RICHMOND TRANSPORT

Programme Business Case

WAKA KOTAHI NZ TRANSPORT AGENCY

16 DECEMBER 2021

WAKA KOTAHI NZ TRANSPORT AGENCY

tasman district council

Te Kaunihera o te tai o Aorere

Disclaimer

Waka Kotahi has endeavoured to ensure material in this document is technically accurate and reflects legal requirements. However, the document does not override governing legislation. Waka Kotahi does not accept liability for any consequences arising from the use of this document. If the user of this document is unsure whether the material is correct, they should refer directly to the relevant legislation and contact Waka Kotahi.

More information

Waka Kotahi NZ Transport Agency
Published December 2020

If you have further queries, call our contact centre on 0800 699 000 or write to us:

Waka Kotahi NZ Transport Agency
Private Bag 6995
Wellington 6141

This document is available on our website at www.nzta.govt.nz

Contents

Appendices

EXECUTIVE SUMMARY

Overview

Richmond is growing at an unprecedented rate, with development in the Richmond West and Richmond South areas occurring far sooner than originally anticipated. Now, partly in response to a national need for more affordable housing, further continued growth in the immediate to short term is expected in both Richmond West and Richmond South.

This Richmond Transport Programme Business Case (PBC) demonstrates the need for investment and sets out a 30 year programme that will can support growth whilst at the same time making Richmond a more liveable place and help achieve climate change goals. This PBC has been developed jointly between Tasman District Council (TDC) and Waka Kotahi, and the preferred programme has been informed by extensive consultation with the public and community representatives.

Preferred programme

A significantly improved walking, cycling and public transport network is the foundation of the programme. Short term investment is targeted at achieving mode shift from the car (particularly short local journeys) to sustainable modes as a means of improving liveability and safety. The initial focus is around improving connections to schools and key places such as the town centre and parks. Encouraging the younger generation to walk, cycle or take the bus will help to change mindsets and make New Zealand's long term climate change aspirations more achievable.

Investment in active and public transport in the short-term, along with minor capacity improvements along SH6, will help reduce demands through local streets. However, unless a major investment in improving the capacity of the state highway corridor is made, the effects of growth will mean that high traffic volumes will return to the local streets – to a level beyond what is currently seen. The benefits gained through the short-term programme could therefore be lost. The Hope Bypass has been identified as the preferred long-term solution for ensuring that the desired outcomes from transport investment are realised.

The preferred programme includes:

- Safety improvements to 16 intersections.
- 6 km of new separated cycleways.
- 15 km of new on-road cycleways.
- Reduced speed limits along Salisbury Road and through the town centre.
- A staged approach to delivering a high-quality public transport network and services.
- Targeted measures to reduce rat-running on local streets.
- A focus on improving the place quality of the town – with more 'people focused' streets.

Problems

The problem statements, prepared with input from key stakeholders, are:

1. **Safety and Place (50%)** - Increasing traffic volumes as a result of growth creates severance and rat running, leading to reduced place value and increased safety risk.
2. **Route Efficiency (30%)** - Traffic congestion through Richmond causes delays to people and goods reducing travel time reliability and access to economic opportunities and key destinations.
3. **Travel Choice (20%)** - Reliance on private cars for short journeys as a result of car-oriented development leads to low utilisation of public and active transport modes and conflict between modes (20%).

The problem statements align strongly with all five of the enduring outcomes within the Ministry of Transport's Transport Outcomes Framework; namely 'Inclusive access', 'Economic prosperity', 'Healthy & safe people', 'Resilience & security' and 'Environmental sustainability'.

Investment Objectives

The Investment Objectives were developed with the project partners and consider the wider mode change goals of TDC. An Investment Logic Map, presented within this PBC, show how these link to the identified problems.

Table 1: Investment Objectives

Theme	Investment Objectives
Place quality	• Traffic volumes on key local roads (e.g. Salisbury Road and Wensley Road) to reduce by 25% by 2028 when compared to a 'Do Nothing' scenario.
Accessibility	• 75% of 'key routes' offer high quality active and/or public transport options within ten years
Safety	• Reduce the proportion of cyclists riding on the footpath along Wensley Road and Salisbury Road to 5%, from the current 19%. • Increase the number of people who stated that they feel safe cycling in Richmond in the next ten years. *Note that baseline data is required.*
Route efficiency	• Freight travel time along SH6 between Hope and the 'three roundabouts' remains within 2 minutes of current travel times for the next 10 years.
Mode share	• Mode share for journeys to work by public or active modes (people living and working in Richmond) increases from 12% in 2018 to 22% by 2031. • Mode share for journeys to school by public or active modes increases from 51% in 2018 to 66% in 2031.

Long list

The long list was finalised with 89 interventions identified through the workshops (31), existing strategies and plans (41) and project team inputs (17). Once the long list was collated, some ideas or potential interventions were flagged and not explored beyond early assessment. There are several reasons for excluding alternatives at this long-list staging, including:

- Duplication of ideas.
- Interventions were outside of the project area.
- Did not meet early assessment thresholds for feasibility, deliverability and cost.
- Waka Kotahi/TDC had limited influence or control over as part of this project (i.e. national policy).

Identifying programmes

Potential programmes of work, made up of multiple interventions, were developed. The intent was that each programme has a different approach capturing the key themes and outcomes that had emerged through the development of the Strategic Case. This ensured that a variety of potential responses were considered.

The programmes were:

- **Addressing immediate issues** facing Richmond through a low level of investment.
- **Accessibility** - improving access for all modes.
- **Liveability** of place, including improved travel choices.
- **Enabling Growth** (efficient movement through Richmond). *The description of this programme was later expanded to better reflect growth in relation to the integration of land use and transport in enabling growth.*

Given the wide-reaching implications that a new road along the existing Hope Bypass designation could have, the following programmes were also considered:

- **Liveability with Hope Bypass (with/without flyover)** - sub-programmes of the 'liveability' programme.
- **Enabling growth** – focusing on improving efficiency of vehicles and freight.
- **Do Maximum**.

Establishing an emerging programme

An assessment of the programmes through multi-criteria analysis (MCA) allowed for a better understanding of the relative benefits and costs of each. The 'Do Maximum' programme would, by definition, deliver the highest benefits. The MCA process therefore also provided a tool for helping understand what interventions contribute the best value for money, should the Do Maximum be unaffordable.

MCA

Technical specialists from the project team each assessed programmes performance in relation to their specialisation. These specialisation scores were then pulled together into a single MCA matrix, before being moderated. The focus of the moderation process was to understand how much (slightly, moderately, significantly) one programme performed better or worse than another, and to ensure that individual scores considered a wide range of different perspectives.

The raw scoring identified that the 'Do Minimum', 'Addressing Immediate Issues' and 'Increased Road Capacity' scored notably lower than alternative programmes.

Sensitivity tests were then undertaken to understand whether the relative ranking of programmes would change in response to chances to the weighting of key criteria. These sensitivity tests focused on the themes of **'climate change', 'high growth** and '**low growth**. A summary of the scoring is provided within Table 2.

Table 2: MCA - Programme rankings

Theme	Sensitivity			
	Baseline	Climate Change	High growth	Low growth
Do Min	8	8	8	8
Addressing Immediate Issues	7	7	7	6
Accessibility	3	2	3	2
Liveability (excl Hope)	5	5	6	1
Liveability (incl Hope - at grade)	4	4	5	3
Liveability (incl Hope - flyover)	2	3	2	4
Increased road capacity	6	6	4	7
Do Maximum	1	1	1	5

The MCA identified that the 'Do Maximum' consistently ranked the highest for all scenarios, aside for the 'low growth'. This is because a maximum investment programme is intended to support future growth.

The relative rankings of the programmes remained relatively consistent, regardless of the sensitivity test that was used. This highlighted that the liveability and accessibility programmes contribute well to achieving the desired outcomes of investment.

Feedback from stakeholders

The primary purpose of Workshop No.2 was to present the programmes to the wider stakeholders and gain feedback that would assist in the identification of an emerging preferred programme. Key feedback was:

- All groups agreed that the 'Do Maximum' should be used as the basis for forming the 'preferred programme'.
- Stakeholders agreed that Hope Bypass designation, which is due to lapse in 2023, should have its timeframe extended. Further work, and monitoring of the future transport mode trends would be required before a decision on the form and function of the transport corridor can be made.

  There were two distinct viewpoints amongst the group regarding the potential Hope Bypass:

  - Supporters of a new bypass noted that it was needed to resolve increasing congestion issues, with the biggest concern being the impact on freight movement and associated economic impacts. It was however acknowledged that it would take time for such a project to be funded, investigated, designed, and ultimately constructed.
  - Stakeholders who were not supportive of the bypass argued that short term measures could deliver the necessary mode shift. However, there is no certainty that, even with a comprehensive suite of active and public transport infrastructure, that capacity issues would be resolved.

  There was agreement that the designation should be retained, but not around how it should be used.

- Stakeholders agreed that setting in place infrastructure at an early stage that encourages mode shift should be undertaken in the first instance.

Programme refinement

The project team refined a programme that used the Do Maximum programme as a basis and then refined by referring to key features of the 'Liveability' programme. The refinement process involved:

- Considering how the network would work as a whole, and whether additional interventions would be needed to compliment core components of the programme.
- Taking a pragmatic approach to establish what could reasonably be achieved, from both funding and constructability points of view, for the short (0-3 year), medium (4-10 year) and long term (11-30 year) timeframes.

The refined 'emerging preferred programme' was then presented to the public for feedback.

Ultimately the emerging preferred programme that was presented to the public was a hybrid between the 'Liveability' and the 'Do Maximum'. The interventions for delivery in the early years were primarily from the 'Liveability' programme and it was a popular stakeholder programme. The remaining interventions specific to the Do Max were identified for implementation in later years, to enable monitoring into the effectiveness of early interventions effectiveness.

Refining the preferred programme

Public engagement on the emerging preferred programme occurred between 19 July 2021 and 13 August 2021. During the engagement period 1,163 pieces of feedback were submitted.

The following key themes emerged in the feedback:

- Bringing forward the timing of the Hope bypass.
- Conversely, removing the Hope bypass from the programme.
- Congestion and delay in the area surrounding the Gladstone Road (SH6) and Queen Street intersection.
- General agreement with the cycling infrastructure proposed in the programme.
- General agreement of the public transport services and infrastructure proposed in the programme.

Preferred programme

The preferred programme was finalised by:

- Taking into consideration feedback from the public. Refer to Section 15.4 around specific changes which were made is response to feedback.
- Review of the projects included within the 2021-24 NLTP (published in September 2021).

The preferred programme is presented on maps provided as Figure 34 to Figure 36.

Hope Bypass

This PBC has demonstrated that, at the very least, the designation should be extended to allow time for detailed investigation into the potential form and function of a potential bypass to be undertaken. Whilst there was some disagreement amongst some stakeholder groups around how the designation should be used, there was consensus that the corridor should be retained for transport purposes.

The PBC-level assessment and modelling established that:

- Without the bypass, travel time reliability along SH6 Gladstone Road will likely worsen. This is because interventions which are targeted at improving liveability, such as reduced speed limits on Salisbury Road, discourage rat-running (and hence places more demands on SH6). Significant housing growth will also create far more trips, and regardless of how much active mode infrastructure is provided, the majority of new trips would still be car-based.
- The Hope Bypass is forecast to bring a 33% travel time benefit for freight travelling between Hope and the three roundabouts for the 2048 future year when compared to a 'Do Minimum' scenario.
- A bypass would deliver significant travel time benefits for through traffic, and as a result would reduce the level of rat-running on local streets. The bypass would therefore strongly support the desired safety and liveability objectives for the project, and in the long term these objectives potentially may not be delivered unless the Hope Bypass is introduced.

- For capacity reasons, the form of the intersection between the bypass and Lower Queen Street would most likely need to be grade-separated (flyover).
- The Hope Bypass would not necessarily be a high-speed road (>60kph). Potential forms and functions for the road should be considered as part of a separate business case.
- Careful consideration will need to be given to how the designation could be used to support the active transport network. The assumption of this PBC is that the bypass would include a fully separated off-road cycle (or shared) path that would run the length of the designation, with at least one safe (signalised) crossing point.

Ultimately, the question of when the Hope Bypass is required is dependent on several factors. These include:

- The level of mode shift for journeys to education and work that the short-term programme can deliver.
- Uptake in public transport following improvements to services.
- Where land use development occurs, and how this compares to what we expect now.
- Similarly, when land use development occurs.

Ongoing monitoring (already funded through the 2021-24 NLTP) of traffic volumes, travel times, bus patronage, active mode uptake and crash statistics will be essential.

PART A: CASE FOR CHANGE

1. INTRODUCTION

1.1 Overview

Richmond is growing at an unprecedented rate[1], with development in the Richmond West and Richmond South areas occurring far sooner than originally anticipated. Now, partly in response to a national need for more affordable housing, further continued growth in the immediate to short term is expected in both Richmond West and Richmond South.

To support this growth, careful planning and investment is required now. There are immediate issues facing Richmond's transport network and there is a need to ensure that the network can appropriately accommodate future demands. The balance is that this must be done in a manner that improves the liveability and vibrancy of the town whilst ensuring that regional movement of people and goods is efficient.

This **Richmond Transport Programme Business Case** (PBC) has been developed to better understand the current and future transport problems that Richmond is facing, and to establish a preferred programme of interventions. This project is a partnership between Waka Kotahi and Tasman District Council (TDC) and seeks to establish a total transport system solution for Richmond.

The PBC has been prepared in accordance with the principles outlined in the Waka Kotahi Business Case guidelines, to provide the information required to make an investment decision.

1.2 Drivers for change

The key drivers for undertaking this PBC now are:

- Impacts of a growing population and associated access concerns.
- Richmond's urban transformation.
- Changing freight demands and connections to Port of Nelson, Stoke and Nelson.
- Connections to nearby areas such as Wakefield, Brightwater, Mapua and Motueka.
- TDC goal to increase use of public and active modes.
- Waka Kotahi's 'Hope Bypass' designation lapse in 2023.
- Access onto SH60 from Richmond West.

Each of these key drivers are further discussed in **Section 2**.

1.3 Project area

The extent of the project area is Richmond and the Waimea Plains from Wairoa River to the south, Waimea River to the north and Champion Road to east. The project area includes the "three roundabouts"[2].

This PBC reflects the first comprehensive study that is focused on the wider Richmond area. There are transport network issues outside this study area, and particularly north towards Nelson. However, to expand the study area risks diluting the importance of the issues facing Richmond and would have implications for the wider Tasman/Nelson and Top of the South regions.

Figure 1 shows the location of Richmond, relative to Nelson City and other key regional destinations. The map also identifies the 'wider area of influence'. Whilst specific transport interventions are not identified in this area, potentially interventions identified for Richmond will have wider reaching implications to how people in the wider Tasman area will travel.

[1] 1,300 new dwellings, a new school and a residential shopping cluster in the next 10 years. Most of the housing development will be completed in the next 5 years.

[2] SH6 / Salisbury Road; Salisbury Road / Main Road Stoke; Champion Road / Salisbury Road

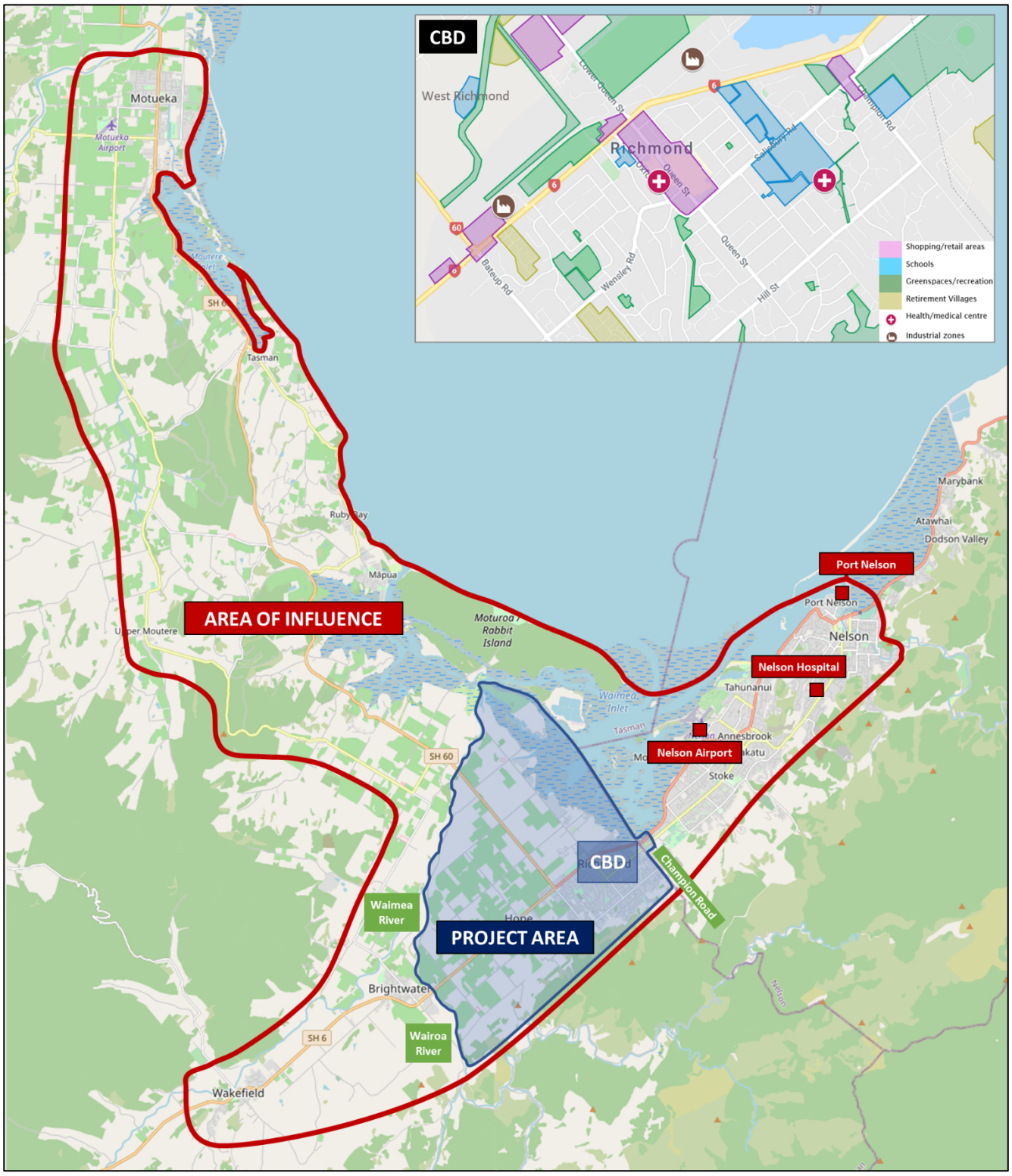


Figure 1: Project area

1.4 Previous / ongoing strategies

1.4.1 Recent local transport strategies

The draft Strategic Case for the project was prepared in August 2020. The Strategic Case identified the problems and benefits of investing in Richmond's transport network, examined available evidence for the problems and established Investment Objectives and key performance indicators (KPIs') to measure the success of investment over time.

As part of the PBC development, the Strategic Case has been revisited and updated to consider the latest information – most notably to capture recent strategies and plans that TDC have completed since August 2020.

An overview of the transport strategies, which outline aspirations and set the strategic transport direction for the Tasman District, is provided within Table 3.

Table 3: Recently completed local transport strategies

TDC Strategy/Plan	Purpose
Walking and Cycling Strategy 2021-51 (TDC)	The main aim of this document is to outline how to improve and encourage active modes as alternatives to private motor-vehicle use. The strategy has four parts: goals, issues, what we will do, and how we will do it. The objectives of the strategy align strongly with the investment objectives (of the draft Strategic Case) of improving liveability and improving transport choice.
Nelson/Tasman Public Transport Review 2020 (NCC and TDC joint plan)[3]	This document was formed in collaboration between TDC and Nelson City Council (NCC). It states that both council's wish to provide a regional integrated network that: • Provides attractive, economic, and viable transport choices for all sectors of the community. • Reduces reliance on motor vehicles. • Is sustainable and reduced carbon emission based. The plan sets out delivery in three stages, to ensure that the most important elements are introduced first, and to enable increment, affordable improvements. **Stage 1 (2023)** • A new simplified urban route network, which will operate seven days a week with improved service levels • Increased frequency to all urban routes to every 30 min, from 7 am to 7pm. 7 days a week. Maintenance of the current hours of operation on Routes 1 and 2. • A new demand responsive service to supplement the main routes in Stoke • New regional commuter services from Motueka and Wakefield to Richmond (and express onwards to Nelson), providing four return trips to Motueka and six return trips to Wakefield per weekday. • Formalised community transport in Golden Bay, and Hira • New high-quality super stops at Richmond, Stoke, Tahunanui, Hospital and Nelson • Bus stop improvements elsewhere in the network • Low emission buses • A new fare structure based around a single urban fare zone, and public information improvements **Stage 2 (2026)** • Introduction of park and ride facilities in Tasman, • Introduction of weekend services on the regional routes, • Review of urban development and intensification proposals to target any new PT opportunities • Ongoing upgrading of bus stops around the network. **Stage 3 (2029)** • Increased peak frequencies on urban routes. • Review of urban development and intensification proposals to target any new PT opportunities In later years, beyond the plans core 10-year focus, several recommendations were made primarily to accommodate growth, including route extensions, route changes to service new growth areas, new services, park and ride and ferry services.
Richmond and Motueka Town Centre Parking Strategy 2018-38 (TDC)	This document sets out Council's approach to managing town centre parking for cars and other vehicles in Motueka and Richmond. The strategy focuses on the District's two largest urban areas where parking pressure is greatest. If current trends continue, the strategy estimates that an additional 600 all day parking spaces and 200 time-limited parking spaces will be required by 2026. TDC proposes to use a suite of interventions that make better use of existing resources, including encouraging alternative modes, as well as creating new parking resources and managing issues relating to disabled and vulnerable users, parking in residential streets and oversized vehicles
Richmond Network Optimisation	The NOF is a transport planning tool to inform strategic transport decisions and operational interventions. It identifies modal priorities, identifies locations of potential conflict and network

[3] https://tasman.govt.nz/my-council/key-documents/more/transport/regional-public-transport-plan/

TDC Strategy/Plan	Purpose
Framework (NOF) 2020	deficiencies. It uses an integrated approach to managing the entire transport system for all users, with core modal objectives and principles, and primary and secondary networks for each mode.

