nine crashes occurred between 3 PM and 6 PM, coinciding with afternoon peak hours, primarily attributed to poor decision making and judgement due to busy hours.

No crashes identified at the existing refuge island and no pedestrian involved crashes.

The serious injury crashes did not involve cyclist or pedestrians.

Two of the serious injury crashes involved motorcyclist.



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Ruakiwi Road – pedestrian crossing improvements

Vehicle Movements

Ruakiwi Road has 2 traffic lanes with a central median and the following characteristics:

- Posted speed limit is 50km/h on Ruakiwi Road, the 85th%tile is 50.76km/h.
- There is an existing informal crossing with median refuge island near the Lake domain Drive intersection, which is only suitable enough to safely accommodate 2 people at a time.
- Ruakiwi Road has no dedicated cycle lanes, although there are 1.5m shoulders.
- There is 1.5m pedestrian footpath on both sides of the road.
- There is no pedestrian priority crossing within a 200-meter radius of the proposed location.
- This section of Ruakiwi Road is not a public bus route.

Road Name	ONF	Estimated AADT (veh/day) & Heavy Vehicles
Ruakiwi Road	Urban Connector (M2,P4)	15,000 (est.2023), 0% Heavy Vehicles

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Ruakiwi Road – pedestrian crossing improvements

Pedestrian Movements

There is high pedestrian demand along Ruakiwi Road near Lake Domain reserve.

200 pedestrian's cross daily at this particular location on Ruakiwi Road This has resulted in high-risk decision making and risk taking by children and other vulnerable users.

The peak traffic times also coincide with high pedestrian and cyclist activity making it difficult for pedestrians to find safe gaps in traffic.

This is compounded by pedestrians having to cross this extremely high-risk location near a busy intersection.

An onsite fixed camera was used to monitor and gather pedestrian and cyclist movement/ behaviour data:

Date and Time 7am to 7pm	Pedestrian Crossing using Existing Refuge (Ruakiwi Road)	Pedestrian crossing nearby locations	Cyclist Crossing using Existing Refuge (Ruakiwi Road)	Cyclist crossing nearby locations	Total Pedestrian crossing
22nd March 2025 (Saturday)*	189	12	11	0	**201**
24th March 2025 (Monday)	191	9	11	0	**200**

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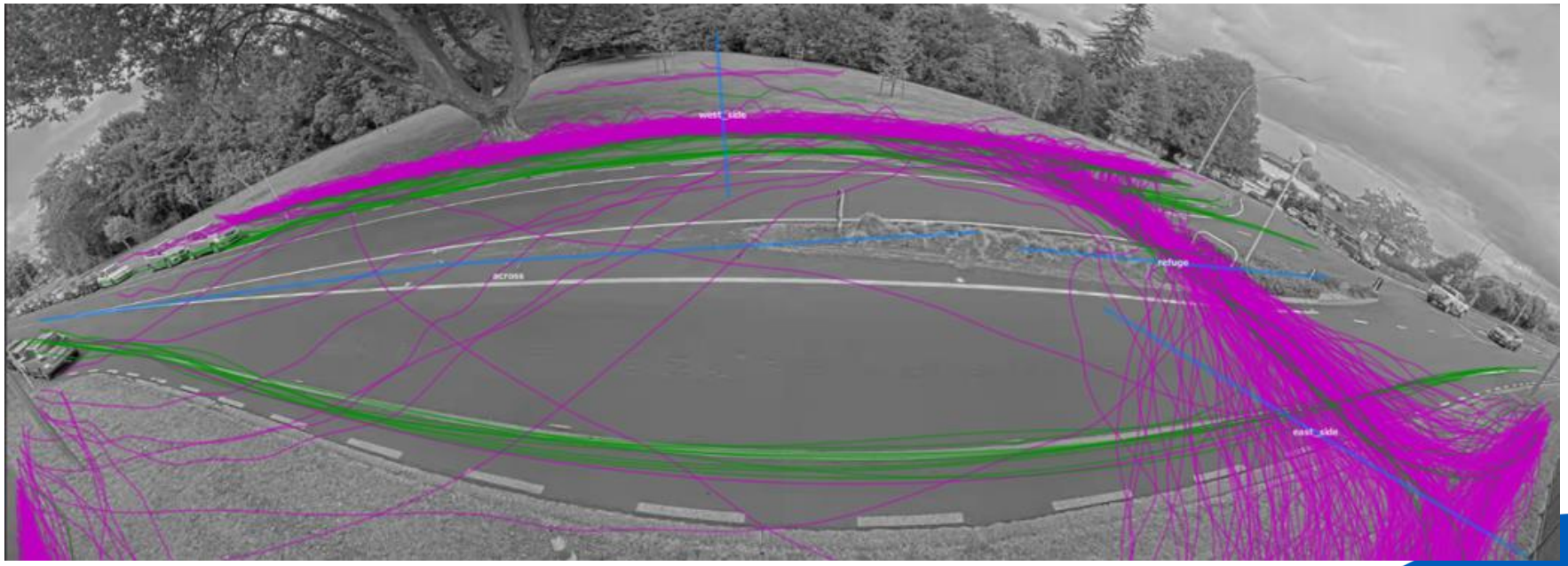
Ruakiwi Road – pedestrian crossing improvements

Pedestrian diagram

Survey Locations showing desire lines on Ruakiwi Road near existing refuge (Purple = Pedestrians, Green = Cyclists)



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Ruakiwi Road – pedestrian crossing improvements

Site Observations

A site inspection was completed on 20 March 2025 during which the following observations were made:

- **People were observed trapped** on the central island trying to find gaps in the traffic to finish crossing the road due to the high traffic volumes.
- **Vehicles accelerating at high speed** through the intersection from Lake Domain Drive turning right on to Ruakiwi Road (challenge in finding gap).
- During peak hours **minimal traffic gaps** were noted for pedestrians to cross the road and people had to run across the lanes while crossing.
- Existing cutdowns at the crossing are **not non-wheelchair friendly** due to slope up to the footpath.
- Students and family that used the narrow refuge island, were **often in groups >4** which required them to stand on to the front and rear of the existing refuge island.

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Ruakiwi Road – pedestrian crossing improvements

Customer Requests

Customer Request Management (CRM) System has recorded the following customer requests regarding pedestrian safety, crossing needs and speed environment near this location:

- **August 2023:** Request for a safe crossing facility on Ruakiwi Road to access the lake and park for recreational activities.