The NOF map is provided as **Appendix A**.

1.4.2 Urban Planning

The relevant urban planning documents that have been used to inform development of a high-level Urban Design Strategy (UDS) in parallel to this PBC and consequently this PBC, are summarised in Table 4.

Table 4: Recently completed urban planning documents

TDC Strategy/Plan	Purpose
Tasman Intensification Action Plan 2020	While some land has been identified for expansion, most of the growth in Richmond is expected to occur in existing 'brownfield' areas in the form of residential intensification. The Tasman Intensification Action Plan 2020 is a sub strategy of the FDS that outlines ways in which Council can enable intensification and sets out specific actions with timescales.
Tasman 2020 Town Centre Health Checks	The first major survey to be undertaken since 1991, the 2020 Town Centre Health Check surveyed change and expansion in the Richmond town centre to understand how well the centre is performing in terms of occupancy, diversity of retailers (comparison and convenience shopping), and what gaps exist in the Richmond offer - for example the 2020 survey found little in the way of an evening economy and a lack of strong identity.

1.4.3 Wider area investigations

The transport network in and around the Richmond/Nelson area has been the subject of several studies in recent years. The most recent are summarised in Table 5.

Table 5: Previous transport studies

Project	Overview
Nelson Future Access Project (Ongoing)	The Nelson Future Access Project is a joint project between Waka Kotahi and NCC. The purpose is to investigate a future-proofed transport system for Nelson, that considers the needs of all users. A draft Strategic Case focused on problems relating to the current systems inability to reliably move people and freight, a lack of provision for modes other than motor vehicles and resilience risk around Rocks Road. While the study focused on Nelson City, it recognised a significant area of influence from Richmond Plains to Marybank. Potential long-term transport options for Nelson's transport system were consulted on in July 2020. This resulted in the best long-term transport solution for Nelson emerging. Nelson City Councilors endorsed this Preferred Programme for the Nelson Future Access project in a unanimous decision in May 2021. Waka Kotahi are presently consulting on shorter-term improvements.
Stoke Foothills Programme Business Case (2017)	This Programme Business Case (PBC) was prepared for NCC. The study area centered on Stoke between Whakatau Drive and Champion Road. The problems related to poor network connectivity and growing demand, restricting residential development, impacting travel times, and creating safety risks (particularly for active modes). The recommended programme focused on: • Expanding and integrating the Stoke cycle network. • Road network extensions and upgrades for resilience and to ensure a consistent standard. • Reviewing the road hierarchy. • Addressing safety and capacity at key intersections/roundabouts. • A package of works relating to the Stoke Centre.
Richmond Arterial Investigation Strategic Case (2016)	This Strategic Case was prepared by Waka Kotahi. The main drivers were traffic growth and transport pressures from land use development and planned regional growth, the lapsing of the Hope bypass designation in 2023, and a then pending 'Three Roundabouts Study' which

Project	Overview
	recommended investigation be carried out to understand the wider network prior to the Study commencing. The study area focused on Gladstone Road/SH6 from Saxton Road to south of Hope. The Strategic Case found problems relating to changes in the function of Gladstone Road to 'place' reducing efficiencies, particularly at the intersections; people travelling the accessible alternative routes to avoid Gladstone Road and the likely future land development in and around Richmond causing severance and safety issues on local roads. The project did not process forward to a PBC because at the time the case for change was not strong enough. However, the underlying assumptions regarding future growth which informed the original Strategic Case have since proved to be wrong, with growth having actually occurred much faster than anticipated. The Strategic Case did however provide a basis from which a Network Operating Framework could be developed.
Other Studies	In 2008 a Nelson North to Brightwater Strategic Study considered various options for network improvements, including through the Richmond urban area. The preferred strategy for the medium and long-term included a new route along the designated 'Hope Bypass'. The study noted that the designation was due to lapse in 2023.

1.4.4 SH6 Safer Speed Review

Through a Speed Management Programme, Waka Kotahi is identifying roads where reducing speed limits could prevent deaths and serious injuries, and where communities are calling for change.

Each day around 11,500 vehicles travel between Hope and Brightwater, and 8,500 travel between Brightwater and Wakefield. With further developments these traffic volumes are expected to increase. Furthermore, between 2009 and 2018 there were a total of 98 crashes, including 17 serious crashes, on this section of SH6. Three people were killed and 18 people were left seriously injured by these crashes[4].

In late 2019 and early 2020 Waka Kotahi engaged with the community, and asked businesses, stakeholders, and road user groups how they feel about speeds along State Highway 6 (SH6) between Hope and Wakefield. The speed limit changes, as presented Figure 2, have since been implemented.

Figure 2: SH6 Hope to Wakefield Speed Review

[4] https://www.nzta.govt.nz/projects/sh6-hope-to-wakefield/

1.5 TDC and NCC joined up approach

TDC and NCC have acknowledged and active pursued a joined approach to planning the region's future transport network. This is demonstrated by the following joint strategies which have informed this PBC:

Nelson Future Access (NFA)

The NFA business case seeks to develop a detailed investment programme for a multi-modal transport system that supports community aspirations for a thriving CBD; a world-class waterfront; and a safe, accessible and resilient transport system that will meet the diverse needs of customers and communities.

Waka Kotahi and TDC have been involved in the development of the NFA business case since its inception. Key synergies between the Richmond Transport PBC and NFA are:

- An enhanced public transport system which connects Richmond and Nelson, with priority for buses in both Richmond and Nelson.
- A focus on reducing the dependency of private single occupancy motor vehicles.
- Having a joined-up approach to parking charging and restrictions.

Nelson Tasman Future Development Strategy (FDS)

This strategy was developed in 2019 and is currently being refreshed. The strategy establishes where growth will be in the next 30 years to ensure that we collectively have enough housing and building capacity. Selection of these areas has considered key selection criteria including transport. Waka Kotahi were a key stakeholder in this process. It is worth noting that the FDS was a key input in the Nelson/Richmond future transport model and treats the Richmond Nelson urban area as one urban area.

Nelson-Richmond future transport model

In 2015 Nelson and Tasman undertook to create a single land use based transport model (TRACKS). This recognised the high interdependency between Nelson, Richmond and the wider Tasman area. The model was updated in 2018 to inform the Richmond PBC and NFAP. This model also reinforces the single Richmond / Nelson urban area.

Nelson Tasman Land Development Manual (NTLDM)

This manual provides standards and guidance for the design, construction, maintenance, repair and replacement of network assets and infrastructure that are or will be owned by the Councils and some private assets that connect to public assets. This document now standardises the development guidance and standards across Nelson and Tasman be being a joint document.

Te Tauihu Regional Land Transport Plan (RLTP)

This is a joint document between Marlborough, Nelson and Tasman to have a joined up story and approach to transport planning in Te Tauihu (Top of the South). None of the three Councils were required to undertake this document together, but felt it was in the best interest of the wider area. This was particularly relevant to Nelson and Tasman to make sure there is a consistent story, goals and measures.

Nelson Tasman Regional Public Transport Plan (RPTP)

This is a joint document between Nelson and Tasman to create a completely joined public transport service. This means that not only are the services linked, but the management, operations and contractual services are one. The Nelson/Richmond urban area will have a new, high frequency service and the wider Tasman area will have a less frequent service that ties into the urban services.

1.6 Urban Form

Planned intensification in Richmond over the next decade will create a denser urban environment. With this changing urban form comes the opportunity to bring the environmental, social and economic benefits of quality compact, urban living to Richmond. It is important that the additional pressure this change places on the streets and other public spaces is managed carefully to support the high quality of life that attracts people to live in Richmond and the Tasman Region.

1.6.1 Urban Design Strategy

A high-level Urban Design Strategy (UDS) has been developed in parallel to this PBC. It supports future transport investment by exploring ways to balance movement and place needs, and manage movement to,

within and through Richmond. Together, the UDS and PBC will capture an integrated land-use and transport vision for the future of Richmond.

A key outcome of the UDS is to bring together the existing urban planning, growth and intensification strategies to help inform an integrated vision of Richmond's future form and function. Investment objectives, interventions and programmes identified through this business case have been assessed to ensure that the final preferred programme will contributes and support the delivery of the UDS.

The UDS builds on NCC's/TDC's Future Development Strategy. It uses the NOF and ONF as a basis for establishing a hierarchy of streets and spaces to support the existing and planned land uses, activities, and intensification. In doing so, it also helps to support with the broader integration with Nelson City and support the One Network Framework (ONF) Strategic network proposals.

The UDS is provided as **Appendix B**.

1.6.2 Greenway Trials

In 2019 Waka Kotahi introduced a new Innovating Streets for People programme. The programme aims to make it faster and easier for Council's to transition streets into safer and more liveable spaces. A pilot fund provided Councils with a 90% funding assistance rate (FAR) for projects that tested ideas to create more people-friendly spaces and helped demonstrate their value to the community.

TDC received funding for two projects, including the Croucher-Darcy neighbourhood project[5]. The project included trialling ideas aimed at developing greenway residential environments including:

- Trial street closures (Elizabeth Street)
- New drop-off parking spaces
- Road narrowing for slower vehicle speeds (Florence Street)
- New seating and trees (Fauchelle Avenue)
- Pedestrian refuge (Talbot Street)
- Speed humps (D'Arcy, Croucher, Elizabeth and Herbert Streets).

Figure 3 shows the location of the Croucher-Darcy neighbourhood.

Figure 3: Croucher-Darcy neighbourhood map

The project has now been completed and many of the initiatives will now be permanently installed.

[5] https://www.tasman.govt.nz/my-council/projects/streets-for-people/trial-project-croucher-darcy-neighbourhood/

1.7 COVID-19 - Implications for Land Transport

1.7.1 Impacts of Covid-19

In mid-2020 Waka Kotahi reviewed the implications for land transport as a result of COVID-19, to understand how the pandemic might impact land transport in the Top of the South region.

The Arataki[6] review found that the 10 year outlook for the Top of the South region remains largely unchanged. The region will be impacted by a reduction in international tourists, but less so compared with other regions in the South Island. The region is also well-placed to benefit from any increase in domestic tourism given the central location and relative accessibility. Primary sectors including forestry, horticulture, viticulture, pastoral farming and seafood are forecast to remain relatively stable during the recovery period.

While there will be ongoing pressure on transport revenue because of the COVID-19, Arataki continues to highlight that there is a high need to transform urban mobility and improve urban form in the greater Nelson/Richmond area. Step changes are needed in the short to medium term in relation to urban form, urban mobility, safety and tackling climate change.

In response to the pandemic the New Zealand Government had a list of infrastructure projects/programmes that are ready for construction prepared that could be deployed as part of a stimulatory package if deemed appropriate[7].

1.7.2 Funding Constraints

A significant implication for land transport relates to funding. COVID-19 has been a system-wide shock that has created uncertainty for the transport sector, resulting in a reduction in the National Land Transport Fund (NL TF) that could continue in future years. Funding during the 2021-24 RLTP period is severely constrained and issues in New Zealand's large metropolitan areas are drawing heavily on national funding sources. However, investment continues to be necessary within smaller centres, like Richmond, that are suffering growing pains. This is particularly where trends in regional migration[8] are likely to see more people moving away from very large metropolitan centres such as Auckland, bound for smaller urban centres.

1.7.3 Traffic volume recovery

Figure 4 provides the average daily traffic (ADT) recorded along SH6[9].

Figure 4: SH6 Traffic Volumes

The data demonstrates that traffic volumes along SH6 recovered quickly back to pre-Covid 19 conditions, with ADTs of around 25,000 vehicles per day.

[6] Arataki is Waka Kotahi's ten-year view on what is needed to deliver on the government's current priorities and long-term objectives for land transport.
[7] www.crowninfrastructure.govt.nz/iirg/
[8] www.benjepatterson.co.nz/wp-content/uploads/2019/06/Regional-migration-away-from-Auckland.pdf
[9] TMS: 00600130 - Richmond 3 Bros (Humes)

2. DRIVERS FOR CHANGE

2.1 Population Growth and Development

2.1.1 Recent and short-term growth

Tasman was the 7th fastest growing region[10] in New Zealand between 2013 and 2018 (with 1.8% growth per annum[11]) whilst the Nelson Region was the 12th fastest growing region (with 1.1% growth per annum). In November 2020, Tasman District population was reported as having passed Nelson to become the most populated district in the Top of the South region[12].

To accommodate some of this growth, the Richmond West Development Area ("Richmond West") was planned in 2009. This 425ha area to the north-west of Richmond CBD was intended to be a mix of business, commercial and industrial land to serve the Nelson/Richmond urban area to 2030. Elsewhere across the Richmond[13]:

- A residential area surrounds the CBD and in late 2017 was the subject of a Proposed Plan Change for intensification of housing.
- Greenfield development in Richmond South has seen recent residential expansion of Richmond, including a large retirement village.
- Richmond's CBD has seen recent activity in the form of a modern retail development anchored by K-Mart and The Warehouse.

It is anticipated that development currently underway will provide approximately 1,300 new dwellings, a new primary school, and a small residential shopping cluster in the next 10 years. Most of the housing development is expected to be completed in the next 5 years.

Richmond's key growth areas are shown in Figure 5.

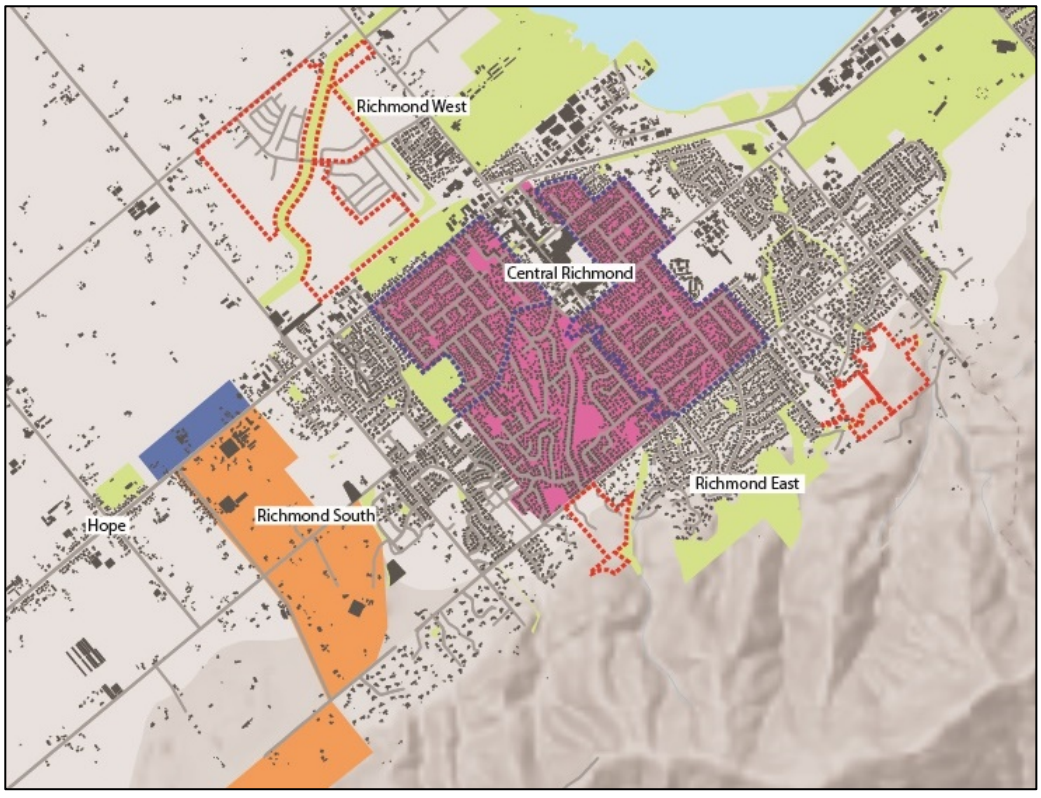


Figure 5: Richmond growth areas

The Richmond north eastern gateway area, situated between Salisbury/Champion Roads/SH6, has also seen recent change. A service station and ancillary facilities have been developed near to the Richmond Aquatic

10 Ranked 1st to 6th growth areas: Auckland (2.3% pa), Otago (2.2% pa), Northland (2.1% pa), Canterbury (2.0% pa), Waikato (1.9% pa), BOP (1.8%)
11 https://www.stats.govt.nz/information-releases/subnational-population-estimates-at-30-june-2018-provisional
12 https://www.rnz.co.nz/news/national/430330/fuelled-by-people-and-growth-tasman-is-now-larger-than-nelson
13 Long Term Plan (2018-2028) – What is planned for Richmond? TDC Report

Centre, and a Private Plan Change allows for a supermarket and ancillary development on the corner of Salisbury/Champion Roads. **Appendix C** provides the zoning map for the Richmond area.

This means that growth (and subsequently new trips) is not going to be centred in only one location, but across the Richmond urban area as well as from wider-spread rural areas across Tasman.

In the year ending 30 June 2020 building consents in Tasman reached a record high of 491, exceeding those in the Nelson City and wider Nelson urban area. New sections created in Richmond account for 75% of all sections created in the Tasman District in the past 12 months, with 243 of the total 322 sections being on residentially zoned land[14].

Recent legislation

Population growth and Special Housing Area (SHA) legislation has enabled developers to expedite residential developments. Recently, 32ha has been brought forward primarily for residential development and 52ha rezoned from commercial to residential. An additional 12ha is being developed under normal consent process.

2.1.2 Future Development Strategy

The Nelson Tasman Future Development Strategy (FDS) was adopted by the TDC and NCC in July 2019. It sets out the long-term picture for their shared future urban growth. The maps in Figure 6 show the areas of expansion and areas of intensification that are signalled through the FDS.

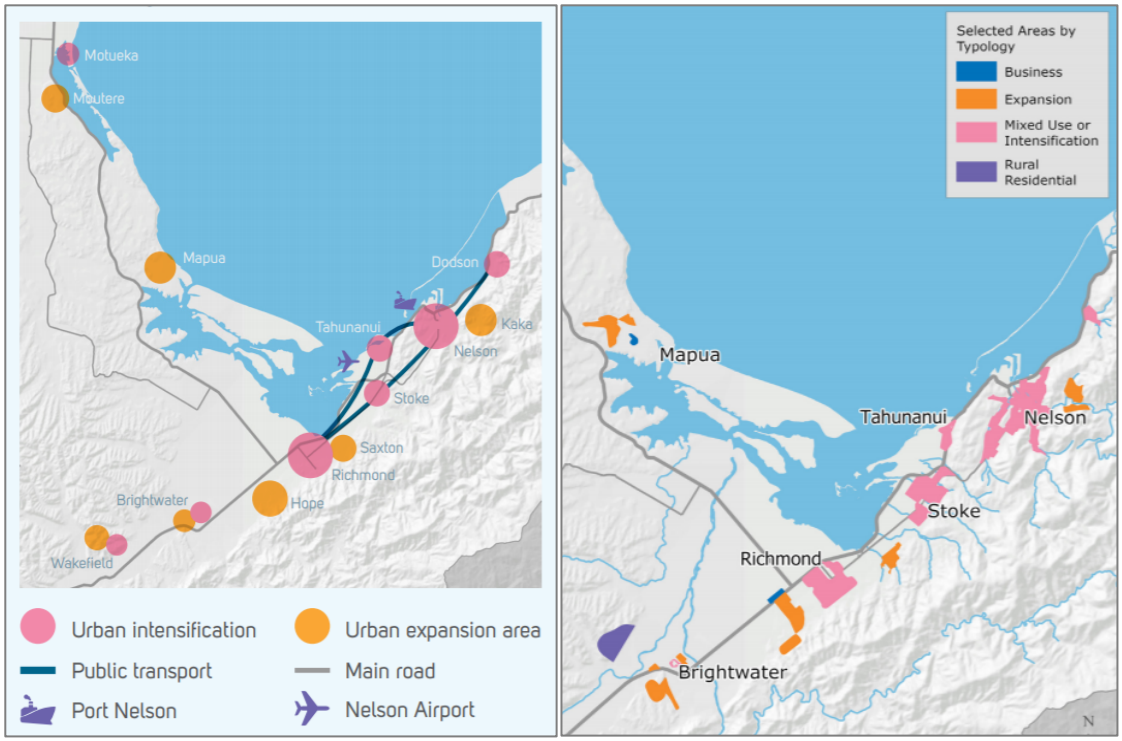


Figure 6: Future Development Strategy Growth Areas

Land use forecasts in the FDS were based on household growth figures agreed between TDC and NCC. Estimates of housing demand under a high growth future indicate the need to accommodate up to 24,000 extra houses in the combined Nelson Tasman area over the next 30 years.