- **January 2022:** Request expressing concerns regarding vehicle speed and requesting for speed calming measure.

- **August 2020:** Customer reported child near hit by a vehicle and noted frequent risky behaviours exhibited by both drivers and pedestrians. They highlighted high foot traffic and vehicles travelling at approximately 60km/h with few gaps. The customer recommends implementing a controlled crossing.

- **June 2020:** A request has been made to consider the possibility of reviewing this specific intersection: Tainui St, Lake Rd, Ruakiwi Rd, and Lake Domain Drive.

- **March 2019:** Request for a safe crossing facility on Ruakiwi Road to access the lake and park for recreational activities.

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Ruakiwi Rd – Pedestrian crossing improvements

Early Engagement

Staff have completed early engagement with Hamilton Girls' High School to gather insights about the existing conditions. The school is very supportive for a formal pedestrian crossing at this location.

The following parties have been identified for engagement:

- Girls High School
- Cancer Society Lodge
- Residential properties adjacent to the intersection
- Fire and Emergency NZ (FENZ) – Site is on FENZ routes.

The site is located away from any property so primary communication for this project would be around construction timeframes and disruption.

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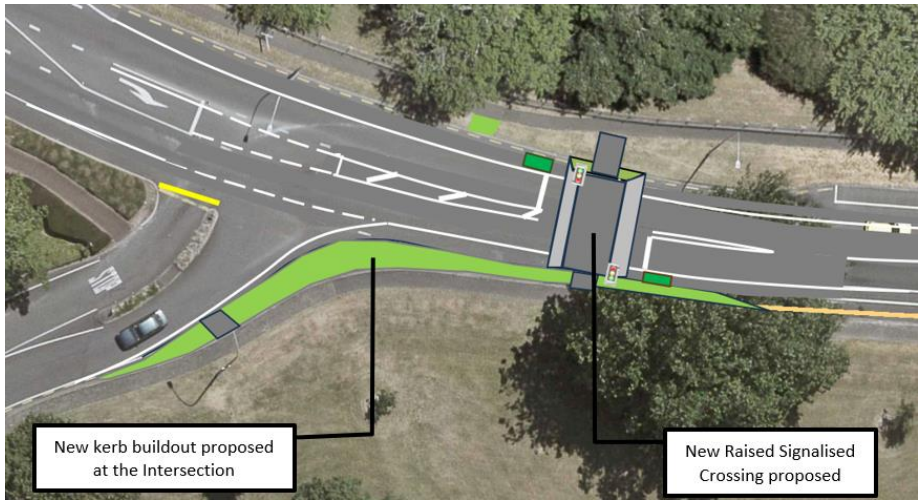
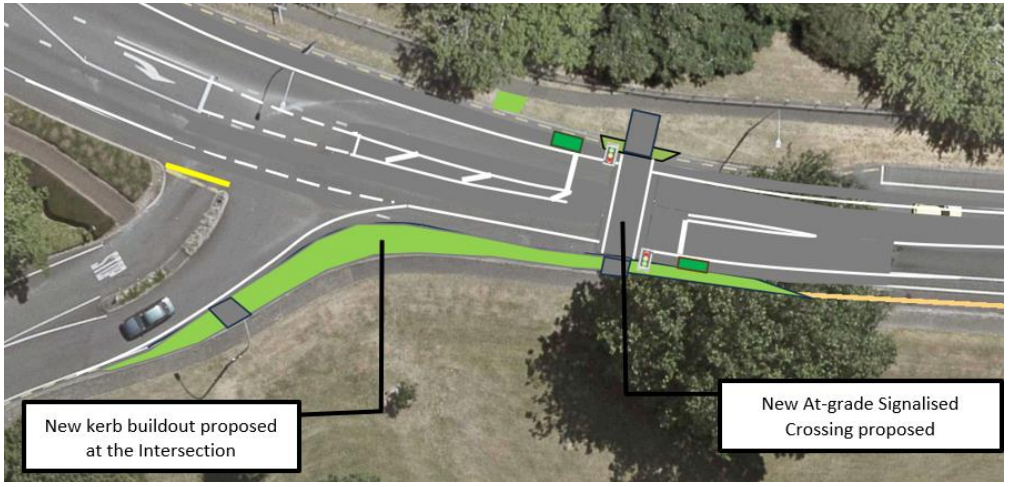
Ruakiwi Road – Pedestrian crossing improvements

Recommended options at 18 June 2025 Elected Member briefing

Preferred Safest Option: Raised signalised pedestrian crossing - **Estimated costs $950k**



Alternate Option: At-grade signalised pedestrian crossing - **Estimated costs $750k**



Ruakiwi Road / Lake Domain Drive Intersection

Site Observations

A site inspection was completed as part of a previous intersection investigation during which the following observations were made:

- **Poor sight lines** for vehicles pulling out of Lake Domain Drive due to the steep slope.
- **Vehicle speeds** appeared to be high along Ruakiwi Road
- **High turning demand** observed going into Lake Domain Drive and Tainui Street
- Median on Ruakiwi was used as a **temporary stop island** for vehicles travelling north-south
- **Consistent flow of pedestrians** crossing the Ruakiwi eastern leg at the end of the school day

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Additional Options considered (Feb 2021)

Intervention Options	Characteristics
A1 Signalised 	- Intersection lights at Tainui Street, Ruakiwi Road, Lake Road and Lake Domain Drive - Left turn slip lanes at Ruakiwi Rd - Removing the existing pram crossings and further reconstruction and reconfiguration of the street layout.
B1: Double Roundabout 	- Two roundabouts between Ruakiwi and Lake Road - Raised zebra pedestrian crossings across all approach legs - Implementing a raised zebra crossing in between the two roundabouts - Locations of the raised zebra crossings to be further investigated if moved to the preferred option.

B2: Dog-bone Roundabout 	- One elongated roundabout allowing access in Ruakiwi Road, Lake Road, Tainui Street and Lake Domain Drive - Pedestrian and cyclist crossings across Ruakiwi Road, Lake Road, Tainui Street and Lake Domain Drive - Wider kerbs on each street lane.

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Additional Options considered for this site (Feb 2021 Study)

	Option A1 Signalised Intersection	Option B1 Double Roundabout	Option B2 Dogbone Roundabout
Footprint	Overall smaller than the current intersection. Larger than Option B1 and B2	Similar footprint with Option B2 Notably smaller than existing	Similar footprint with Option B1. Notably smaller than existing
Speed Management	No speed management features. Vehicles slow down for red light	Raised safety platforms are included on all approaches. Created a safer speed environment for all road users	Raised safety platforms are included in all approaches and in between the two roundabouts. Created a safer speed environment for all road users
Walking and cycling	Signalised controlled crossing where vehicles are stopped by the red light	Raised zebra crossings are provided for all approaches	Raised zebra crossings are provided at 3 locations including the one in the middle which align with the pedestrian desire line
Estimated Cost	$4.5-5M	$5.5 – 6M	$ 6.6-7M

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Options Discussion

- All options all improve accessibility for pedestrians and cyclists crossing north-south direction
- The intersection options will improve the current intersection layout and the turning movements but are a significantly higher cost than the proposed options.
- Signalised Intersection will result in a **negative impact** on traffic operational performance, due to layout
- Double roundabout options provides the highest overall benefit for safety and accessibility for walking, cycling and vehicles operational performance.
- Both the roundabout intersection options can be installed later without the midblock pedestrian signals becoming redundant

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Staff Recommendation

It is recommended that:

- The lower cost Ruakiwi Road (east of Lake Domain Dr) midblock pedestrian signals is approved for design and construction under this current LTP.

- Monitoring be put in place following midblock signal installation to measure the impact of this on the intersection's operational and safety changes.

- The intersection transformation works to be included in the next LTP for funding if considered necessary following monitoring

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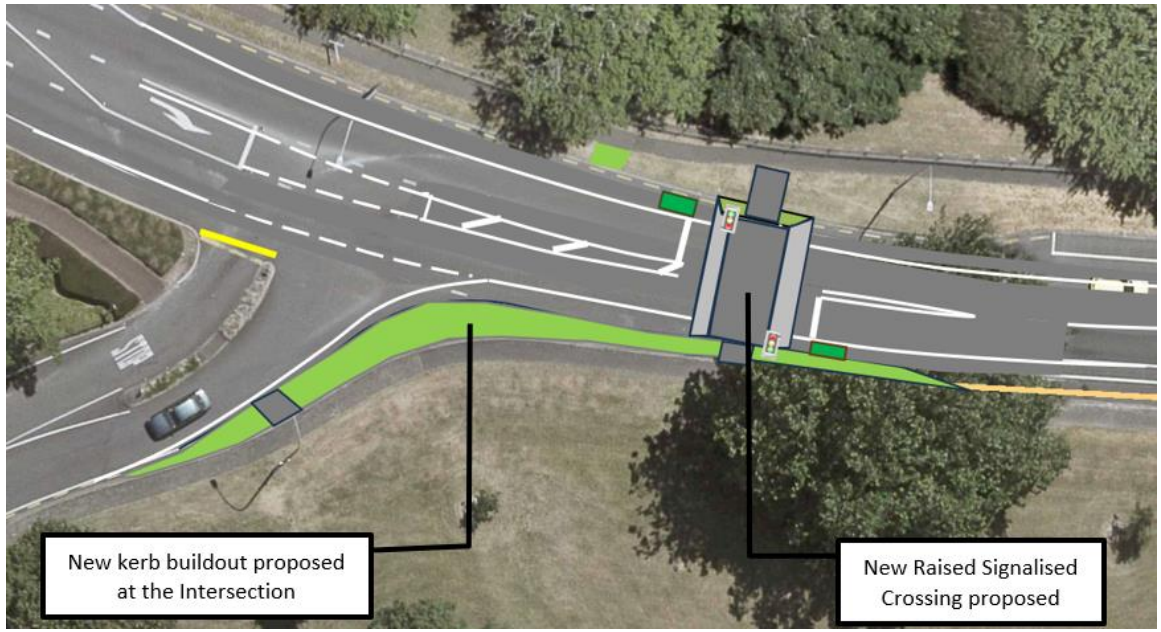
Ruakiwi Road – Pedestrian crossing improvements

Recommended option:

Preferred Safest Option: Raised signalised pedestrian crossing - **Estimated costs $950k**



Signalised intersection would allow active mode users time to safely clear the live lanes.

Raised intersection will help reduce driver speeds to 40km/h with a 1:20 ramp grades.

A Raised signals will allow for additional intersection traffic calming with more gaps for traffic exiting side roads.

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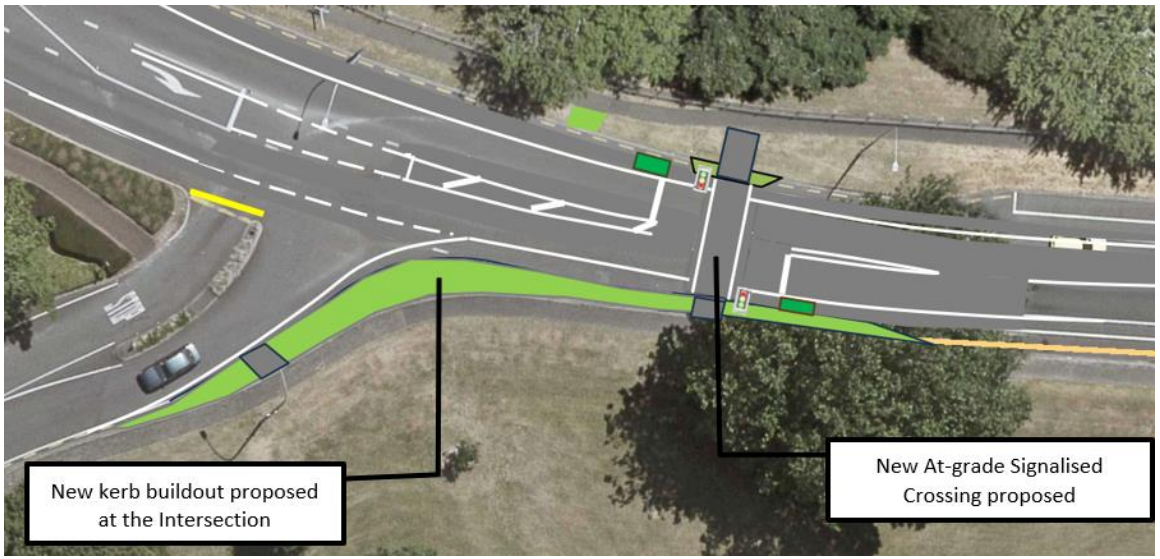
Ruakiwi Road – Pedestrian crossing improvements

Alternative Option: At-grade signalised pedestrian crossing - **Estimated costs $750k**



Signalised intersection would allow active mode users time to safely clear the live lanes.