This corresponds to 12,000 more houses than are currently provided for under existing district plan zonings and Special Housing Areas. Of the extra 12,000 houses required, approximately 8,000 will be in the Nelson Urban Area and around 6,000 will be in the Tasman District.

The rate of growth is not anticipated to be consistent year on year. The average annual growth rate for Tasman's population for 2018-2028 is projected to be 1.3% per annum, and 0.9% per annum for 2028-2048[15]. However, growth is occurring at a much greater rate than anticipated. For example, urban expansion into Richmond South was initially anticipated in the FDS to come online between 2038 and 2048. It is now expected to be only 5 years away due to growth pressure.

[14] www.tasman.govt.nz/document/serve/Urban%20Development%20Capacity%20Monitoring%20Report%20-%20June%202020.pdf?DocID=16577

[15] https://www.tasman.govt.nz/my-council/key-documents/more/growth/growth-model/

Due to the pace of growth, housing developments like West Richmond have been progressing without investment in supporting transport infrastructure. There is a risk that South Richmond could follow a similar pattern, with further consequences for Richmond's transport system, if investment in supporting transport infrastructure is not delivered in a timely way.

The FDS signals the need for spatial planning and structure planning for large expansion areas and integrating infrastructure planning, but it does not require them, and there is currently no long-term transport plan for Richmond in response to the FDS.

2.1.3 Tasman Intensification Action Plan

While some land has been identified for expansion, most of the growth in Richmond is expected to occur in existing 'brownfield' areas in the form of intensification. The Tasman Intensification Action Plan 2020 is a sub strategy of the FDS that outlines ways in which Council can enable intensification and sets out specific actions with timescales and departmental owners.

2.2 Aging demographic

Demographics are a key driver for shaping the urban form and the associated transport system. A breakdown of the age demographic in Richmond, as per the 2018 NZ Census, is presented as Figure 7.

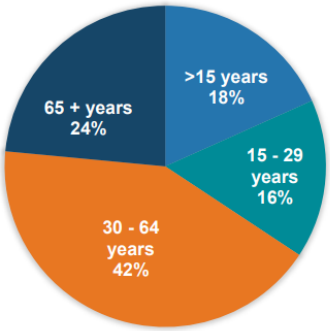


Figure 7: Richmond's age demographics

Going forward, most of the anticipated population growth in Richmond/Tasman is in the age *'65 years and over'* group. By 2043, this age group is expected to form 34% of the population in Tasman district – an increase from 24% in 2018. Those in this age group may increasingly find themselves unable to drive or suffering activity limitations that make them reliant on alternative transport for mobility and access to essential goods and services, and access health services.

This means there needs to be a complimentary shift in thinking about how access and mobility is provided for, and what sort of urban form is encouraged. According to a recent Council survey[16], residents aged 65 and over are more likely to prefer smaller dwellings, with 40% preferring a small house, unit or townhouse in town. This also happens to be what young adults are looking for, along with a preference for walkable, amenity rich, dense and diverse places.

2.3 Importance as a Key Regional Transport Corridor

2.3.1 Current role

Richmond plays a very important role in the Tasman/Nelson economy by facilitating through movement of regional trips to key facilities, such as the port, hospital, and airport. All regional roads from the south lead to Richmond and through-traffic to Nelson must pass through Richmond. Despite growth in and around Richmond, there will always be a need to maintain the efficiency of through trips, particularly from an economic perspective. There are no alternative routes for regional traffic. This also reduces resilience on this part of the network, as movements through Richmond are currently vulnerable to events resulting in closure such as crashes.

Figure 8 highlights that there are currently two major pressure points (in yellow) on the Tasman/Nelson road network where around 21,000-23,000 vehicles movements per day are seen. These are SH6 heading through Richmond (Gladstone Road) and into Nelson.

[16] Reference: Ibid

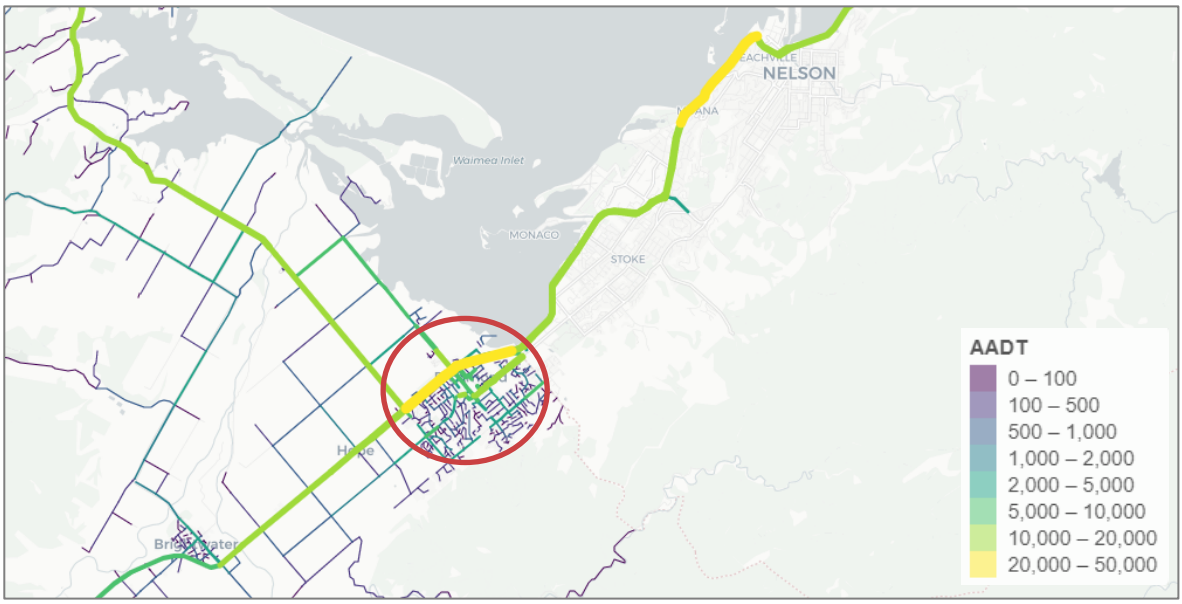


Figure 8: Tasman/Nelson Road Network – Pressure Points

The inter-regional importance of the state highway network is also evident for visitors. There are several very high-profile destinations in Tasman, including the Abel Tasman National Park, Heaphy Track, and Golden Bay. Richmond sits at the crossroads for visitors moving up from the West Coast to enjoy the Top of the South between Golden Bay and Nelson, the Marlborough Sounds and the Picton Ferry.

2.3.2 Future State Highway access

There are also several existing traffic generating businesses and activities, such as Jubilee Park sports fields, that are accessed directly off Gladstone Road. There is also intensifying commercial development around Queen Street and at the intersection with SH60 (Three Brothers Corner), plus much of the greenfield land identified for future development in FDS is alongside SH60 and SH6.

Multiple access points impact the safe and efficient operation of the state highway network. Consideration will need to be given as to how future development access is facilitated onto the state highways.

2.4 Increasing Freight Demands

Tasman's long period of growth has resulted in more economic activity and GDP growth. Tasman's economy is primarily made up of horticulture, forestry, fishing/seafood, agriculture, and tourism. Tasman District is highly export focussed and producers rely on the factories, manufacturing and processing plants and ports in both Nelson and Tasman for production and export.

SH6 and SH60 provide vital cross-district and inter-regional connections. They are the primary freight routes through Richmond, with secondary routes along McShane Road and Lower Queen Street/Lansdown Road (Figure 9 on the next page). Tasman's producers and industry are completely reliant on the SH network for freight movement. Rail was disestablished in the region in 1955.

A new Waimea Dam will also be located on the Lee River to the south of Richmond. The new Dam is anticipated to have a significant impact on the District's transport network, as products are transported through Richmond to Port Nelson. This is because the Waimea Dam will increase area of irrigated land[17] and therefore increase farm output that generates a higher demand for export through the Port[18].

[17] Expected to increase productivity of produce/irrigated land for apples, kiwifruit, grapes and berries.

[18] https://waimeawater.nz/wp-content/uploads/2017/07/NZIER-Waimea-Dam-Economic-Assessment-Report-21-October-2014.pdf

Figure 9: Primary and Secondary Freight Routes

Current delays along SH6 being experienced by freight is described in Section 7.

2.5 Richmond's Urban Transformation

Richmond is no longer a rural service town. Where it once primarily supported its hinterland, the town is transforming into a modern, vibrant urban centre. As part of this transformation, TDC recently made a significant investment in Richmond's main shopping area. In late 2018, on the back of a stormwater upgrade, Queen Street was rebuilt with an award-winning design that created a pedestrian-focussed public space. Queen Street now has wide pedestrian-friendly footpaths, narrow vehicle lanes and a design speed of 30 kilometres/hour for a slower and safer overall environment.

Private commercial developers are also investing in Richmond. Along with the residential subdivisions that are underway, a large multiplex cinema/shopping complex is being developed alongside Richmond West. This new 'destination' is expected to attract people from across the Tasman/Nelson urban area.

The liveability of Richmond is potentially compromised by this additional development which, without transport intervention, would bring additional traffic and negative environmental (e.g. CO_2 and noise) effects.

The conflict between liveability and urban developed has been recognised also through the FDS. For example - the FDS has identified Richmond South as a potential future development area for industrial and mixed-use land uses. This would improve Richmond's self-sufficiency in terms of resident's access to employments locally.

The FDS also refers to the intensification of Nelson City Centre, Nelson South, and Richmond as a means of creating densities which would support a passenger transport corridor between these two main hubs in the Nelson Urban Area.

2.6 Designation of the Hope Bypass

The 'Hope Bypass' is a designated[19], but undeveloped, route alongside SH6 heading south towards Hope from Lower Queen Street. The corridor is currently referred to as "Railway Reserve" and is accommodating a section of the National Cycle Trail 'Great Taste' ride. The Hope Bypass designation, required by Waka Kotahi NZ Transport Agency, was set aside as a long term transportation measure should additional capacity in the Richmond transportation network be needed. Retention of the Hope Bypass designation has, in some way, set an expectation about the future network plan.

The Hope Bypass designation is due to lapse on 1 November 2023. At the same time, a designation required by TDC[20] to ensure the critical link between the existing transport network and any future development and use of the Hope Bypass, will also lapse. This PBC has helped to inform a decision around whether the Hope Bypass designation, and related TDC designation, should be extended.

An overview of the designation area is shown as Figure 10.

[19] D127 for the purpose described as 'State highway purposes' in the Tasman Resource Management Plan (TRMP)
[20] D132

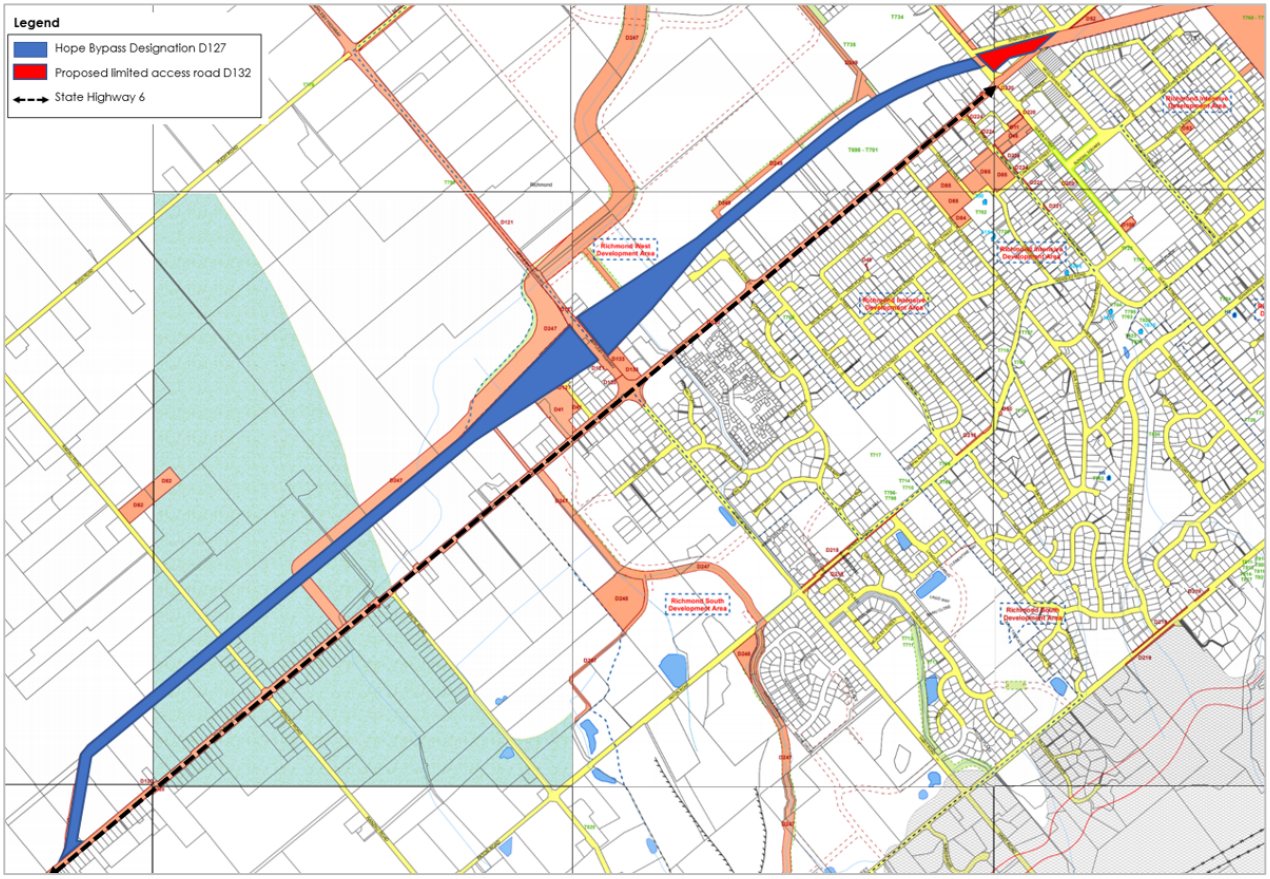


Figure 10: Hope Bypass Designation

2.7 Public Transport and Active Modes

TDC has very clear goals around encouraging active mode use and increasing the public transport service to improve liveability outcomes in Richmond and take some pressure off the road network by reducing the rate of traffic growth. Increasing public transport, walking, and cycling will also have positive environmental outcomes and help TDC meet climate change obligations. Tasman's draft Regional Land Transport Plan (2021—31) also outlines a target that:

> *"Walking as a form of transport will be encouraged for trips that are less than 1km. Cycle networks will be designed so that trips between 5km and 15 km will be just as convenient or better by cycling than by driving a car".*

Furthermore, TDC is currently reviewing its Active Transport Strategy. TDC's goal is to create a network of safe cycleways and walkways so people can use active travel as a form of transport and as part of their everyday activities. TDC's active mode targets are in Table 6.

Table 6: TDC Active Mode Targets

	2018 (Baseline)	Targets			
		2023	2028	2033	2038
Richmond	14%	17%	26%	36%	38%
Tasman	11%	14%	23%	33%	35%

TDC have also completed their review (alongside NCC) of public transport, with the goal of providing a regional integrated public transport network that is an attractive, economic, and viable transport choice for all sectors of the community. Public transport improvements will support social equity and ensure there is a viable transport option for Richmond's communities. Funding has also been confirmed through the NLTF.

The planned improvements in public transport will form a significant part of this PBC's programme development, to help overcome the problems Richmond is facing and to achieve the investment objectives of this PBC.

2.8 Cross-district connections

While the study area of this Strategic Case is focused on Richmond and its immediate hinterland, as shown within Figure 1, the project has a significant area of influence that impacts transport outcomes in Richmond (and vice versa).

There are several outlying settlements in Tasman District which are also growing, with corresponding increases in traffic volumes. Wakefield, Brightwater, Mapua and Motueka have all grown in recent years and are identified in FDS for further growth over the next 30 years. Motueka and Mapua to the north-west of Richmond connect via SH60. Brightwater, Pigeon Valley and Wakefield connect from the south via SH6. 'Lifestyle' development areas are also expanding in the Moutere Hills to the west and across the Waimea Plains.

Growth in these townships and settlements will influence transport outcomes in Richmond, as well as development of future transport systems and connections.

3. PARTNERS AND KEY STAKEHOLDERS

3.1 Partners

This PBC has been developed through partnership and collaboration. Waka Kotahi and TDC are investment partners. The interests of these organisations are set out in Table 7.

Table 7: Investment Partners

Investment Partners	Knowledge/involvement
Waka Kotahi (NZ Transport Agency)	• Partner agency responsible for developing this project. • Investor in land transport systems. • Provider and operator of the state highway network. • Regulator of access to and use of the land transport system.
Tasman District Council	• Partner agency responsible for developing this project. • Study area is within the TDC unitary territory. • Co-investor in TDC transport system. • Responsible for provision and operation of local road network, and strategic transport planning for the region. • Unitary authority – plans for and manages the effects of the use and development of land • Joint partner in Future Development Strategy. • 50% owner of Port Nelson and Nelson Airport (with NCC).

3.1.1 Waka Kotahi

Waka Kotahi's role is to work with a range of partners to plan, invest in, build, manage and operate the land transport system within the priorities and outcomes set in the GPS. The strategic priorities in the draft GSP 2021-24 are safety, improving freight connections, better travel options and climate change.

Waka Kotahi supports the integration of land use planning with transport planning and delivery through 'Arataki', and applies a mode neutral approach to investment. Waka Kotahi also leads on the state highway programme which, in the Richmond area, is focused on SH6 and SH60.

Waka Kotahi also seek to improve understanding of what good urban design means in a transport project through its urban design guidelines and ten urban design principles[21].

3.1.2 Tasman District Council

TDC is a unitary authority and undertakes the functions of both a regional council as well as a territorial authority. Tasman District works closely with Nelson City and Marlborough District to provide a coordinated 'Top of the South' Regional Land Transport Plan, and specifically with Nelson City to provide an integrated public transport service across the Nelson/Richmond urban area. TDC is also responsible for planning for future residential growth in the District. This is being achieved through a joint Nelson/Tasman 10-year Future Development Strategy (FDS).

3.1.3 Iwi

Iwi have a role as Treaty partners and are identified by statute for collaboration.

Collaboration will seek to develop the relationships and identify any cultural values and issues of significance in the area. Te Tau Ihu Māori include: Ngāti Kuia, Rangitāne, Ngāti Apa ki te Rā Tō, Ngāti Koata, Ngāti Rārua, Ngāti Toa Rangatira and Ngāti Tama.

3.1.4 Nelson City Council

The preferred programme will ultimately influence transport through to Nelson given that a significant number of people live in Richmond and work in Nelson (and vice-versa). TDC and NCC have been working closely together on several projects to create a joined up transport solution, and as such are a key partner.

[21] Bridging the gap: NZTA urban design guidelines - www.nzta.govt.nz/resources/bridging-the-gap/

3.2 Key stakeholders

The PBC has been developed with input from the following key organisations:

- Accessibility for All
- Automobile Association
- Bicycle Nelson Bays
- Blind Low Vision NZ
- Borlase Transport
- Bus and Coach Association
- Enviroschools
- Fire and Emergency New Zealand
- Grey Power
- Hearing Association
- Henley School
- Ministry of Education
- Multicultural New Zealand
- Neighbourhood Support
- Nelson Grey Power
- Nelson Marlborough District Health Board
- Nelson Mums Support Group
- Nelson Suburban Bus Co Limited / Bus and Coach Association
- Nelson Tasman Chamber of Commerce
- Nelson Tasman Climate Forum
- Nelson-Tasman Community Transport Trust
- Nelson Tasman Cycle Trails Trust
- Nelson Tasman Kindergartens
- Nelson Women's and Children's Refuge Services Inc
- Nelson-Tasman Climate Forum
- NZ Police
- Richmond Primary
- Richmond Unlimited
- Road Transport Association NZ
- Rotary Club of Richmond
- Salisbury School
- St Johns Ambulance
- St Paul's School
- Tasman Nelson Kindergarten Association
- Te Kura Kaupapa O Tuia Te Matangi
- Top of the South Principals group – Primary
- Waimea College
- Waimea Intermediate
- Waimea Youth Council
- Walk Nelson Tasman / Health Action Trust
- Zero Carbon

3.3 Stakeholder engagement

Ahead of wider stakeholder workshops, selected Tasman and Nelson councillors (plus Waka Kotahi and TDC project team staff) attended a **'Richmond Vision' workshop**. The purpose of this workshop was to look to establish vision statements and aspirations for Richmond's growth and urban transformation. Insights were provided by the Richmond councillors and regional transport committee which enabled vision statements to be developed, with the project team helping to facilitate conversations. This Richmond Vision workshop set the urban design 'scene' for two subsequent transport system workshops.