The approach and transition speeds are not reduced to a survivable pedestrian impact speed, as a result there is risk, that any crash involving a pedestrian is likely to result in death or serious harm.

At-grade crossing unlikely to provide any additional intersection traffic calming

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What direction/feedback is needed from Members?

- Staff need direction on the preferred option(s) for inclusion into the Project Reports and presentation to the 2 September 2025 Infrastructure and Transport Committee.

- Staff would like to know if there is anything further that Members would like covered in the staff report?

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DISCUSSION TOPIC SUMMARY

Topic: Transport Projects – Macroscope proposals

Related Committee: Infrastructure and Transport

Business Unit/Group: Infrastructure and Assets

Key Staff Contact/s: Robyn Denton & Gordon Naidoo

Direction Discussion recommended?

Status: Open

Briefing Date: 30 July 2025

PURPOSE OF TOPIC/INFORMATION

To provide a presentation on the process involved in the development and delivery of the Minor Transport Improvements programme, costs associated with the projects and how value for money is achieved.

WHAT KEY THINGS SHOULD MEMBERS THINK ABOUT/ CONSIDER IN UNDERSTANDING THIS INFORMATION?

Minor transport improvements are complex activities as they involve retrofitting existing transport infrastructure which is already in use by the community and which has a lot of utilities and infrastructure in place which has to be worked around and accommodated both in the design process and in the construction activity.

KEY SUMMARY POINTS

- The Minor Transport Improvements programme had a lot of upfront work involved which starts well before the approval of funding for the LTP programme by HCC and hopefully NZTA also.
- The scope of work and therefore costs are gradually refined as the various stages in the development of the project and approvals steps via the Transport Decision Making Process for the project are completed.
- Funding decisions by the NZ Transport Agency for the minor improvements programme has made delivery for the 2024/27 more complex as we worked through additional approval steps for the use of local share funding.
- We have various options for completing the designs (via staff and consultants) and the delivery of the works (via minor works contractor and Connect Hamilton) and decisions are made on a case by case basis to ensure the best value for money.
- There will be unders and overs in the costs associated with the delivery of each project – but any unspent funding will be presented back to Elected members who will decide how that funding will be used.
- All costs associated with the planning of a project need to be either capitalised at the completion of physical works or charged to operational costs if the physical works do not proceed – so staff work hard at minimizing upfront costs until certainty of the project proceeding is gained.

WHERE CAN MEMBERS FIND MORE INFORMATION?

A copy of the presentation will be sent to Elected Members ahead of the briefing.

Purpose of Briefing

As per request from 30 April 2025 Council meeting:

To present an overview of the processes used for the development and delivery of the minor transport improvements programme and projects – including the management of costs to ensure value for money.

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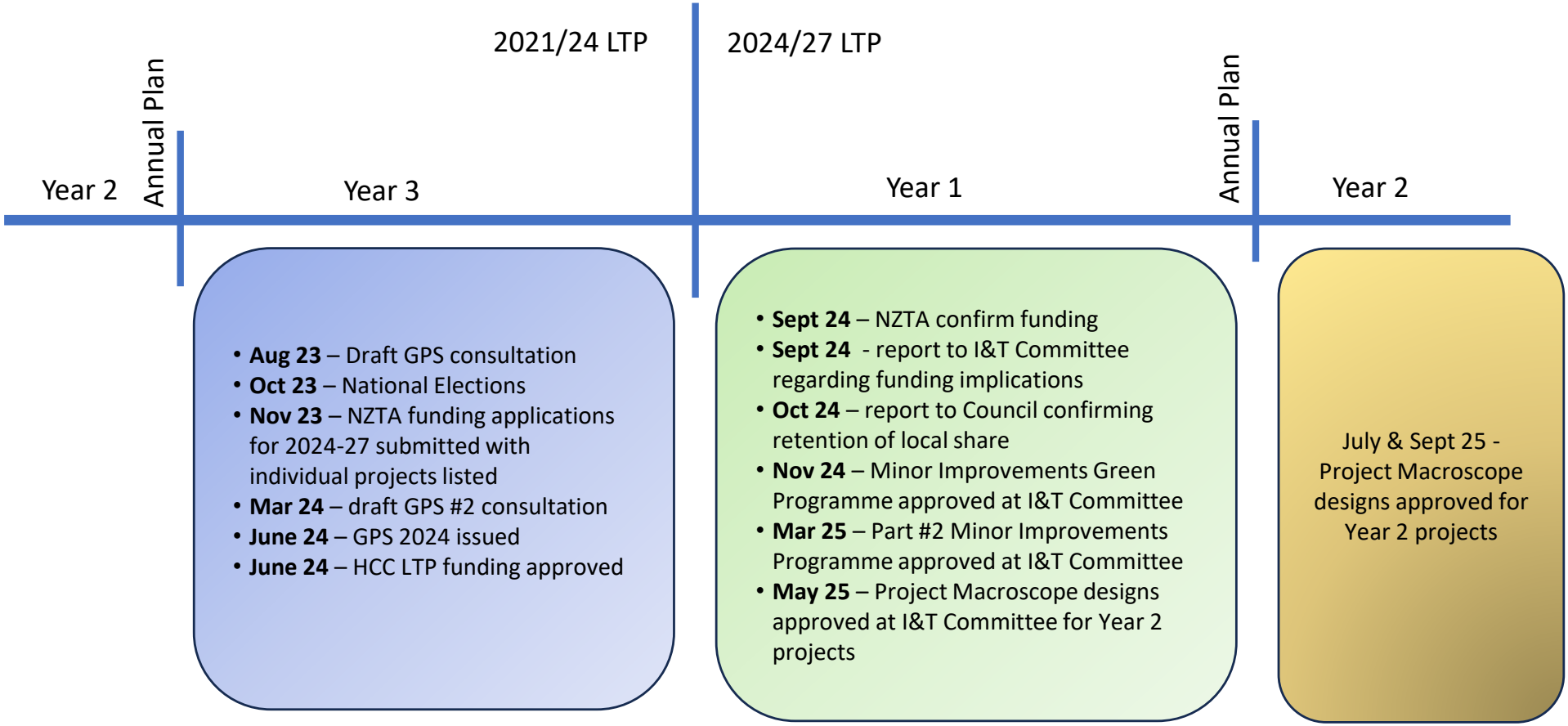
Timeline for the Minor Transport Improvement programme



Developing the Minor Transport Improvement programme

Identifying projects includes consideration of the following:

i. requests for service from the community;

ii. volumes of people using the location including vehicles, people walking and/or cycling;

iii. proximity to high use 'generators' e.g. schools, shops, aged care facilities, retirement villages, bus stops; and

iv. safety data – including crash records and on site observations.

v. contribution to outcomes included in Access Hamilton and other strategic documents such as the Biking and Micromobility network plan

vi. Elected Member direction and requests

vii. identifying opportunities for gaining co-investment from NZ Transport Agency

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Key Steps for delivery of a project

Following approval of the funding approvals (HCC LTP & NZTA co-investment (if any)), the following steps are undertaken in the delivery of the proposed programme:

i. *Develop a draft list of projects*
ii. *EM briefing on proposed programme*
iii. *Report to Committee to gain approval of the projects in accordance with decision making framework*
iv. *Prepare Project Reports (if assessed as a Yellow project) including Safe Systems Assessment*
v. *EM Briefing for Macroscope reports*
vi. *Report to Committee seeking approval for macroscope designs*
vii. *Development of concept designs*
viii. *Safety audit or review on concept designs (depending on complexity of work)*
ix. *Consultation on the concept plans*
x. *Report to Traffic Panel for approval of any parking restriction changes and outcome of consultation*
xi. *Development of detailed designs and schedules*
xii. *Safety audit of detailed design*
xiii. *Pricing of the schedule of works by the contractor who will be delivering the work*
xiv. *Notification of upcoming works – public and key stakeholders*
xv. *Construction of the project*
xvi. *Safety audit of finished works*
xvii. *Data capture and capitalisation*

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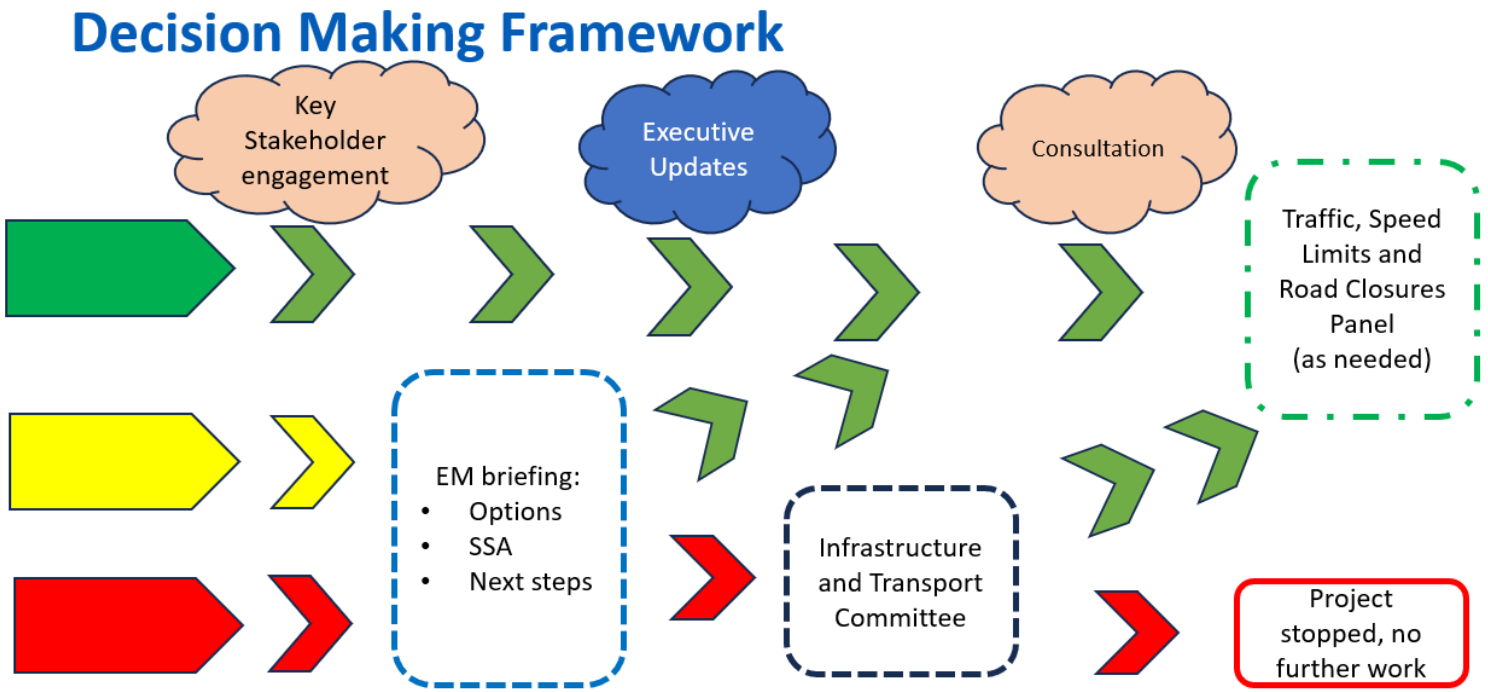
Transport Decision Making Framework

The May 2024 Infrastructure and Transport Committee approved a decision making framework:



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Project reports and options

Projects that had been assessed as “Yellow” projects in accordance with the Transport Decision Making framework require a project report to be developed.

The Project Report contains:

- Problem definition
- Why it is important to address the problem
- Data including traffic volumes and speed, pedestrian and cyclist counts, crash history
- Community and public feedback already received
- Results of any early stakeholder engagement
- Identification of options including a Safe System Assessment
- Recommendations of the safest option as a preferred option. (Noting some of these do include Raised Safety Platforms (RSP), and an alternative option is also provided – generally without an RSP.

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Green Field Development vs In Use Retrofit

So... A mechanic was removing a cylinder head from the motor of a Harley, when he spotted a world-famous heart surgeon in his shop. The heart surgeon was waiting for the service manager to come take a look at his bike.

The mechanic shouted across the garage, "Hey Doc can I ask you a question?" The famous surgeon, a bit surprised, walked over to the mechanic working on the motorcycle.

The mechanic straightened up, wiped his hands on a rag and asked, "So Doc, look at this engine. I also can open it up, take valves out, fix'em, put in new parts and when I finish this will work just like a new one. So how come I get a pittance and you get the really big money, when you and I are doing basically the same work?"