Wider project stakeholder and community groups provided active participation in the following workshops:

- **Long List Workshop** - the purpose of the workshop was to:
  - Confirm the 'Case for Change' (the problems that need addressing).
  - Present the draft 'Vision' for Richmond.
  - Identify a long list of options.
  - Understand stakeholder priorities for investment.
- **Emerging Preferred Programme Workshop.** The purpose was to review a range of options and help identify an emerging preferred programme of work to include in the business case.

Weekly and monthly meetings were also held with project partners to guide project development and outcomes. Minutes from the workshops are provided in **Appendix D**.

3.4 Other engagement

3.4.1 Survey of Tasman Businesses

In late 2020, TDC surveyed local businesses to help inform future urban development decisions about the type and best location for business land in the district. The study found that Richmond businesses were generally long established, with nearly half have been locally established for more than 10 years (1 of 5 businesses for more than 20 years). A high number of businesses own the premises they operate from. Consequently, 83% of businesses are not planning to relocate.

Responses from businesses emphasised the importance of Richmond as a commercial area, with most surveyed businesses (32%) based in Richmond/Hope. Currently, 9.5% of all zoned business land in Tasman is in Richmond/Hope and more than 50% of businesses responded that Richmond is their preferred location.

Richmond's road network was the 5th most important factor influencing businesses when deciding where to locate their premise. Access in and out of and around Richmond was a priority, including for heavy goods vehicles, with comments that "bad roads", "unable to navigate easily and safely" and "congested roads" common cause for concern. Traffic, especially at peak times (notably SH6, Lower Queen St,) was the 2nd most mentioned disadvantage of a business' current locations (19%).

3.4.2 Tasman Environment Plan

In late 2020, TDC also completed a first round of engagement on Aorere ki uta Aorere ki tai - Tasman Environment Plan. The Tasman Environment Plan is being developed over the next five year period and will replace the Tasman Regional Management Plan prepared under the Resource Management Act 1991. Richmond specific feedback showed six overarching themes, all relating to issues with the transport network:

- **Traffic/congestion** (19 comments) –specific problem points/areas (Lower Queen St, Gladstone Road, SH6); supermarket situation (Saxton, Champion Road).
- **Pedestrian infrastructure** (15) – safety and quality of road crossings/bridges, footpath quality, shared footpaths; several mentions of vulnerable groups (children, mobility, elderly).
- **Public transport** (10) – focus on commuters and especially Richmond-Nelson connectivity.
- **Road design** (7) – interest in speed reduction to improve safety, traffic volumes and congestion.
- **Parking** (7) – interest in more parking, park and ride options.
- **Cycling** (6) – more cycle lanes, convenience/safety of cycling, cycleway maintenance.

Other comments of interest to this PBC related to the operation and aesthetic of the CBD 'ring road', the Richmond Intensification Area, school drop offs and parking pressure causing issues for access to and from residential properties.

4. THE NEED FOR INVESTMENT

4.1 Defining the Problem

The process undertaken to establish the underlying problems in the Richmond transport network was:

1. **Separate meetings with TDC, NCC and Waka Kotahi technical staff (June 2020)**. The purpose was to understand high level issues. The feedback from the three interviews highlighted that, despite their different interests in the study area, staff from the three organisations agreed on the key issues.
2. **Investment-Logic Mapping (ILM) Workshop**. A facilitated Strategic Case workshop was held on 9th July 2020 to confirm the case for change. The workshop was led by an accredited facilitator and attended by decision makers and governance leaders from the partner organisations and key stakeholders, supported by staff from TDC, Waka Kotahi and NCC.
3. **Reconfirming the problems with the wider stakeholder group.** As part of a wider 'Problems and Options' workshop, held on the 22 February 2021, the evidence base and draft problem statements were presented to the wider stakeholder group for feedback.

Partners and key stakeholders discussed causes and consequences and agreed problems. Attendees at the ILM workshop identified percentages to indicate the relative scale of the problems. Minutes from all meetings and workshops are provided as **Appendix D**.

4.2 Problem Statements

The agreed problem statements were:

1. **Safety and Place.** Increasing traffic volumes as a result of growth creates severance and rat running, leading to reduced place value and increased safety risk (50%).
2. **Route Efficiency.** Traffic congestion through Richmond causes delays to people and goods reducing travel time reliability and access to economic opportunities and key destinations (30%).
3. **Travel Choice.** Reliance on private cars for short journeys as a result of car-oriented development leads to low utilisation of public and active transport modes and conflict between modes (20%).

The problems, causes and consequences are set out in Table 8.

Table 8: Problems - cause and consequences

Problem	Cause	Consequence
Increasing traffic volumes as a result of growth creates severance and rat running, leading to reduced place value and increased safety risk.	• Rapid and continuing residential and industrial growth in and around Richmond. • Availability and efficiency of local road network. • Dual role of Gladstone Road of throughput (local and regional) and place.	• Motorists using local roads to avoid areas of congestion. • Community severance from key destinations. • Increased real and perceived safety risk. • Low community satisfaction, loss of amenity and reduced sense of place.
Traffic congestion through Richmond causes delays to people and goods reducing travel time reliability and access to economic opportunities.	• Rapid growth in the Richmond and wider Tasman Bay area. • Proximity to Nelson City. • Needs of conflicting types of traffic – local access and through traffic.	• Travel time delays (all modes). • Reduced network efficiency. • Reduced satisfaction with alternative networks (PT and active modes).
Reliance on private cars for short journeys as a result of car-oriented development results in low utilisation of public and active transport modes and conflict between modes.	• Low density land use development. • Underdeveloped public transport, cycling and walking and networks.	• Conflict between modes (as cyclists need to share the road with vehicles, or share footpath with pedestrians). • Reduction in people choosing active and sustainable modes. • Reduced satisfaction with alternative networks (PT and active modes).

5. STRATEGIC CONTEXT

This section outlines how addressing the key problems facing the Richmond transport network align with the key outcomes desired through both national and local government strategies.

5.1 Alignment to Existing Strategies

Table 9 sets out how the case of change and the need for investment aligns with relevant national, regional, and local strategies and planning direction.

Table 9: Strategic Alignment

Organisation	Document	Alignment/Response
Central Government/Waka Kotahi	Draft Government Policy Statement (GPS) on Land Transport Funding (2021)	**Strong alignment** with strategic priority for **Safety** by focusing on current high risk areas as well as safety outcomes for all modes across the whole network; for **Better Travel Options** by focusing on the integration of land use and transport and providing a more balanced transport network now and in the future; **Improving Freight Connections** by focusing on transport corridors to ensure the right journeys happen on the right parts of the network, and **Climate Change** by creating options for Richmond's communities to respond to environmental priorities.
	Arataki: 10 year transport plan	Strong alignment with the focuses of Improving Urban Form, Transforming Urban Mobility and Safety. This business case recognises that despite the current pandemic, no significant changes are expected in the nature, scale and location of transport demand over the medium to long term - the 10 year outlook for the Top of the South remains largely unchanged.
	Road To Zero (New Zealand's Road Safety Strategy 2020-2030)	**Strong alignment** with Focus Area 1, where there is a case for investment in safety treatments and infrastructure improvements
	Climate Change Response (Zero Carbon) Amendment Act (2019)	Provides a framework by which New Zealand can develop and implement clear and stable climate change policies. Sets new domestic greenhouse gas emissions reduction target for New Zealand to reduce net emissions of all greenhouse gases (except biogenic methane) to zero by 2050. This business case contributes to this goal by making a case for investment in a total transport system solution for Richmond
TDC/NCC	Nelson Tasman Future Development Strategy (FDS) 2019	Jointly adopted strategy setting out long-term picture for urban growth over the next thirty years to 2048. **Strong alignment** with the FDS where this business case makes a case for change and investment in the transport network necessary to meet the level of anticipated growth.
TDC	Regional Land Transport Plan Tasman 2021-24	Covers the unitary authorities of Marlborough District, Nelson City and Tasman District, providing an integrated approach to land transport planning across the Top of the South region. Sets priorities for regional transportation initiatives, and includes the Regional Public Transport Plan **Strong alignment** where this business case responds to the problems identified in the RLTP by making as case for change to reduce network constraints and delays, improve access, improve safety outcomes and improve infrastructure for all modes
	Tasman 2018 Transportation Activity Management Plan (AMP)	**Strong alignment** where this business case responds to the problems identified in the TAMP through partnership working with Waka Kotahi to focus on an integrated transport solution for Richmond, and establishing a case for change to address delays on main routes for traffic and freight

Organisation	Document	Alignment/Response
		occurring as a result of growth, and supporting investment in better mode choice, particularly public transport and active modes.
	TDC Long Term Plan	Contributes to Tasman's Community Outcomes relating to the **Human Environment** and urban and rural environments that are people-friendly, well-planned, accessible and sustainably managed; **Infrastructure** that is efficient, cost effective and meets current and future needs; **Recreation** ensuring communities have access to a range of social, cultural, educational and recreational facilities and activities; and **Economic** outcomes and supporting a sustainable economy

5.2 Climate change

The preferred programme for the PBC will need help contribute to the New Zealand government's climate change targets. The key strategies against which it will need to strongly align with are described below.

5.2.1 Climate Change Response (Zero Carbon) Amendment Act 2019

The *Climate Change Response (Zero Carbon) Amendment Act 2019*[22] provides a framework by which New Zealand can develop and implement clear and stable climate change policies that:

- Contribute to the global effort under the Paris Agreement to limit the global average temperature increase to 1.5° Celsius above pre-industrial levels.
- Allow New Zealand to prepare for, and adapt to, the effects of climate change.

It sets a new domestic greenhouse gas emissions reduction target for New Zealand to:

- Reduce net emissions of all greenhouse gases (except biogenic methane) to zero by 2050.
- Reduce emissions of biogenic methane to 24–47 per cent below 2017 levels by 2050, including to 10 per cent below 2017 levels by 2030.
- Establish a system of emissions budgets to act as stepping stone towards the long-term target.
- Require the Government to develop and implement policies for climate change adaptation and mitigation.
- Establish a new, independent Climate Change Commission to provide expert advice and monitoring to help keep successive governments on track to meeting long-term goals.

5.2.2 He Pou a Rangi - The Climate Change Commission

The Climate Change Commission have released their final package of advice to Government on the steps Aotearoa must take to drastically reduce greenhouse gas emissions and address climate change.

It proposes the first three emissions budgets for Aotearoa and recommends a direction of Aotearoa's first emissions reduction plan. The three national targets are:

- An average reduction of 2% each year between 2022 and 2025.
- 17% reduction each year between 2025 and 2030.
- 36% reduction each year between 2030 and 2035.

The government has pledged to release an Emissions Reduction Plan before the end of the year after receiving the final advice, which will set out how the first three emissions budgets will be achieved.

Of the advice provided in the report, the following elements are of particular relevance to the Richmond PBC.

- Transport is identified as one of the most important targets for change.
- Their analysis "shows that reducing transport emissions is crucial to meeting our emissions budgets and reaching net zero by 2050".

[22] https://environment.govt.nz/acts-and-regulations/acts/climate-change-response-amendment-act-2019/ accessed 15/04/21

- The report envisions: "near complete decarbonisation of … electricity generation, energy use in buildings and land transport”
- It recommends that vehicle travel should be rapidly electrified and there should be a ban on fossil fuel vehicle imports by 2035.
- Access to walking, cycling and public transport should also be upgraded.
- Freight trucks should be decarbonised, and significant amounts of freight should be moved onto rail and coastal shipping, which are easier to electrify.

5.2.3 Climate Change at Waka Kotahi and Tasman District Council

Both Waka Kotahi and Tasman District Council are committed to addressing climate change in terms of mitigation and adaptation. At Waka Kotahi, it is guided by *Toitū teTaiao - Our Sustainability Action Plan* and extends to all facets of their work programmes. At Tasman District Council, it is guided by the *Tasman Climate Action Plan,* and also extends into their policy and strategies.

These documents have similar objects and both outline plans for reducing greenhouse gas emissions and achieving a low carbon transport system. There is an emphasis on creating a multi-modal land transport system where public transport, active or shared modes are the first choice for most daily transport needs. They also aim for greater resource efficiency in infrastructure and development.

6. PROBLEM NO.1 – SAFETY AND PLACE

This section presents the evidence base for Problem Statement No.1:

Increasing traffic volumes as a result of growth creates severance and rat running, leading to reduced place value and increased safety risk

6.1 Growth resulting in more car trips

Table 10 provides population estimates which informed TDC's 2018 Long Term Plan, the 2019 Future Development Strategy (FDS) and the 2021 Long Term Plan.

Table 10: Population Growth Forecasts

	2018 (Actual)	2028			2048		
		Low Growth	Medium Growth	High Growth	Low Growth	Medium Growth	High Growth
2018 Long Term Plan	54,300	50,600	54,300	58,000	46,200	55,800	65,500
2019 FDS		54,300	55,700	61,700	55,800	57,300	76,600
2021 Long Term Plan		58,651	61,794	64,964	62,124	74,501	88,618

Figure 11 provides a graphical representation of these population forecasts. The most striking aspect is that the actual 2018 population (54,300) which informed the 2021 Long Term Plan, was almost roughly the same as the 'medium' forecast outlined within the 2018 Long Term Plan.

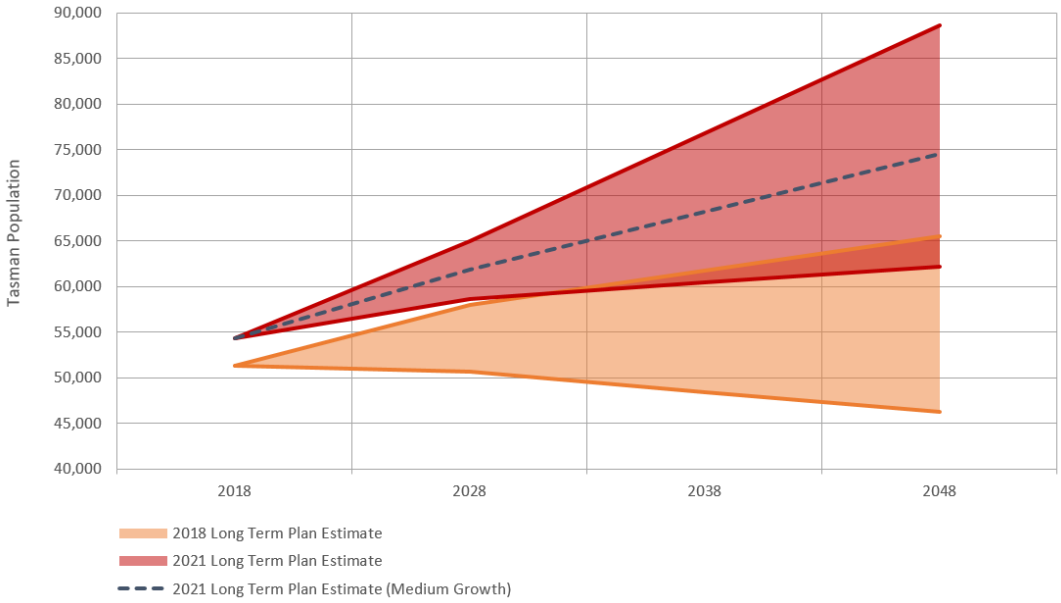
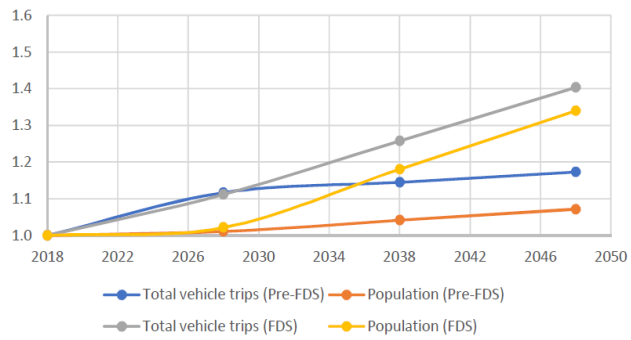


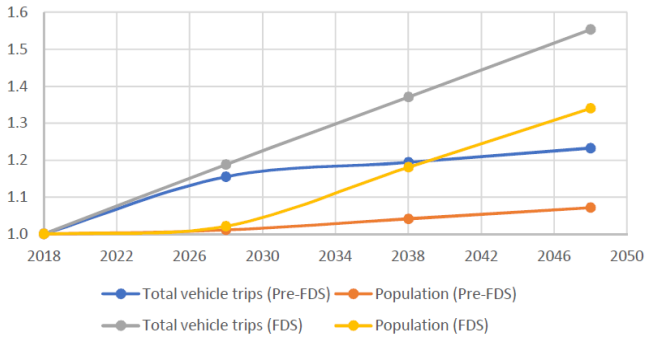
Figure 11: Population Growth Forecasts

The data shows that growth is occurring at a rate that exceeds even the most recent of projections. The implications of this growth, particularly in the short term and without intervention, are significant.

In early 2020, the Nelson/Tasman strategic transport model was updated using FDS growth predictions. The graphs in Figure 12 show population growth and corresponding vehicle trips using FDS predictions compared to previous estimates.



AM Peak



PM Peak

Figure 12: Estimated Growth in Peak Vehicle Trips

The modelling shows an estimated 17% increase in car trips by 2028 and 51% increase by 2048, with the most notable impact likely to be seen during the PM peak. This additional traffic will load onto an existing network which is already experiencing delays and travel time reliability issues.

Increasing traffic on local roads is already being seen. Many of these increases are within places of priority for the community. For example, Wensley Road has a strong residential character and is a direct walking route used by children to reach the cluster of schools on Salisbury Road.

Figure 13 provides the historical AADTs for Wensley Road, which highlight has traffic has steadily been growing along this collector road through Richmond.

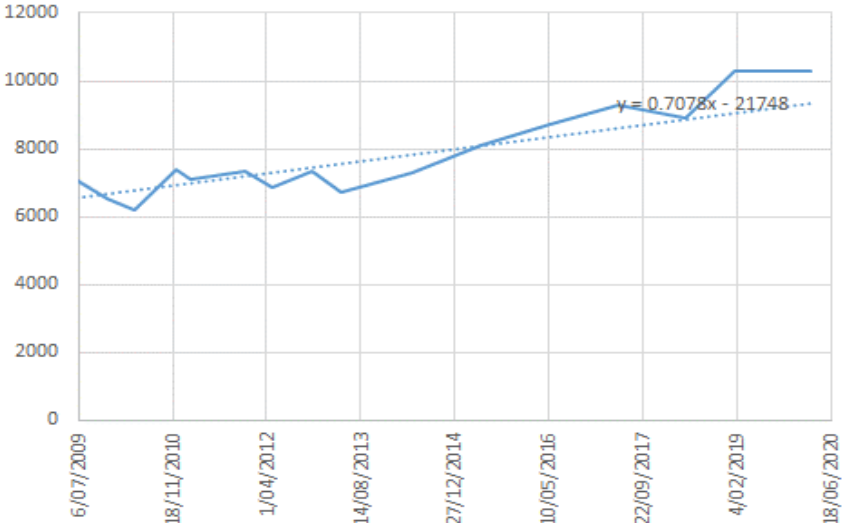


Figure 13: Wensley Road – Traffic Growth (2009-2020)

6.2 More traffic creating further severance

6.2.1 Traffic vs place

Severance occurs when the volume or speed of traffic on a road is high enough to prevent people from safely crossing to the other side. This impact is often most severely felt by vulnerable road users due to associated risks, and additional time sometimes required to cross.

Severance is a significant issue for Richmond, due to the relationship between the volume or speed of traffic and places of interest. Places of interest and priority within the community were identified during a NOF workshop, using documentation from previous reports and local knowledge. Places of interest included health centres, industrial areas, parks and reserves, commercial and retail areas, retirement villages and education facilities or schools.

Figure 14 shows the distribution (shopping, medical) and concentration (schools) of Richmond's places of interest and priority across the existing urban area. It also identifies the key traffic routes across Richmond, demonstrating that many pass through areas with high 'place' value.