The surgeon paused, smiled and leaned over, and whispered to the mechanic, "Try doing it while it's running."

vs

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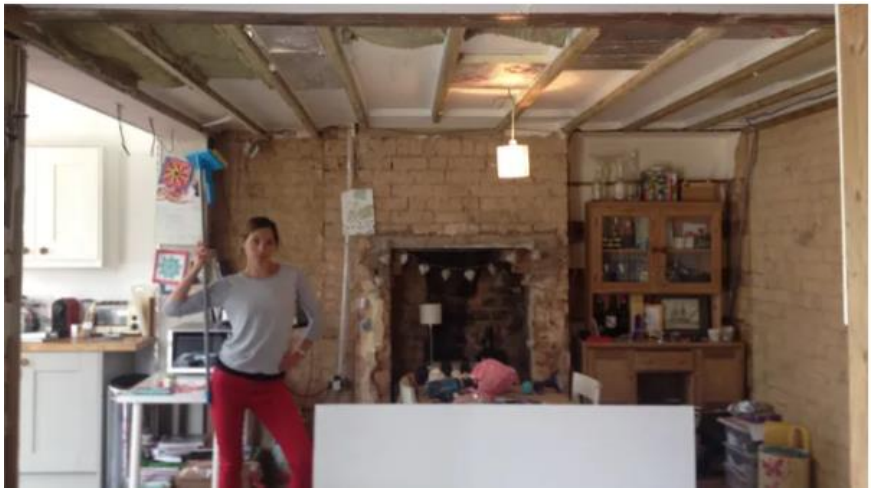
New house vs In Use Retrofit



Things we think about for our ‘in use retrofit’ transport projects

- Adjacent residents and businesses: access, noise, dust, accommodation works within the property, impact on their amenity
- Working around existing utilities below the ground, various depths and locations
- Finding space for additional services to be added eg, new drainage
- Allowing the time to get the new services installed eg power & communication connections for traffic signals
- Keeping the site accessible and safe for pedestrians and cyclists to move through
- Managing general traffic through the site – vehicles and people eg school sites
- Managing the construction traffic taking materials on and off site
- Hours of work – can be limited to being outside peak hours on busy sites
- Keeping the workers on the site safe – temporary traffic management
- Working under overhead power services – limiting the size of equipment that can be used
- Where materials are stored so that they are safe and not causing a hazard – generally ‘just in time’ delivery
- How we will be able to maintain and service this new facility in the longer term
- What communications and engagement do we need to complete prior to the designs being finalised and what is needed throughout the delivery of the physical works to support temporary traffic management but also any impacted businesses.

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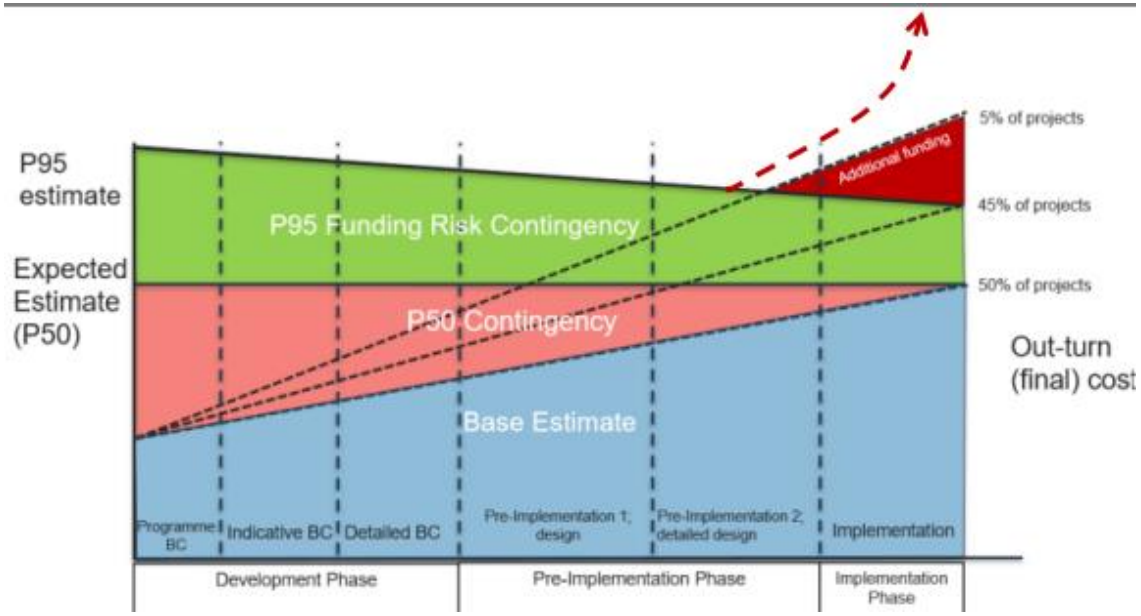
Pricing the Projects



Construction Cost Estimate
+
Non-Construction Cost Estimate
=
Base Estimate
+
Risk Quantification (probable risk factors)
=
Project Expected Estimate (P50)
+
Funding Risk Contingency
=
Total Project Cost Estimate (P95)

Cost estimation is seen as an iterative process where project cost estimates are revised and updated as the project scope becomes more precise during the project life cycle and project risk assumptions are refined.

A capital investment usually begins **when there is very little known about the project** and an initial estimate is required.

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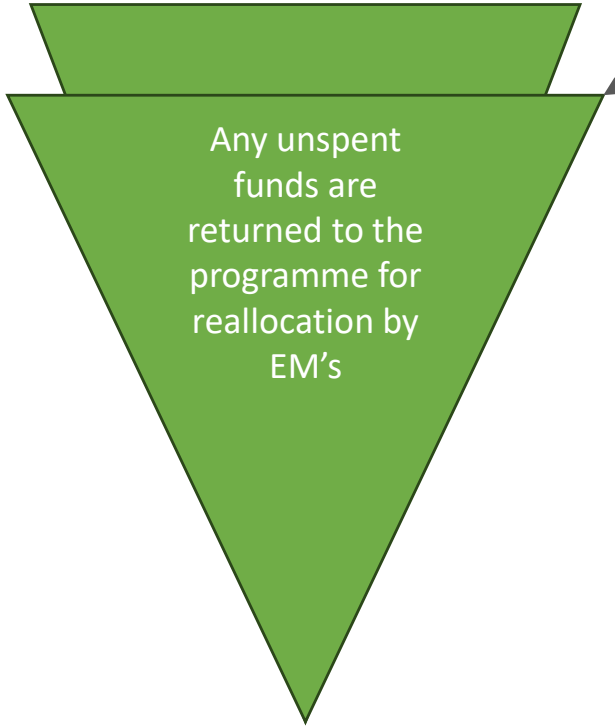
Managing the Costs