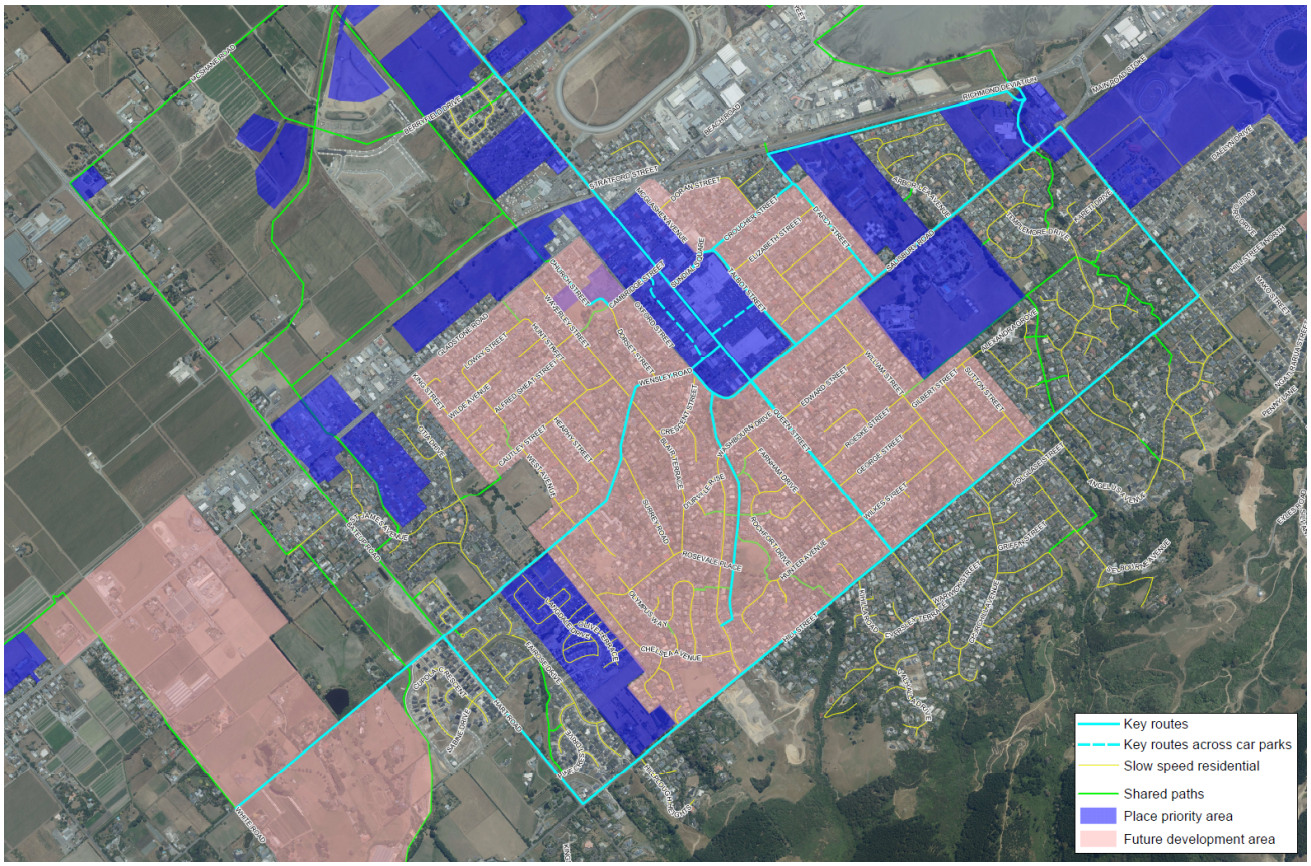


Figure 14: Place vs traffic conflict

Figure 15 provides a representation of the AADTs across Richmond, which provides further evidence of how high traffic volumes are seen on corridors (most notably Salisbury Road) that have high place value.

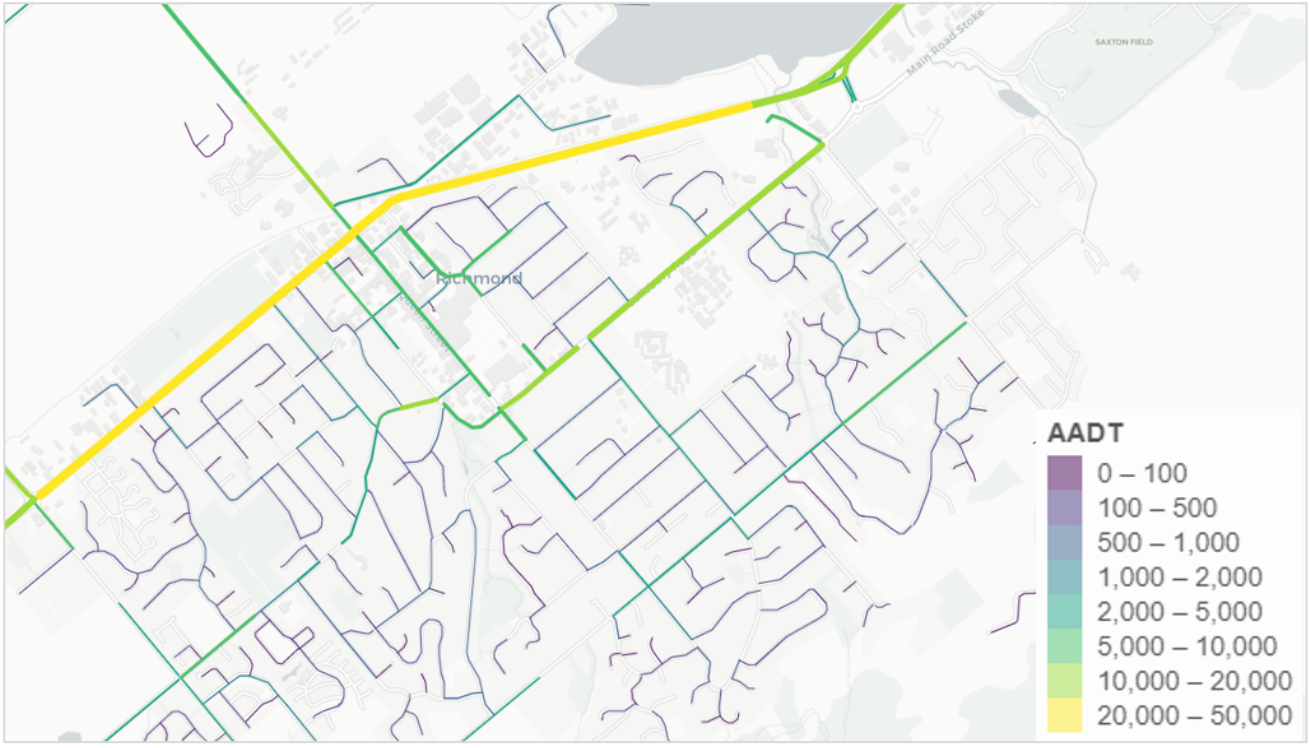


Figure 15: AADT – All Traffic[23]

[23] RAMM database

The map shows that there is upward of 21,000 vehicles per day travelling on Gladstone Road/SH6. This creates severance through Richmond's commercial area and separates Richmond's current urban area from the future growth area of Richmond West.

Frustration with congestion on Gladstone Road/SH6 is causing higher volumes on Richmond's local road network which in turn increases severance on these roads. There are also over 10,000 vehicles per day travelling along Salisbury Road. Elsewhere there are high traffic volumes on Wensley Road and Lower Queen Street, which unofficially functions as the 'gateway' into Richmond Town Centre.

As evidenced by modelling a notable portion of the traffic along Salisbury Road and Wensley Road is high due to 'rat running'[24]. Salisbury Road is the location of Richmond's cluster of schools, and Wensley Road has high residential place values. The way the transport network is currently providing for the movement of people and goods is causing detriment to these high value places.

6.2.2 Impact of land use and parking

Gladstone Road sees the highest volumes of traffic in the Richmond area. It also has several properties and businesses which can only be accessed off the road. Furthermore, parking is available along much of the road. All these factors contribute to an environment where there are multiple movements occurring, and where crossing pedestrians need to be conscious of more than just through traffic. These barriers create an increased feeling of severance.

6.2.3 Impact of heavy vehicles

The type of traffic on the roads also contributes to severance. The presence of heavily laden trucks and truck-and-trailer units create a barrier due to their scale. The map in Figure 16 shows those parts of Richmond's local road is being used by heavy vehicles, including Salisbury Road where the cluster of schools is located.

Figure 16: AADT - Heavy Vehicles[25]

6.2.4 Network Operating Framework

Richmond's current transport network is dominated by arterial roads, which primarily have a movement function and very little place value. Richmond's Network Operating Framework was finalised at the end of 2020. It identifies priorities across the network and considers a range of modes[26].

[24] Rat-running occurs when high traffic volumes on main roads cause motorists to look for alternative routes on more minor roads.
[25] RAMM database.
[26] The contents of the NOF were used to inform the long list of options.

6.3 More traffic increasing the road safety risk

6.3.1 Risk ratings

A bespoke 'safety tool' has been developed to inform the PBC by helping to establish areas of the network that are most susceptible to increases in deaths and serious injuries (DSIs) as Richmond grows and traffic volumes increase. The model brings together traffic modelling and geometric data (RAMM) and then applies formulas within Waka Kotahi's Monetised Benefits and Costs manual to derive an estimate for DSIs at each intersection and mid-block in Richmond. The tool also provides the personal and collective risks for each part of the network for all future years where modelling forecasts are available (i.e. 2018, 2026 and 2046).

Figure 17 show a map of the estimated personal risks for all parts of Richmond in 2028. It highlights:

- For most parts of the network, the personal risk level is typically low or medium-low. This is largely a consequence of how personal risk is calculated, with lane and shoulder widths considered alongside traffic volumes. As many roads in the town are relatively wide, the personal risk is low. However, this does not reflect the actual or perceived safety risk to pedestrians; where on the contrary, a wider road creates increased severance and higher greater issue.
- There are medium-high risk sections on SH60 and Lower Queen Street.
- McShane Road, which provides a key connection to the large Richmond West development, is expected to be medium risk by 2028.
- There are medium risk intersections along Wensley Road, Salisbury Road and Gladstone Road.

Figure 17: Personal Risk – 2028

The tool has been used as part of the assessment of the preferred programme to understand the potential DSI reduction benefits.

6.3.2 Crash History

Figure 18 shows all reported crashes in the Richmond urban area between 2010 and 2019, using Waka Kotahi's Crash Analysis System (CAS).

The map identifies:

- There have been a high number of reported crashes on SH6. The areas on SH6 with the highest rate of crashes are the signalled intersection with Queen Street, Three Brothers Corner and around Jubilee Park. These are areas with high vehicle numbers, turning movements and conflicting road users. The area to the

north of Richmond is where the Richmond Deviation joins Whakatu Drive with changes in the number of vehicle lanes and the posted speed limit.

- A very high number of reported crashes occurring throughout the local road network, and particularly around Richmond's central business district and cluster of schools. These are locations that will have an especially high number of vulnerable road users. The most common type of crashes were rear-end/obstruction crashes. This type of crash resulted in 47% and 42% of the crashes on SH6 (Gladstone Road) and local road network, respectively. This type of crash also accounted for 39% of all serious crashes. Other common crash causes were crossing/turning (33%) and losing control on a bend (17%). On the local road network, a major cause of crashes was loss of control (40%), with 33% being loss of control on a bend.

The types of crashes occurring on Richmond's road network are typical of congestion, resulting in frustration and rat-running. Drivers are travelling too close and too fast for the environment, pushing forward too quickly around corners without regard for vulnerable road users and driving too fast through local streets.

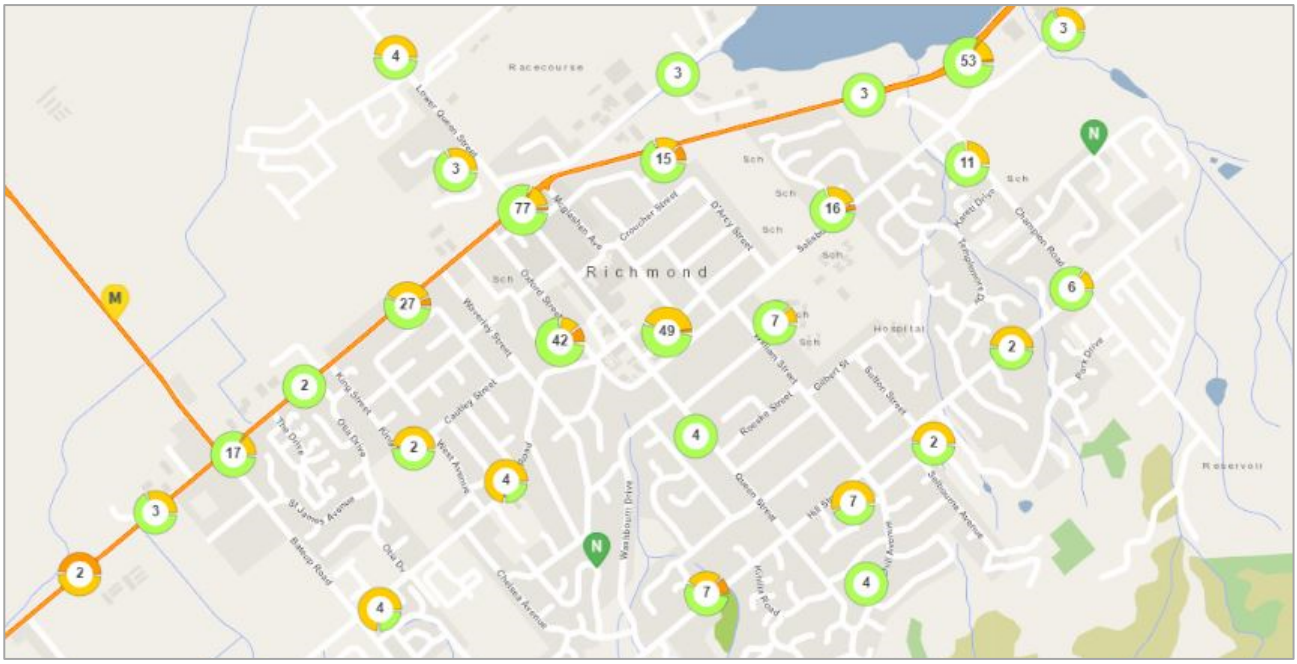


Figure 18: Crash Location and Severity

6.3.3 Pedestrian Crashes

There are high rates of crashes involving pedestrians and cyclists (noting that many incidents involving these users go unreported, particularly if they are non-injury).

The heat map in Figure 19 shows the areas of highest concentration of reported road crashes that involved a pedestrian. The most serious crashes occurred on Gladstone Road between Oxford Street and Queen Street, with one fatal crash. This is the area with the greatest concentration of commercial activity, high volumes of traffic and turning manoeuvres.

There have also been concentrations of minor and non-injury crashes on the local road network within Richmond's central business area. The majority of these occurred prior to TDC completing the pedestrian improvements on Queen Street. Oxford and Talbot Streets serve a 'ring road' function around Richmond's central business area, with commercial activity on one side and residential activity on the other. There have been no significant pedestrian improvements on these streets.

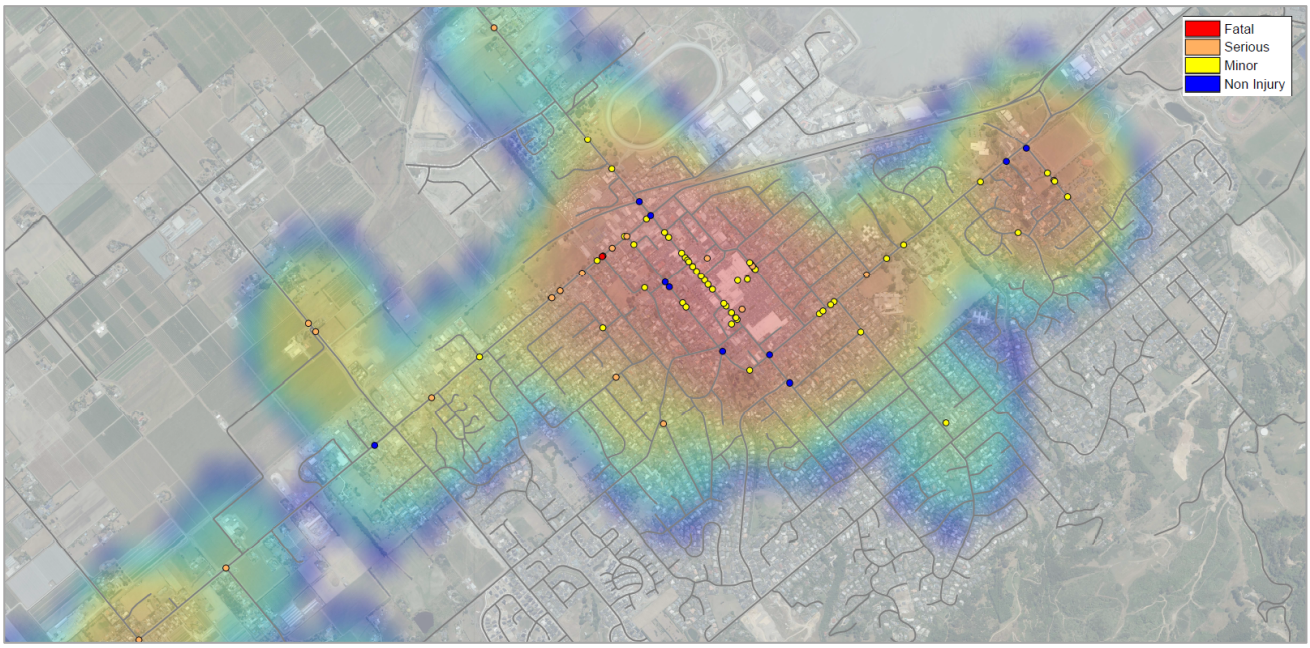


Figure 19: Pedestrian Crashes 'Heat Map'

6.3.4 Cyclist crashes

The heat map in Figure 20 relates to cyclists.

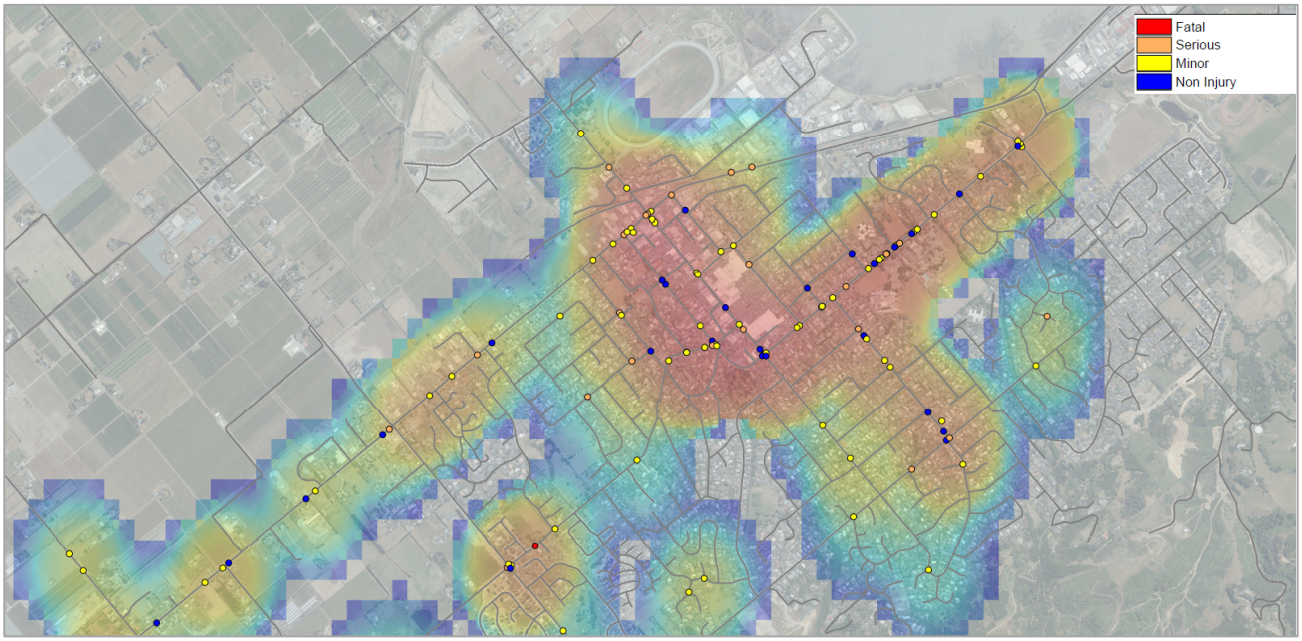


Figure 20: Cycle Crashes 'Heat Map'

The heat map shows that reported cycle crashes are spread more widely across Richmond's road network, including throughout the local road network. The crashes are predominantly minor or non-injury. However, there are several serious crashes, particularly at intersections, and a fatality on Wensley Road.

There is also a high concentration of cycle crashes on Salisbury Road. Salisbury Road provides access to Richmond's cluster of schools. The potential for these crashes to involve children is high. The cluster of schools includes Richmond's only secondary school. Traffic volumes along Salisbury Road are already very high and Richmond's forecast residential growth is likely to result in an increase in school roles.

6.4 Real and perceived safety risks impacting 'place' values

Real and perceived safety has a large bearing on how a place feels, whether people want to visit and spend time. The environmental impact of very high volumes of traffic and resulting noise, vibration and vehicle emissions can also impact people's enjoyment of a place.

In May 2020, on the back of the COVID-19 Level 4 lockdown, TDC invited residents to participate in a survey about how the lockdown has changed their perception of their local streets and how they wanted their streets to look and feel when the COVID-19 restrictions were lifted. The survey was open for the month of May.

Of the approximately 1,200 surveys completed, 88% of respondents commented that walking and cycling felt safer during lockdown due to fewer cars being on the roads. In addition, 84% said they wanted to see TDC focus more on creating neighbourhoods, rather than focusing mainly on motor vehicle transport.

6.5 Problem 1 - summary

Without investment in the Richmond transport network the safety issues that are already present will significantly worsen, increasing the likeliness of death and serious injuries occurring within the project area.

The main contributing factor to an increasing safety risk is the rapidly growing population. This translates to an increase in travel movements across the network and an increase in the number of vulnerable people living in Richmond.

7. PROBLEM NO.2 – ROUTE EFFICIENCY

Problem 2 – Traffic congestion through Richmond causes delays to people and goods reducing travel time reliability and access to economic opportunities and key destinations.

7.1 Access to Destinations

The relatively low populations of the Tasman and Nelson regions, and the proximity of the urban areas of Richmond and Nelson, has resulted in major infrastructure and key destinations supporting communities from both districts. This includes the airport, port, hospital and tertiary education facility (see Figure 1). Nelson's CBD has a wide range of cafes, restaurants and bars, which are a night-time attractor. Future developments such as 'Berryfields' in West Richmond are likely to attract people from Nelson's southern suburbs, as it will be closer than Nelson's CBD.

The distance between Richmond and Nelson's CBD is approximately 13 km. This short commute means that people can live in one District and easily work, shop or recreate in the other. Growth in Richmond, including growth in jobs, means the flow of people is increasingly two-way.

There is an inherent link between how growth in Nelson affects Tasman, and vice-versa. The boundary between Tasman and Nelson is almost indistinguishable and development in one council area can have impacts in the other. An example is future residential subdivisions off Champion Road (three special housing areas). The subdivisions are within the NCC boundary however traffic to/from these developments will use roads controlled by TDC.

7.2 Travel Time Reliability

The graph in Figure 21 has been generated from TomTom data for the section of SH6 from south of Hope to Salisbury Road intersection (November 2019).

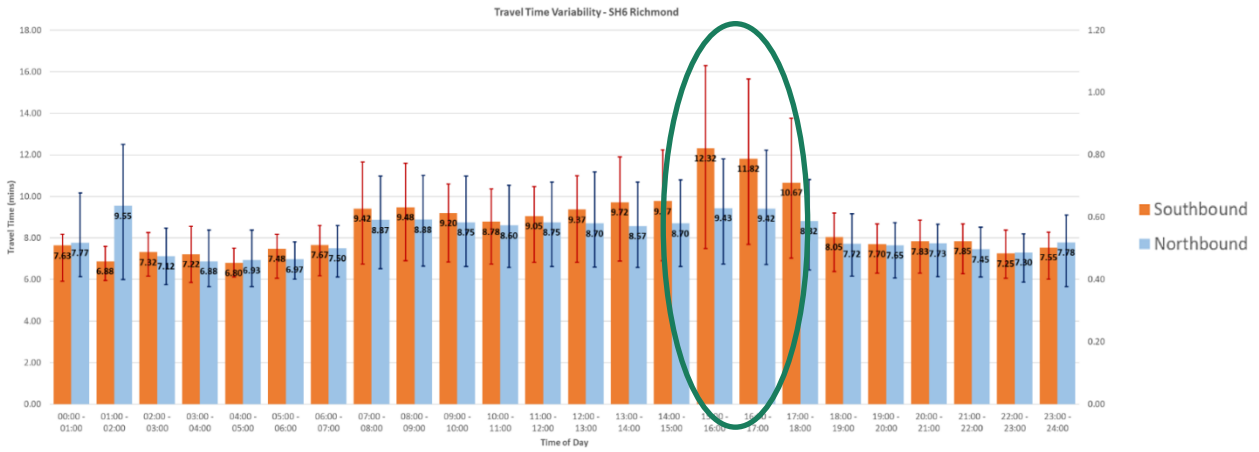


Figure 21: Travel Time Variability

The graph shows there are unreliable periods of the day for motorists traveling to and through Richmond. These unexpected delays will be highly disruptive, particularly for freight using this key corridor between regional Tasman, industrial areas, and Nelson Port.

The data also shows that journeys southbound through Richmond in the evening peak period will take longer and the journey time will be less predictable. For example, at around the end of the school day, a typical trip will take about 12 minutes. However, it could take as little as seven minutes or over 16 minutes.

Travel speed variability through Richmond also impacts travel time reliability.

Figure 22 shows the likely vehicle speed during one hour of the evening peak relative to the posted speed limit. Along the 50 kph section of Gladstone Road, between 4 pm and 5pm, 85% of vehicles will be travelling at 50 kph. However, closer to the centre of Richmond and the beginning of the 'Richmond Deviation', vehicle speeds drop to between 20 and 40 kph reflecting the tailback caused by the three sets of signals on Gladstone Road.

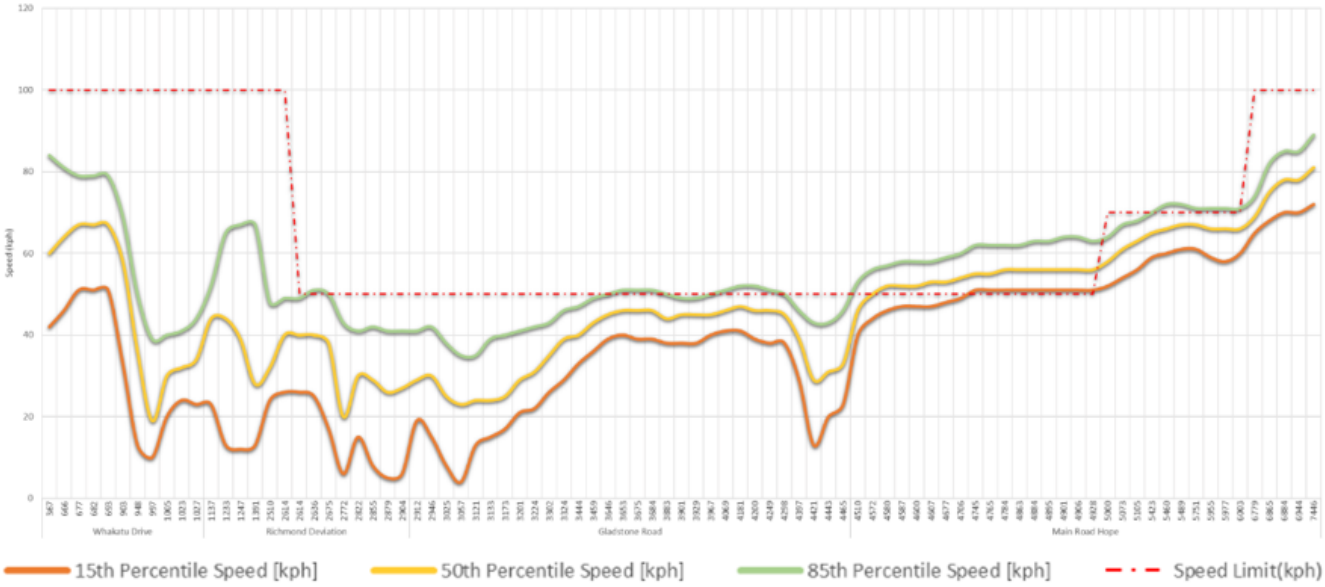


Figure 22: Travel Speed Variability (Southbound – 4pm to 5pm)

Journey times are expected to get longer and travel speeds slower over the next 10 to 30 years.

Table 11 has been extracted from the Nelson/Tasman strategic transport modelling report[27]. It shows that network speeds are expected to dramatically drop over the next 10-20 years if a 'do minimum' approach is taken. Average trip length is also shown to increase, which is a reflection of increased rat-running (i.e. people choose longer routes to avoid congestion on the state highway).

Table 11: Journey Time and Travel Speed Forecasts

Indicator	Totals AM Peak (2018-2048)			Totals PM Peak (2018-2048)		
Model Year	2018	2028	2048	2018	2028	2048
Vehicle kilometres	113,379	135,944	184,602	119,324	147,853	197,668
Vehicle hours	2,725	3,497	7,848	2,740	3,832	9,849
Average network speed (km/h)	41.6	38.9	23.5	43.5	38.6	20.1
Average trip distance (km)	3.9	4.2	4.5	4.0	4.2	4.2
Average trip time (min)	5.6	6.5	11.5	5.5	6.5	12.7
Total vehicle trips	29,234	32,503	41,038	29,965	35,610	46,547

7.3 Route Efficiency

Increases in travel demand in the Tasman/Nelson area over the next 30 years are anticipated to increase network congestion in Richmond. The following images have been exported from the Nelson/Tasman strategic transport model. The roads where the greatest congestion will be experienced are shown in progressively darker shades, based on vehicle-to-capacity (v/c) ratios. Roads coloured **orange** (v/c ratio between 0.85 and 1.00) are "at capacity" and roads coloured **red** (v/c > 1) are considered to be "over capacity".

The image in Figure 23 provides v/c outputs for the 2048 PM peak period. It shows that significant sections of SH6 and the local road network through Richmond will be operating over capacity (a similar story is seen for the AM peak also). The consequence is a significant increase in rat-running, with Salisbury Road operating close to capacity.

This translates into a **x4 increase in travel time between the Salisbury Road roundabouts and SH60 Appleby Highway roundabout**, during the PM peak hour by 2048. Unless there is change to the number of vehicles on the road (or capacity) during the peak times, the level of service for motorists will be dire.

[27] The Nelson/Tasman strategic transport model built-in assumptions are that FDS development occurs as anticipated, there is no change to current travel behaviour and the planned 'do minimum' network improvements are completed.

Figure 23: 2048 PM – V/C ratio

7.4 Delays for public transport and active modes

Another significant impact of increasing congestion is delays for people choosing public transport and active transport options.

Current and future planned public transport routes follow many of the roads where congestion is forecast to worsen. This will result in increasingly long delays for buses, impacting people on their journey and those waiting to start their journey. For public transport to be an attractive choice, it is essential that services run oo time. Without investment to relieve congestion, public transport will not be reliable and, therefore, not be considered a viable option.

For people choosing active modes, crossing very congested roads can be difficult, particularly where there is little or no facilities to support crossing. The map in Figure 24 shows two key locations on Gladstone Road where pedestrian delays are significant. The location shown in green is the signal-controlled intersection where pedestrians travelling directly along Lower Queen Street from West Richmond cross to Richmond's central business area. The location in red is the signal-controlled intersection for pedestrians and cyclists moving between the Railway Reserve shared path and Richmond shopping area.

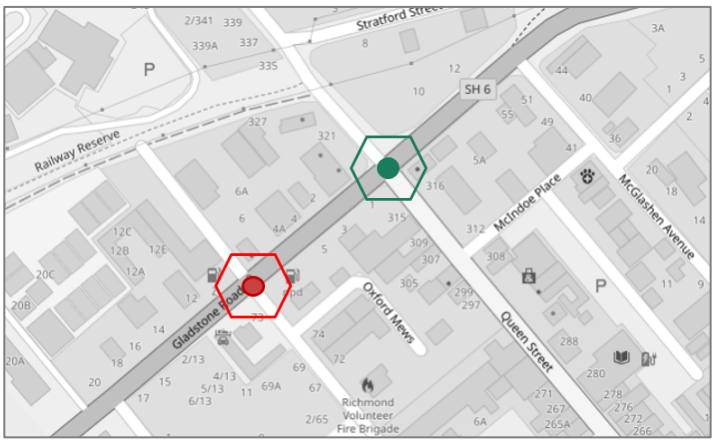


Figure 24: Gladstone Road Pedestrian delays

An analysis of SCATS data (Figure 25) highlighted that the wait to cross SH6 at these two locations, during peak periods, can take up to three minutes. The typical wait time outside of the peak is just over a minute. This sort of delay can cause frustration and result in people taking risks.

SH6 (Gladstone Road) / Oxford Street	
Waiting time to cross SH6	
	Time (min)
Peak Hour	3.0
Typical	1.5
Waiting time to cross Oxford Street	
	Time (min)
Peak Hour	1.1
Typical	0.7

SH6 (Gladstone Road) / Lower Queen Street	
Waiting time to cross SH6	
	Time (min)
Peak Hour	2.4
Typical	1.3
Waiting time to cross Queen Street	
	Time (min)
Peak Hour	1.7
Typical	1.1

Figure 25: Pedestrian Delay Times (SH6 - Gladstone Road)

There is no data available to understand pedestrian and cyclist delays at the southern end of Gladstone Road, but anecdotal evidence suggests it is particularly intimidating towards *Three Brothers Corner/SH60*. It is likely that without any supporting infrastructure, delays during the peak period will be significant.

7.5 Problem 2 - summary

The evidence shows that there are already issues with congestion along SH6 which is causing delays in the movement of goods and people through Richmond. New housing areas are being constructed now, and the increasing population will see demands for travel to, from and through Richmond increasing rapidly.

If a 'Do Minimum' or 'Do Nothing' approach is taken, significant congestion will be experienced not only during peak times but throughout the day. Simply, the transport network will not be sufficient to support the additional housing growth that is planned and desired (at a national government level). Levels of service for all modes will be very poor.

8. PROBLEM NO.3 – TRAVEL CHOICE

Reliance on private cars for short journeys as a result of car-oriented development leads to low utilisation of public and active transport modes and conflict between modes

This problem relates to travel choice and the attractiveness of options available to Richmond's communities, to access work and make everyday trips. Problem 3 has been investigated with reference to TDC's land use planning documents, Census journey to work data, TDC cycle surveys and public transport use data.

Car orientated development is the result of extensive areas of single land use, such as housing, and essential goods and services or major attractors being established elsewhere. The new subdivisions in Richmond are developing almost exclusively for residential purposes. There is some variation in the density of housing, however most is low density. This type of development invariably results in high numbers of vehicle trips.

8.1 Reliance on the car for short journeys

8.1.1 Journeys to work

Table 12 provides census journey to work data for the Richmond Ward between 2006 and 2018. The data shows that there has been an increasing trend for use of a private car (inc. passengers) for getting to work – with now around 87% choosing this mode for their commute.

Table 12: Journey to Work Mode Share (Richmond Ward)

Year	Drive a private VEHICLE	Drive a company VEHICLE	Passenger in a PRIVATE VEHICLE	Public bus	Bicycle	Walk or jog	Ferry	Other
2006	62%	17%	5%	1%	6%	8%	0%	2%
2013	61%	18%	4%	1%	7%	7%	0%	2%
2018	67%	17%	3%	1%	4%	6%	0%	2%

Apart from households living immediately around Richmond's central business area, most households use private cars to access employment. In and around Richmond, over 70% of people travel to work by private car. This is despite 42% of respondents to TDC's Active Transport Survey[28] saying they live within a 30-minute bike ride of the places that they most regularly travel to, and despite mountain biking being a popular recreational activity in the area.

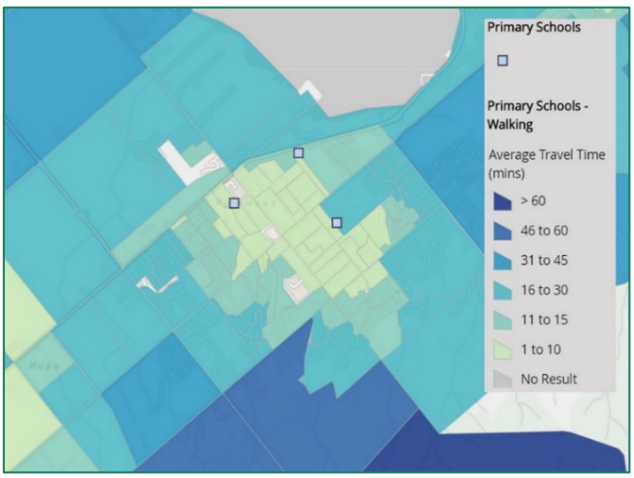
8.1.2 Journeys to education

Travel to education data is more positive, with 39% of students walking, 9% cycling and 2% taking the bus[29]. There are seven schools located within a cluster to the north of Richmond's central business area. Together, they support a combined role of about 4,000 students, from primary to secondary and upwards of 500 staff.

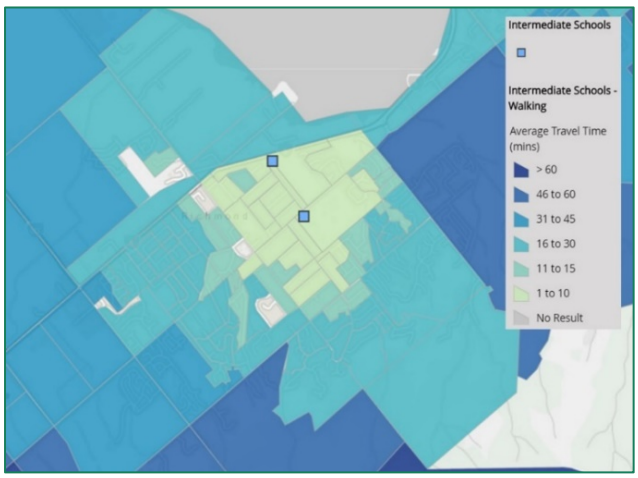
Figure 26 shows that the cluster of schools is well positioned to facilitate walking and cycling journeys. Richmond's current urban area is less than 15 minute walk from the primary and intermediate schools, and most of the Richmond's future urban area (Richmond West) is within a 30 minute walk. The Ministry of Education has also earmarked land for another school in Richmond.

[28] TDC's Active Transport Survey was completed by approximately 1200 residents in May 2020

[29] Sum of Statistical Areas: Ben Cooper Park, Richmond Central (Tasman District), Fairose, Wilkes Park, Easby Park and Templemore



Walking Time to **Primary** Schools



Walking Time to **Intermediate** Schools

Figure 26: Walking Time to Richmond Schools

8.2 Poor safety perception for using active modes

High volumes of traffic in Richmond and underdeveloped infrastructure for active modes is creating conflict. Conflict between motor vehicles and people choosing active modes is a real issue due to the risk of injury.

Figure 27 shows that there have been notably more serious injury crashes involving cyclists in the last five years (8) compared to the previous five years (2). This is during a period when motor vehicle numbers and uptake in cycling have both increased, creating more competition for road space.

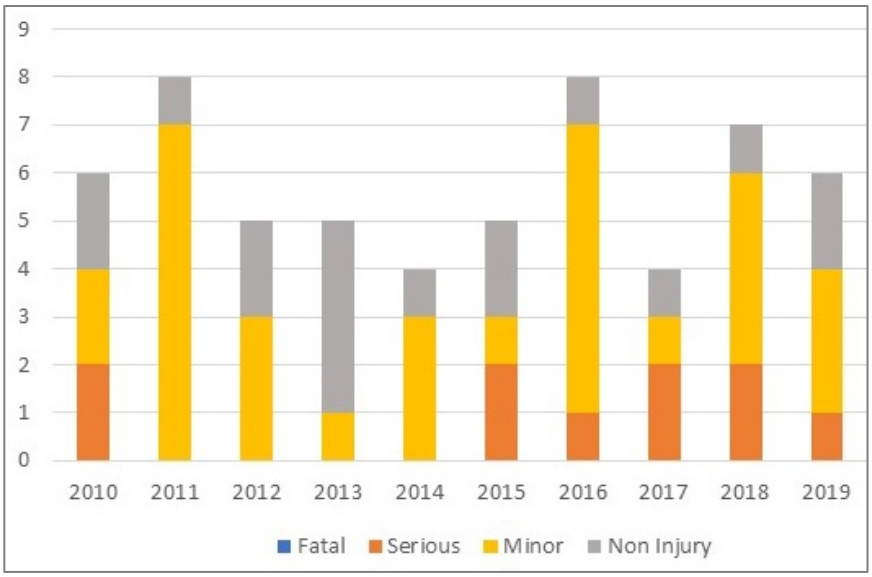


Figure 27: Cycle Crashes

TDC's Active Transport Survey found that 35% of respondents said that they do not find the area they live in easy and safe to walk and cycle. The primary reason for this was *'no appropriate separation from cars'*.

People also reported using footpaths for cycling due to the perception of poor safety when cycling with traffic. These sorts of trends can negatively impact people's willingness to use active transport or support others, such as children and young people, do to so. Although cycling on the footpath can feel safer there is an increased risk at driveways and accesses, as well as a risk to pedestrians.