Work Programmes are managed within the available budget

Bus shelters
Bus stop Improvements
Accessibility Improvements
Footpath widening
New footpaths
New guardrails
New stormwater facilities
Pedestrian fencing at underpasses
Associated improvements for Kerb and Channel renewal programme
New road signs and markings

Projects are managed to achieve desired outcomes and value for money



Sometimes we find there is a need for more work than originally anticipated when we do the Project Reports

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Examples of Costs

Power connections for traffic signals:
- Typical $1k - $10k – can be up to $50k

Communications at traffic signals:
- $2k (no camera – eg pedestrian signals)
- $10k (to run a camera eg at intersections)

Traffic signals for midblock pedestrian crossing $90 - 150k

Traffic Signal Mastarms for hanging traffic signals across the road extra $10k for each mastarm.

Streetlight – new, plain pole and luminaire $10k

Existing Services: locating and safely working around them to install new infrastructure
- approximately $10k for simple site like pedestrian signals

Catchpits
- supply and install $4 – 4.5k
- additional cost to connect into the stormwater network via a lead – length varies

Kerb and Channel - $300-350 per metre
- includes preparation of base, pouring concrete, protection while drying, replacement of road pavement and berm/footpath

New footpath/shared path - $130-150/m2

New signs and poles $350-400 each

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Examples of Costs

Safety Audits
- required to be completed on concept, detailed design and post construction
- varies according to complexity of site
- typically $3-5k per audit depending on complexity of site

Public Consultation and Engagement
- letter drops
- door knocking
- public meetings
- variable message boards
- information for website, media releases, executive updates

Consents $20k minimum
- to work around trees
- to work around significant natural areas

Design:
- estimated as 10-20 % of the total project cost
- options development and assessment
- Concept plans – suitable for public consultation
- on site surveys
- detailed design
- construction drawings
- lighting design
- drainage and stormwater overland flow paths
- schedules of quantities
- traffic restrictions formalised via Traffic Panel
-Cost goes up if we need to redesign

Contract Supervision
- ranges 1-3% of total project costs
- Quality assurance,
- Health and Safety assurance
- monitoring performance, timelines, engagement with adjacent properties
- measure up of works completed for processing payments
-preparing contract payment claims
- data gathering for capitalisation of the new assets

Ensuring Value for Money

Consultants

- Professional services **panel** managed by Co-Lab
- Work assigned to consultants who have previous experience and demonstrated skills
- Ability to seek prices across several consultants for the larger/complex projects
- Staff are experienced in developing the initial scope and have experience in working in the consultancy business
- Staff do negotiate with Consultants if they believe the proposed costs are too high

Physical Works

- Contracts are publicly and competitively tendered in accordance with HCC and NZTA procurement processes
- A panel of contractors for delivery being established
- Coordinate with existing work where possible eg reseals easiest way to remove roadmarking, timing of 3 Waters projects
- Issue to Connect Hamilton where it ties into a logical part of their programme eg footpath widening, accessibility improvements, pavement renewals

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Managing the scope vs do it once, do it right

Need to manage the scope of the works to ensure keeping within budget, but also trying to ‘do it once, do it right’.

Aim to ensure all modes are better off – or at least, no worse off.

Common to find additional work that makes sense to deal with at the time eg localised footpath widening or repairs, kerb & channel replacement, pavement repairs

Generally cheaper to do it now rather than have another crew come in later – one establishment cost, share the traffic management costs. It is also less disruptive to the adjacent residents or businesses

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Capitalisation vs Operational costs

Any work undertaken in the planning, scoping, reporting, consultation, design, supervision etc can be capitalised if there are physical works completed.

Any work undertaken that does not result in physical works has to be charged to an operational budget.

We do not have planning money in our operational budgets – and this therefore makes it very hard to accommodate and this creates challenges to our budgets eg Eastern Pathways.

We therefore try to minimise and manage the costs upfront prior to approval from EM's for a project to proceed

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Temporary Traffic Management – managing costs

- Safety and efficiency is our key focus
- Coordinating works to get multiple jobs completed under one traffic management plan provides best cost savings
- We are doing this now and have good examples
- All options considered to determine what approach will be used to deliver works including detours, night works
- New tool to assist coordination across activities - Forward Works Viewer