8.3 Limited public and active transport options

8.3.1 Public Transport

TDC works with and subsidises NCC to operate the contracted bus service between Nelson City and Richmond. There are two main public transport routes between Richmond's Queen Street and Nelson's CBD. Each operates on a 30 minute peak and hourly off-peak frequency on weekdays, and at a much lower frequency on weekend days. The journey takes approximately 30 minutes. These routes have now been supplemented by two new local Richmond routes, which have similar service levels to the main routes and commenced running in August 2020 (at the same time as fare and ticketing improvements). The new routes improve public transport coverage within Richmond but require a transfer for onward travel and may compete with active modes for local journeys.

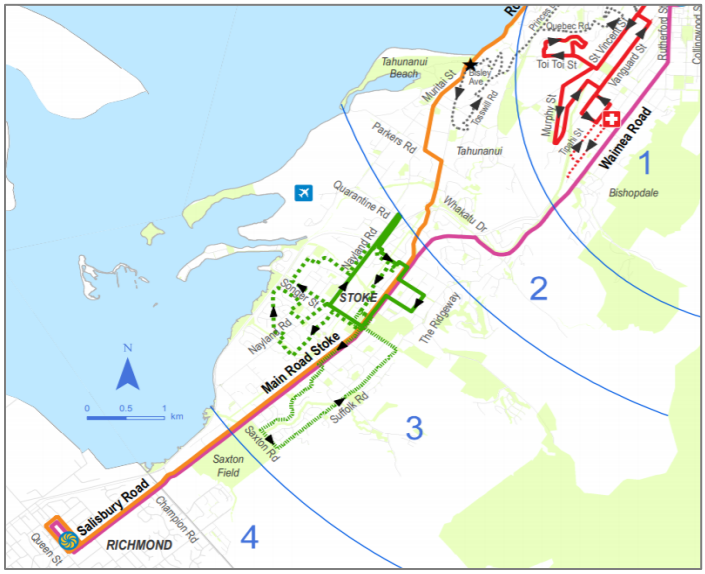


Figure 28: Richmond Public Transport Routes

The graph in Figure 29 shows the total number of passengers, per month, across the Nelson/Tasman network in the eight years to March 2020. Patronage grew strongly following investment in improvements in the first part of the period, but has remained somewhat stagnant over latter years, despite high population growth across the area. This suggests that the public transport service has not been meeting people's needs and they are increasingly reliant on car travel.

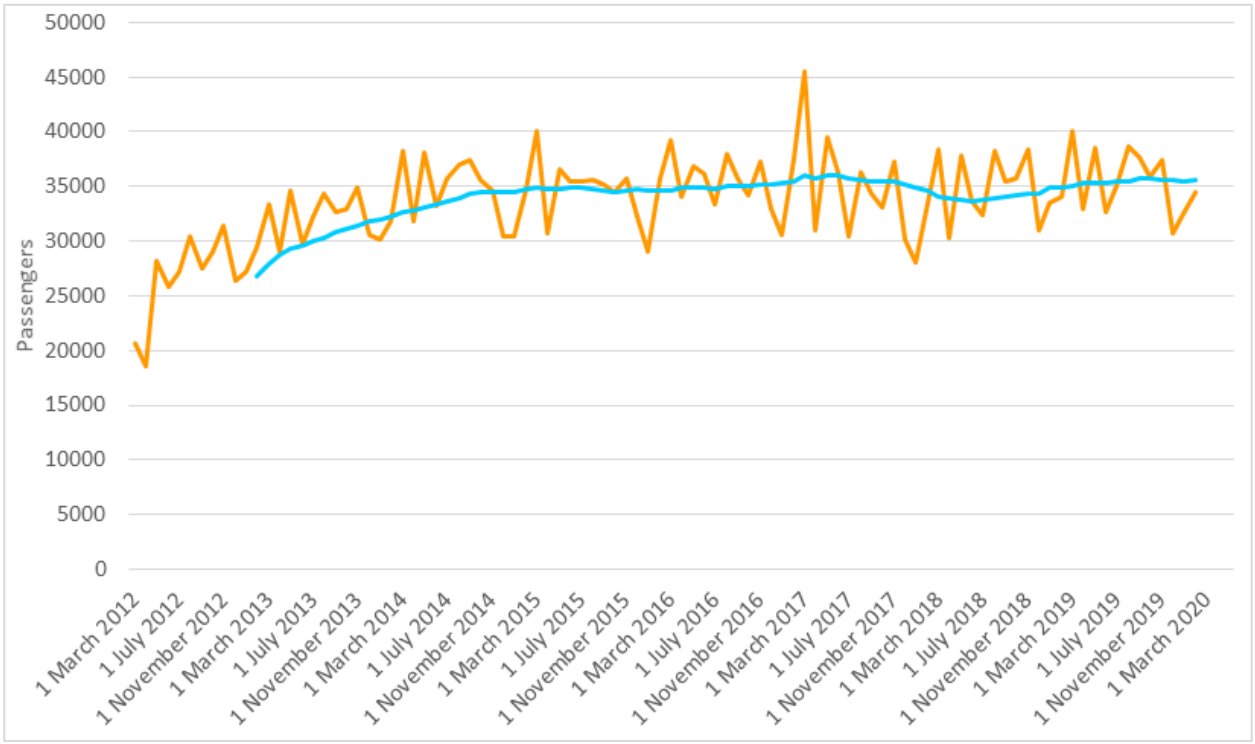


Figure 29: Public Transport - Total Network Passengers per Month

There are some known barriers to Richmond's communities using the public transport service. When TDC's Active Transport Survey asked people about their use of public transport, 6% said they would take public transport if they could and 70% said they do not have a bus service available to them. 73% of respondents thought that TDC should invest more in public transport. Other surveys have similar findings, including a survey conducted in early 2020 for the Nelson/Tasman public transport review.

A draft review of public transport in Nelson and Richmond was recently undertaken. It assessed the coverage, convenience, facilities, fares, information, and delivery framework. A programme of proposed interventions was provided[30]. The public transport review is looking at further improvements to access and coverage (both urban and rural), as well as service level, vehicle, fare, infrastructure, and other improvements that can be rolled out over the next ten years.

A barrier to public transport identified was the coverage of service, and that apart from Routes 1 and 2 all other routes are focused on a local activity centre and require at least one transfer to reach other destinations.

8.3.2 Parking

TDC and NCC have different strategic policies around parking. This can make travel demand management difficult and increase competition between the two commercial/retail centres, where the cost of parking may be a factor for some shoppers. There are currently over 3000 free public car parks available in Richmond CBD. However, only approximately 50% are under the control of TDC, making it difficult to control parking outcomes. Currently there is no paid parking in Richmond, but in some areas time restrictions apply. There is paid parking in Nelson, but parking is free for the first hour.

TDC consulted on a new parking strategy for Richmond in early 2018. The strategy proposed short term actions relating to parking prioritisation by need and seasonal variations to time restrictions. The introduction of user pays was expected in the medium (5-10 year) term.

8.3.3 Active Modes

Richmond and its surrounds are flat, the weather is good and distances relatively short. The Tasman/Nelson area has a reputation for being great for recreational cycling and a good deal of investment has been made in the National Cycle Trail, including a Whakatu Coastal Pathway and Great Taste Trails.

Development of Tasman's urban cycle network has not been as comprehensive. Figure 30 provides Richmond's current cycle network, which includes cycle trails, off-road shared paths that have been formed within greenspaces and wayfinding between residential cul-de-sacs. It also highlights that crossings of major arterial roads are required to connect the various off-road routes.

Figure 30: Richmond Cycle Map

The remainder of the network is made up of on-road cycle lanes. These are primarily located on the main traffic roads. While the cycle lanes provide some road space for strong, confident cyclists, they do not form a comprehensive network suitable for all ages and abilities. At present, and particularly during peak traffic periods, cycle journeys within Richmond are difficult and quite unsafe.

[30] These were consulted in the preparation of the long list of options.

The RLTP recognises the limitations of the existing cycle network, stating:

"In the urban areas of Richmond and Motueka there are a number of cycling facilities but in general they do not currently form a cohesive network for less confident people on bikes to go about their every-day trips."

8.3.4 Counts

Investment in cycle trails is showing benefits. The graph in Figure 31 is taken from the permanent cycle counter on the Great Taste Trail at Whakatu Drive, between 1 January 2017 and 30 June 2020. Cycle numbers on this route have been steady increasing, year on year. The spike in cycle numbers in early-mid 2020 is likely to relate to the COVID-19 lockdown and a corresponding increase in recreational cycling during this time.

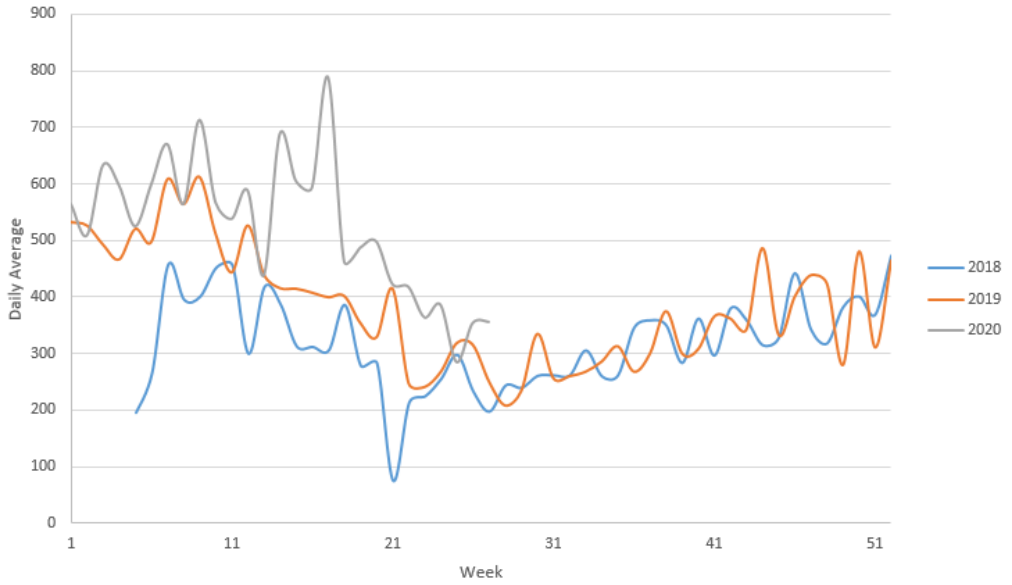


Figure 31: Great Taste Ride – cyclists per day

Cycling counts on the local road network were also undertaken in 2020, capturing volumes of cyclists and the proportion of cyclists that ride on road compared to on the pavement. Table 13 identifies that of the cyclists recorded travelling along Wensley Road, 39% rode on the footpath. Along Salisbury Road that proportion is 18%. These statistics provide further evidence of a perceived safety issue for cycling along these key corridors which provide direct connections to the school cluster and town centre.

Table 13: Footpath vs on-road cycling counts

	Daily cyclists	% Footpath	% On-Road
Salisbury Road	428	18%	82%
Wensley Road	148	39%	61%
Combined	576	19%	81%

8.3.5 Micro-mobility

2013 Census data indicates that 7.2% of people in Richmond East, and 5.8% of people in Richmond West walked to work. Little is known about the uptake of micro mobility. Micro mobility devices such as electric scooters have emerged as a key part of the urban mobility 'story'. There has been rapid adoption of these types of devices across New Zealand and initial research suggests they could offer a solution to address accessibility and last/first mile issues. At present, Richmond's active transport infrastructure is underdeveloped for micro mobility mode, where there are only footpaths and not shared paths to cater for emerging modes.

8.4 Problem 3 - summary

The evidence shows that there are currently limited quality public and active mode provisions, particularly for journeys through Richmond. The key deficiencies are on routes which connect to local schools and areas with high place values. Without direct and safe active mode provisions, TDC will be unable to achieve their active mode targets and the New Zealand climate change goals. A lack of quality active and public transport provisions creates an environment which encourages short journeys by the car.

9. THE CASE FOR CHANGE

There is strong evidence for Problem 1 (Safety & Place). Very high traffic volumes through Richmond, and particularly along Gladstone Road/SH6 with 20,000-23,000 vehicles movements per day, are causing safety and severance issues. The issues are being experienced by all users on the SH, and on local road network as drivers deviate from main roads looking for 'shortcuts'. It is also negatively impacting on the way people feel about Richmond as a place. The impact is expected to get significantly worse as vehicle numbers increase with growth signalled in the FDS.

There is also strong evidence for Problem 2 (Route Efficiency). Levels of service for all modes and travel time reliability is deteriorating on Richmond's road network, particularly in the PM Peak, with implications and access issues for the wider Tasman/Nelson area. Traffic congestion is predicted to get significantly worse with predicted growth and current travel behaviour, with all modes, including freight, being impacted by delays.

There is also good evidence for Problem 3 (Travel Choice). While there is significant car-orientated development occurring, Richmond's underdeveloped public transport, walking and cycling networks mean that those mode choices are not yet attractive enough for people to choose and therefore struggle to be part of Richmond's travel demand solution. Recent counts highlight that a high proportion of cyclists use the footpaths rather than the road, which highlights a level of service deficiency for active modes.

Evidence Gaps

The following evidence gaps have been identified and will need to be filled in the next stage of work:

- Pedestrian counts: TDC does not have any pedestrian counts.
- Freight delays: assumptions have been made that freight is experiencing the same delays as other vehicles.
- Perceptions of place: Initial findings available only, further analysis of complaints needed by road - e.g. Wensley Road.
- Economic impacts to freight because of an unreliable network.

Summary

The evidence gathered demonstrates that investment in a total transport system solution for Richmond is urgent. Richmond is growing at an unprecedented pace and, despite previous studies, there has been a lack of transport investment.

Investment is needed to ensure Richmond's success as a small urban metro, to support local and regional economic development and improve resilience of the state highway network. Investment is also urgently needed to boost public transport and active modes as genuine travel choices.

It is essential that the partners collaborate now to develop an integrated plan for transport and land use, ahead of further growth, and that clear timeframes are confirmed to deliver the plan prior to 2028, when growth is projected to proceed at a faster pace.

The network is also going to have to adjust to where development is going to occur. Otherwise, without investment in the transport network, potentially growth as planned cannot proceed.

10. BENEFITS AND INVESTMENT OBJECTIVES

10.1 Investment Logic Map

Figure 32 is the agreed Investment Logic Map (ILM) for the project, and the line of sight from the agreed Problem Statements to the Investment Objectives.

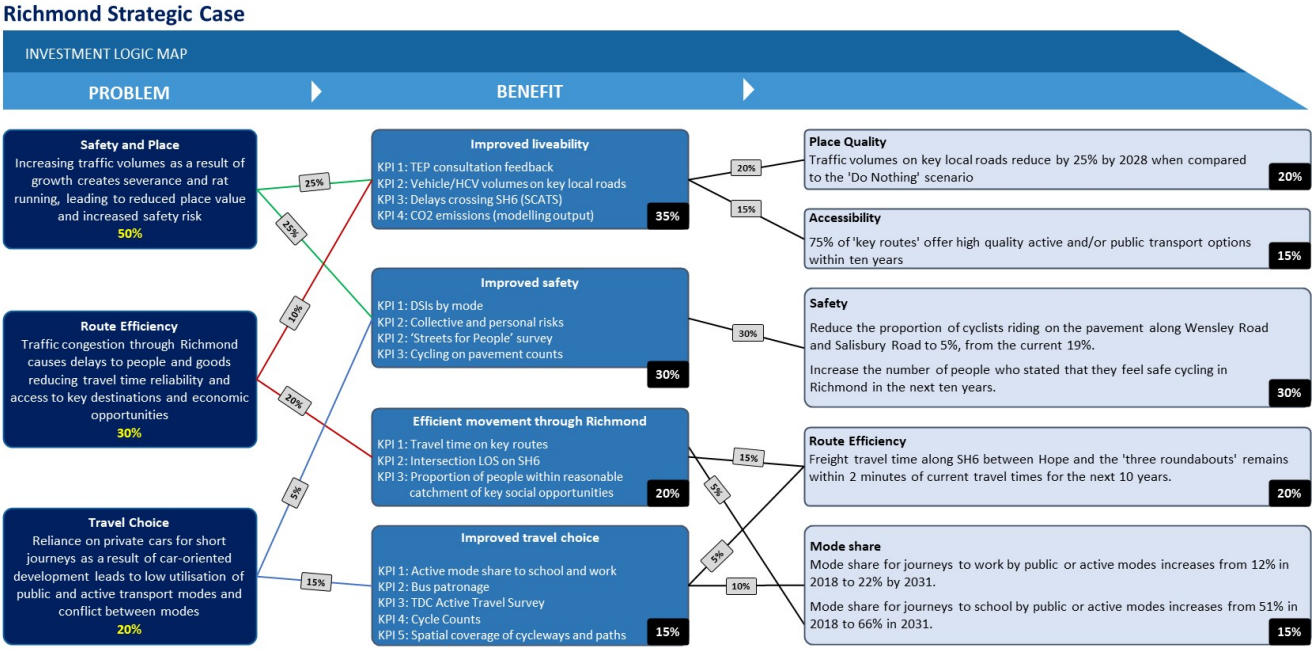


Figure 32: Investment Logic Map

Key local road = road adjacent to high place value areas

Key routes = connections between two high place value areas, or between intensification areas and high place value areas

10.2 Investment Objectives

Investment Objectives developed by Waka Kotahi, TDC and the project team, are listed in Table 14. The evidence base described earlier was used to establish the baseline from which targets were established.

Table 14: Investment Objectives

Theme	Investment Objectives
Place quality	• Traffic volumes on key local roads (e.g. Salisbury Road and Wensley Road) to reduce by 25% by 2028 when compared to a 'Do Nothing' scenario.
Accessibility	• 75% of 'key routes' offer high quality active and/or public transport options within ten years
Safety	• Reduce the proportion of cyclists riding on the footpath along Wensley Road and Salisbury Road to 5%, from the current 19%. • Increase the number of people who stated that they feel safe cycling in Richmond in the next ten years. *Note that baseline data is required.*
Route efficiency	• Freight travel time along SH6 between Hope and the 'three roundabouts' remains within 2 minutes of current travel times for the next 10 years.
Mode share	• Mode share for journeys to work by public or active modes (people living and working in Richmond) increases from 12% in 2018 to 22% by 2031. • Mode share for journeys to school by public or active modes increases from 51% in 2018 to 66% in 2031.

The 'key routes' referred to in the investment objectives, align with the routes identified in the UDS, and are shown in **Appendix E**. The key routes cover Salisbury Road, Wensley Road, Hill Street and Champion Road.

10.3 Benefit Alignment

It is important to ensure the benefits and investment objectives for this business case align with national direction for investment. The Benefits Framework outlined in Waka Kotahi's recently published Investment Decision Making Framework (IDMF) was used to test and demonstrate a clear line of sight for investment. The new Benefits Framework is also aligned with the *NZ Enduring Outcomes* in the Ministry of Transport's Transport Outcomes Framework (TOF)[31] .

The problem statements align strongly with all the enduring outcomes; namely 'inclusive access', 'economic prosperity', 'healthy & safe people', 'resilience & security' and 'environmental sustainability'.

The new IDMF benefit framework was then applied to help determine the range of potential monetised and non-monetised benefits of solving each of the problems. These are outlined within Table 15 along with an overview of which of the NZ enduring outcomes are captured by which problem statement. The potential benefits of successfully investing to address the problems were also identified during the workshop.

Table 15: Benefits of investment

Problem Statement	Inclusive access	Economic prosperity	Healthy & safe people	Resilience & security	Environmental sustainability	Benefits	
						Monetised	Non-Monetised
Increasing traffic volumes as a result of growth creates severance and rat running, leading to reduced place value and increased safety risk.	✓	✓	✓	✓		• Crash cost savings (DSIs) • CO_2 emissions	• Personal and collective risks • Safety perception surveys • No. cyclists using the footpath rather than the road
Traffic congestion through Richmond causes delays to people and goods reducing travel time reliability and access to economic opportunities.	✓	✓		✓		• Travel time and vehicle operating costs	• Proportion of population living within travel threshold (15 minutes, 30 minutes or 45 minutes) of key social opportunities (including education, health care, supermarkets) by different modes (walking, cycling, public transport, private motor vehicle) in the morning peak
Reliance on private cars for short journeys as a result of car-oriented development results in low utilisation of public and active transport modes and conflict between modes.	✓	✓	✓		✓	• Walking and cycling travel time benefits • Walking and cycling health benefits • Public transport benefits from new or improved services	• Mode shift from single occupancy private vehicles • Spatial coverage of cycleways and paths

[31] www.nzta.govt.nz/assets/planning-and-investment/docs/benefits-framework-june-2020.pdf

11. UNCERTAINTY LOG

11.1 Uncertainty Log

An uncertainty is an event or change in condition that may result in a different future state from that originally anticipated or assumed. The uncertainty log has been developed using Waka Kotahi guidance. The main uncertainties associated with this project are as outlined in Table 16.