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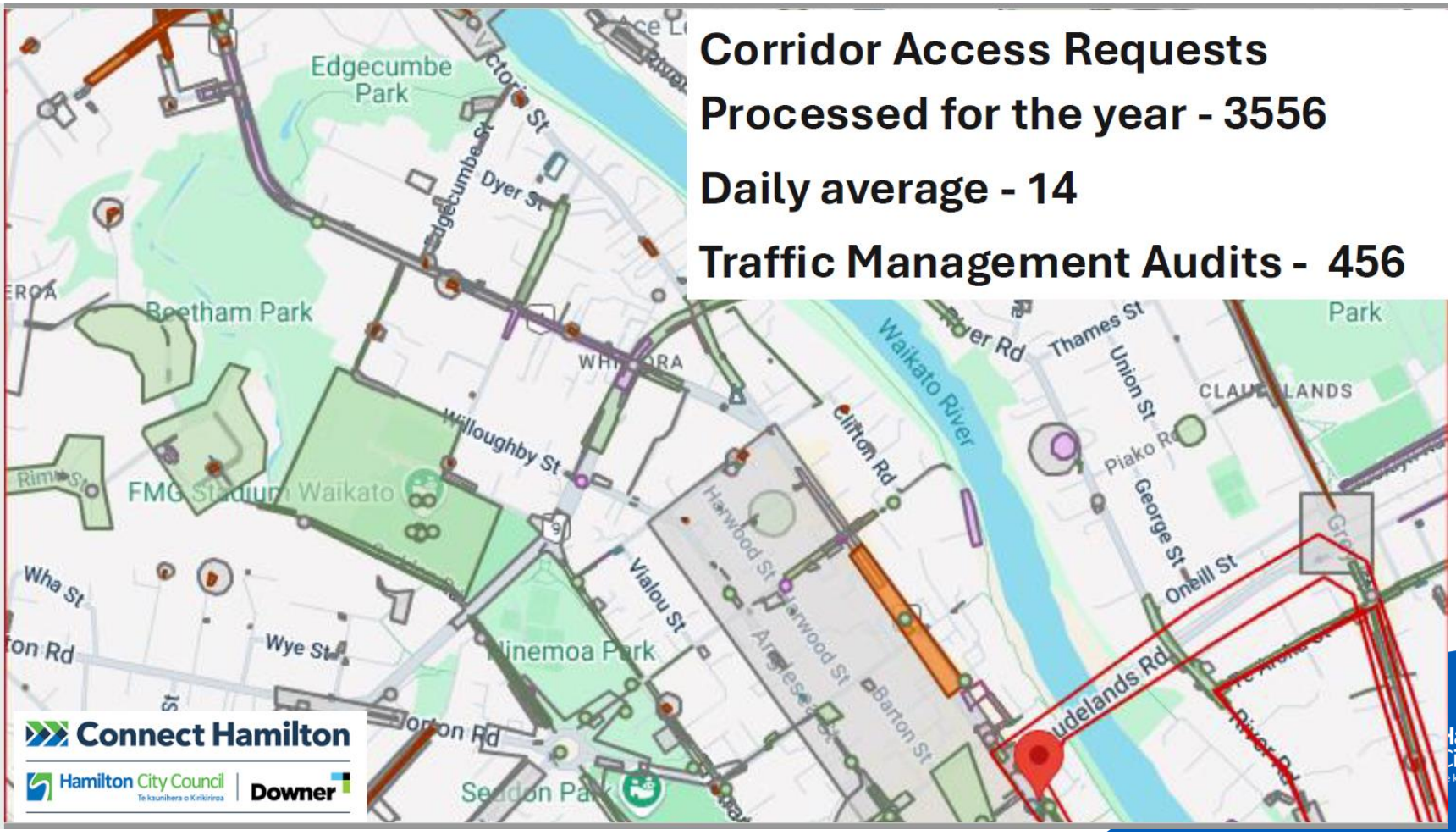
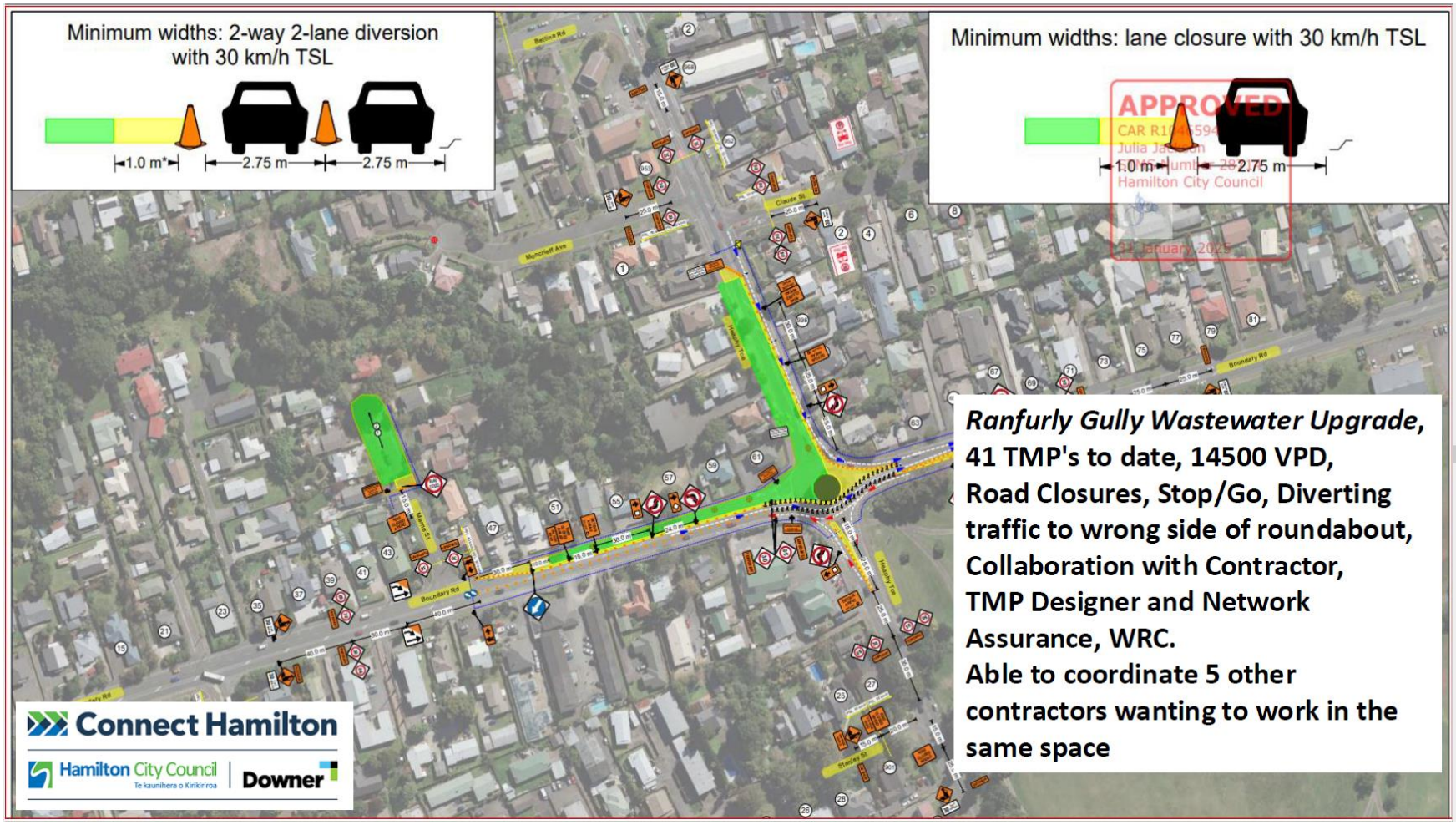
Temporary Traffic Management



Temporary Traffic Management – coordinating works



***Ranfurly Gully Wastewater Upgrade*, 41 TMP's to date, 14500 VPD, Road Closures, Stop/Go, Diverting traffic to wrong side of roundabout, Collaboration with Contractor, TMP Designer and Network Assurance, WRC.**

Able to coordinate 5 other contractors wanting to work in the same space