Table 16: Uncertainty log

Uncertainty	Comment	Likelihood	Impact
Population growth predictions used in traffic modelling	Population may grow at a faster or slower rate than anticipated which would affect the timing of interventions. However, the rate of growth does not change the need for the various interventions. *This could influence the timing for longer term interventions.*	Reasonably foreseeable	Moderate
Transport modelling accuracy	Modeling to date has been at a high level and needs further detailed analysis to confirm possible transport impacts. This is particularly key for large scale infrastructure, such as new roads. The available TRACKS and SATURN models are strategic models, and do not provide the level of detail that would be required to inform any design decisions. *This could influence the design (and cost) for longer term interventions.*	More than likely	Moderate
The scale and form of development	Assumptions have been made that Richmond will continue to grow as indicated in the Future Urban Development Strategy and other land use and urban design strategies. The scale and form of development may change land use densities and consequently local demands. *This could influence the timing for longer term interventions.*	More than likely	Minor
COVID-19 / working from home tendency	The widespread impacts of the COVID-19 pandemic are creating numerous uncertainties and challenging long held assumptions, particularly in relation to the regional economy. This pandemic may have also created a long-term shift in how people work, with more people working from home. *This could influence future travel patterns and the need for increases in road capacity.*	Reasonably foreseeable	Moderate
Future demand for exports	Assumptions relating to the future demand for exports are uncertain, where there may be an increase or decrease in demand. This could have an impact on freight movements.	Reasonably foreseeable	Moderate
Government imposed regulations	Regulations imposed by central government may incur additional costs to local government. This creates uncertainty for local government to budget for transport improvements.	Hypothetical	Moderate

11.2 Assumptions

Table 17 outlines the key assumptions which have influenced the development of the preferred programme and/or could influence the timing or affordability of separate interventions. Assumptions which have informed the economic analysis have been detailed in Part B.

Table 17: Assumptions

Assumption	Notes
Growth / land-use planning	Assumptions have been made that Richmond will continue to grow as indicated in the Future Urban Development Strategy and other land use and urban design strategies. The scale and form of development may change land use densities and consequently local demands. Where and when growth occurs could also change, which could influence the prioritisation of certain interventions.
Freight demand and reliability	Assumptions relating to the future demand for exports are uncertain. Assumptions have also been made that freight is currently experiencing the same delays as general traffic.

Assumption	Notes
Costs	Cost estimates for each intervention have had a variety of assumptions applied – for example, the extent of the intervention, need for property acquisition, potential changes to kerb lines etc. This level of detail is however appropriate at the PBC stage.
Hope Bypass	Assumed that the Hope Bypass would include a fully separated off-road cycle (or shared) path that would run the length of the designation, with at least one safe (signalised) crossing point). Grade separation for the Hope Bypass / Lower Queen Street intersection would also be required.
Wider programme elements	It is assumed that to deliver a comprehensive multi-modal response to the identified problems that other parallel elements (such as the public transport strategy) will be supported and developed as necessary. The detail of some of the wider programme elements may be further developed at a later change.
Traffic forecasts	Traffic forecasts assume business as usual travel continues, and there is no change as a result of the Government's Emissions Reduction Plan. The influence of Covid-19 may also change 'work from home' tendencies.

Note that other that financial availability, there is little else in the way of key constraints.

PART B: DEVELOPING THE PROGRAMME

12. LONG LIST

12.1 Programme development process

The process for establishing a preferred programme used the following process:

1. Establishing a long list of interventions.
2. Screening of the long list of interventions.
3. Development of a long list of programmes. Each of the long listed interventions were included within at least one of the programmes.
4. Multi-criteria assessment (MCA) of the long list of programmes. This helped to establish the relative benefits of each of the programmes. An indicative cost and benefit for each long listed programme was also established.
5. Feedback from the wider stakeholder group on the various programmes.
6. Establishing an emerging preferred programme based on workshop feedback.
7. Finalising the preferred programme based on Waka Kotahi and TDC review, plus feedback from the community consultation.

This section describes how the long-list of interventions for the PBC were established and then refined. The following sections provides details of the other steps in the process.

12.2 Long list process

The long list was developed through the following process:

- Input from Richmond's local representatives and key stakeholders during workshops held in Richmond on 22nd February 2020. Refer to **Appendix D** for minutes.
- A review of existing and in-development strategies and studies, including the draft Long-Term Plan (LTP).
- Project team inputs, which specialists from TDC, Waka Kotahi and Stantec.

12.3 Stakeholder workshops

Workshop 1a – Richmond Vision

Workshop 1a was held during the morning of 22nd February. It was attended by members of the TDC Transport Committee and local elected representatives representing Richmond. The purpose of the workshop was to capture a 'vision' and aspirations for Richmond's growth and urban transformation.

Workshop participants were led through a series of exercises aimed at helping them articulate what, for them, successful urban transformation for Richmond looked like. Participants were then asked to consider what was needed to achieve the visions of success – the opportunities/actions needed and challenges /issues to overcome. Ideas generated by the workshop participants informed the development of the long list.

Workshop 1b – Long List

Workshop 1b was held during the afternoon of 22nd February. During Workshop 1b the wide group of stakeholders were split into four groups and invited to circulate between 'problem stations' and suggest ideas that would help address the three key problem areas – safety, travel choice and route efficiency. The fourth station was for 'urban design', which focused on options that would help support the 'Richmond Vision'.

Figure 33: Long List Workshop

12.4 Local strategies and direction

In addition to workshop inputs, potential interventions were sourced from background documents.

The project team reviewed existing TDC strategies and recent studies to identify additional long list interventions. This supplementary list ensured interventions that had not been captured during the workshops were included. The existing strategies and recent studies drawn from included:

- Richmond Network Optimisation Framework (NOF)
- Richmond draft Long Term Plan
- Nelson/Tasman Public Transport Review
- Tasman Walking and Cycling Strategy
- Richmond and Motueka Town Centre Parking Strategy
- North Nelson to Brightwater Strategic Study

The project team also worked with representatives from TDC and Waka Kotahi to understand existing and planned work e.g. trials and currently committed projects. This process also informed the long-list of very large scale interventions that were long held community aspirations - e.g. gondola and inland Port.

Urban and landscape design considerations also played a key role in the identification of interventions that would support the vision for Richmond.

A summary of the key strategies is provided as **Appendix F**.

12.5 Sifting of the long-list of interventions

The long list was finalised with 89 interventions identified through the workshops (31), existing strategies and plans (41) and project team inputs (17).

Once the long list was collated, some ideas or potential interventions were flagged and not explored beyond early assessment. There are several reasons for excluding alternatives at this long-list staging, including:

- Duplication of ideas.
- Interventions were outside of the project area.
- Did not meet early assessment thresholds for feasibility, deliverability and cost.
- Waka Kotahi/TDC had limited influence or control over as part of this project (i.e. national policy).

It was also identified that some ideas would be better addressed under other Council initiatives such as plan changes, structure planning or other future spatial planning. These were picked up by the Urban Design Strategy team, tested against the UDS 'key moves' and incorporated into the UDS action plan (see **Appendix B**). Some of the ideas not progressed related to land use influences. In considering whether to include or exclude these, it was agreed that the PBC is responding to and aligning with TDC's land use, urban form and growth planning as outlined in their Future Development Strategy, Intensification Action Plan and other TDC planning policies. The objectives within these documents influenced how interventions were combined into programmes.

In total, 125 discrete interventions were taken forward into programme development, and 36 ideas were not progressed.

The complete long list of interventions taken forward is provided in **Appendix G**. This table categories each intervention into high-level categories of options, such as 'active mode' or 'parking' (referred to as alternatives)

13. PROGRAMME THEMES

Potential programmes of work, made up of multiple interventions, were developed. Each programme has a different approach capturing the key themes and outcomes that had emerged within the Case for Change (Part A). This approach ensured that a variety of potential responses were considered.

The project team defined programme themes to help differentiate programmes as they developed. This included a programme that focused on **Addressing Immediate Issues** facing Richmond through a low level of investment. Another three programmes were broadly based around the project's key benefits – ***Accessibility*** (of improving access for all modes), ***Liveability*** (of place, including improved travel choices) and ***Enabling Growth*** (efficient movement through Richmond). The description of this programme was later expanded to better reflect growth in relation to the integration of land use and transport in enabling growth.

Given the wide-reaching implications that a new road along the existing Hope Bypass designation could have, **'Liveability with Hope Bypass (with/without flyover)'** sub-programmes was added. Other programmes that included the Hope Bypass were Enabling Growth and Do Maximum[32].

Added to these programme themes were:

- **Do Minimum**, which reflects existing Waka Kotahi and TDC commitments.
- **Do Maximum**. This helps to determine the relative value for money of the maximum investment from the available list of interventions.

The project team took account of urban design considerations and ways of achieving the vision for Richmond in the development of programmes. The project team also recognised safety is a key overarching project theme. However, as safety is inherent in all other programmes, it was decided that a specific separate programme was not appropriate.

The programme themes are shown in Table 18, with maps for each programme included in **Appendix H**.

Table 18: Programme descriptions

Theme	Description	Interventions included
Do Minimum	• Includes already committed projects that are planned and committed over the next 10 years. It also includes projects that are already underway.	• TDC committed/underway e.g. Champion Road roundabout - safe cycle crossing. • Waka Kotahi committed/underway – safer speeds programme (SH)
Addressing Immediate Issues	• This programme consists of the lowest level of intervention that is needed to achieve some of the key outcomes for Richmond. • The baseline programme builds on the Do Minimum programme and addresses some of the immediate issues and problems across the network.	• Safe pedestrian access to Richmond's centre. • Speed management near areas of high place value • Safety improvement around Richmond's schools cluster. • Initiatives to manage parking demand in Richmond's centre. • Some improvement to existing on-road cycle infrastructure. • Some route efficiency improvements on SH6.
Accessibility	• The focus of this programme is to improve multi-modal access across the network. This programme includes interventions that: • Enhances supply chain reliability. • Creates a multi-modal network that supports transport choice. • Improves the ability for people to access needs and destinations. • Supports safety outcomes for all road users. • Reduces access constraints. • This programme makes best of existing infrastructure and excludes the Hope Bypass.	• Route efficiency improvements through Richmond (Gladstone Road). • Safety upgrades and improvements across the wider Richmond road network. • Extend cycle network along key routes to future development areas (key on-road routes). • Reduce barriers to walking and cycling on current network. • Investment in public transport system (fares, routes).

[32] The Bypass in these programmes was assumed to be a flyover.

Theme	Description	Interventions included
Liveability	• The aim of this programme is to develop connected and vibrant communities. It has a focus on interventions that promote place making, improve transport and land use integration, reduce emissions, and improve community wellbeing, safety and provide transport choice. • This programme has been split into three - without the Hope Bypass, and with the Hope Bypass both at grade and grade separated	• Significant upgrade of residential streets to improve place quality. • More shared spaces and pocket parks n Richmond's town centre. • Road safety upgrades and improvements across the wider Richmond network. • Increased parking management in residential streets. • Extend active mode network to future development areas, including via green corridors. • Significant investment in public transport system (fares, routes).
Enabling Growth	• This programme is largely focused on capacity in land development and movement to best enable growth and includes interventions that support and enable population, land use development, freight demands and traffic growth. It seeks to add additional capacity in the network where there are current and future constraints. • This programme includes the Hope Bypass.	• Safety and efficiency upgrades and improvements across the wider Richmond road network. • Hope Bypass. • Use of clearways, special vehicle lanes and priority signals at intersection for PT and freight. • Upgrade of residential streets to improve place quality. • Extends active mode network to future development areas.
Do Maximum	The Do Maximum programme seeks maximum investment across each of the project benefits. It aims to deliver transformational change to Richmond.	

14. PROGRAMME ASSESSMENT

The purpose of assessing the long list of programmes was to better understand the relative benefits and costs of each. This process then helped to establish a short list of programmes. The 'Do Maximum' programme would, by definition, deliver the highest benefits. The MCA process provides a tool for helping understand what interventions contribute the best value for money, should the Do Maximum be unaffordable.

14.1 Assessment criteria

In consultation with Waka Kotahi and TDC (meeting on the 8 March 2021), a total of 13 criteria were agreed to be used to assess the programmes. This included UDS appropriate criteria of accessibility and place quality. The agreed approach to the MCA aligns with Waka Kotahi's MCA guidelines[33], with criteria covering all aspects which are considered mandatory for a PBC[34]. The criteria and baseline weightings are provided in Table 19.

Table 19: MCA Criteria

Investment Objectives (50%)	
Place quality	20%
Accessibility	15%
Safety	30%
Route efficiency	20%
Travel choice	15%
Critical Success Factors (25%)	
Potential achievability	33%
Potential affordability	33%
Potential value for money	33%
Opportunities and Impacts (25%)	
Mandatory	
Climate change adaptation	20%
Cumulative impacts (Land Use / Transport integration)	20%
Property	20%
Impacts on Te Ao Māori	20%
Other	
Climate change mitigation	20%

Appendix I provides further detail around the factors considered as part of the evaluation. Where a criterion included within the MCA guidelines has not been used, an explanation is provided.

14.2 Assessment process

The following approach was taken to scoring the programmes.

1. Initial assessment undertaken by relevant technical specialists within the project team.
2. Initial assessments reviewed with representatives from Waka Kotahi and Tasman District Council client team before being finalised and presented to stakeholders at the 31/3 workshop.
3. Initial sensitivity analyses were completed on the MCA with input from the Waka Kotahi and TDC teams
4. Stakeholders use the MCA outputs to help inform their identification of a stakeholder preferred programme. At this point stakeholders were offered the opportunity to raise any additional matters or information they felt should be included in the assessment, and these were noted and considered after the workshop by the project team.

Note that individual interventions are not scored in isolation; scoring was at a programme level only.

[33] www.nzta.govt.nz/assets/resources/planning-policy-manual/docs/multi-criteria-assessment-user-guidance.pdf

[34] Waka Kotahi guidance recommends 8 to 12 criteria be used in an MCA, with no more than 15. This is due to avoid weightings being spread in a way that makes an assessment criteria redundant, and to avoid the risk of double counting.

14.3 Scoring framework

Table 20 provides a framework for how programmes have been scored against the various criteria.

Table 20: Scoring Framework

Magnitude	Definition	Score
Significantly positive	Significant positive impact, likely resulting in substantial and long-term improvements or enhancements	+3
Moderately positive	Moderate positive impact, which may provide improvements or enhancements, and new opportunities of short, medium- or long-term duration.	+2
Slightly positive	Minor positive impact, may be confined to limited area, possibly only short term	+1
Neutral	No discernable or predicted positive or negative impact	0
Slightly adverse	Minor adverse impact, probably short-term, which can be mitigated	-1
Moderately adverse	Moderate adverse impact, may be short, medium or long term, and impact will most likely be able to be mitigated or managed	-2
Significantly adverse	Significant and serious adverse impact with serious long-term effects on the physical, economic or social environment.	-3

The scoring criteria takes into consideration that growth and traffic volumes will occur, and with this, a 'neutral' score reflects a situation where interventions are required just to retain the status-quo.

14.4 Programme assessment

14.4.1 Raw scores

Technical specialists from the project team each assessed programmes performance in relation to their specialisation. These specialisation scores were then pulled together into a single MCA matrix, before being moderated. The focus of the moderation process was to understand how much (slightly, moderately, significantly) one programme performed better or worse than another, and to ensure that individual scores considered a wide range of different perspectives.

The raw scores are presented in Table 21.

Table 21: MCA – Raw scores and weighted score

Theme	Investment Objectives					Critical Success Factor			Opportunities and Impacts					Weighted score
	Place Quality	Accessibility	Safety	Efficiency	Travel Choice	Potential Achievability	Potential Affordability	Potential Value for Money	Climate change adaptation	Cumulative Impacts	Property	Te Ao Maori	Climate change mitigation	
Do Min	-2	0	-2	-3	-2	3	3	3	0	-2	3	0	-3	-0.3
Addressing Immediate Issues	-1	1	1	-2	1	0	2	3	0	1	-1	0	-1	0.4
Accessibility	1	2	2	0	2	0	-1	2	0	1	-2	0	2	0.8
Liveability (excl Hope)	1	3	1	-1	2	0	0	2	0	1	-2	0	1	0.7
Liveability (incl Hope - at grade)	2	2	2	0	2	-1	-1	1	1	1	-2	0	1	0.8
Liveability (incl Hope - flyover)	2	2	3	2	2	-2	-2	1	1	2	-2	0	0	1.0
Increased road capacity	1	2	1	2	1	-2	-2	1	1	2	-2	0	0	0.5
Do Maximum	3	2	3	3	3	-2	-3	1	1	3	-3	0	1	1.2

The raw scoring identified that the 'Do Minimum', 'Addressing Immediate Issues' and 'Increased Road Capacity' scored notably lower than alternative programmes.

14.4.2 Sensitivity tests

Sensitivity tests were then undertaken to understand whether the relative ranking of programmes would change in response to chances to the weighting of key criteria. These sensitivity tests were:

- **Climate change**: 'climate change adaption' and 'climate change mitigation' criteria represents 100% of score for the 'opportunities and impacts' category.
- **High growth**: 'Safety' and 'Efficiency' criteria represents 100% of the score for the 'Investment Objectives' category.
- **Low growth**: 'Accessibility' represents 70% of the score for the 'Investment Objectives' category, with 'Safety' representing the remaining 30%.

A summary of the scoring is provided within Table 18.

Table 22: MCA - Programme rankings

Theme	Sensitivity			
	Baseline	Climate Change	High growth	Low growth
Do Min	8	8	8	8
Addressing Immediate Issues	7	7	7	6
Accessibility	3	2	3	2
Liveability (excl Hope)	5	5	6	1
Liveability (incl Hope - at grade)	4	4	5	3
Liveability (incl Hope - flyover)	2	3	2	4
Increased road capacity	6	6	4	7
Do Maximum	1	1	1	5

The MCA identified that the 'Do Maximum' consistently ranked the highest for all scenarios, aside for the 'low growth'. Given that this programme would reflect a maximum investment programme and supports future growth, intuitively, these relative rankings are reasonable.

The relative rankings of the programmes remained relatively consistent, regardless of the sensitivity test that was used; highlighting also that the liveability and accessibility programmes contribute well to achieving the desired outcomes of investment.

14.5 Relative BCRs

Some initial benefit-cost ratios (BCRs) were established ahead of the second workshop.

The costs and benefits that informed the assessment at that initial stage were very high-level, and the **BCRs presented to not correspond to the final BCR for the preferred programme**.

This is because:

- The final programme ended up being a hybrid of other programmes (see Section 15).
- Cost estimates were updated to reflect deeper consideration of how each intervention might look (e.g. the start/end points for the cycle lanes and type of separation from traffic).
- Some new interventions were included in the final programme following public and stakeholder consultation.

A summary of the relative BCRs for each programme are shown in Table 23.

Table 23: Relative BCRs for each programme

Theme	Benefit	BCR	
	High	Low	High
Do Min	$3m	1.1	3.1
Addressing Immediate Issues	$73m	1.4	3.3
Accessibility	$249m	0.9	2.3
Liveability (excl Hope)	$223m	1.0	2.3
Liveability (incl Hope - flyover)	$464m	0.9	1.8
Increased road capacity	$457m	0.8	1.7
Do Maximum	$646m	0.9	1.8

The table shows that:

- All programmes would be expected to deliver high economic benefits which would likely offset the total cost of the programme (i.e. BCR > 1.0).
- The 'Do Min' and 'Addressing Immediate Issues' programmes would potentially deliver the highest BCR. However, the overall economic benefits that would be delivered by these programmes would be substantially lower than would be delivered through the 'Do Maximum'. The 'Do Min' and 'Addressing Immediate Issues' programmes only focus on resolving existing issues and would not deliver the long-term benefits that Richmond needs.

Approach to PBC Level cost estimates

The cost estimates at this PBC level have been developed through the following process:

- Where applicable, cost estimates developed by TDC as part of the draft LTP submission were used.
- Where applicable, cost estimates for Do Minimum interventions which have previously been developed either by Waka Kotahi or TDC have been used.
- Where available, operating costs from TDC's LTP were incorporated (e.g. bus operating costs).
- Apply a 'low' (10%), 'medium' (30%) or 'high' (50%) confidence ratings to each intervention (based on knowledge of the intervention, complexity etc.) to establish low and high-cost ranges.
- Meeting with Waka Kotahi and TDC to discuss the assumptions applied for each estimate and agree each indicative cost (capital expenditure only).

14.6 Summary

The MCA and indicative economics for each programme established that the Do Maximum scored generally higher than alternatives, would deliver the highest benefits and would most strongly deliver upon the Investment Objectives. It would however, by nature, be the most expensive programme. The second best scoring programme was 'Liveability (ing. Hope Bypass - Flyover)', which is expected to give an even stronger BCR.

As discussed in the next section, whilst the Do Maximum was used as a starting point, the programme was refined (and scaled back) by referring to key interventions included within the 'Liveability' and 'Accessibility' programmes.

This refinement process was undertaken to ensure that the final preferred programme:

- Reflects the desires and preferences of stakeholders and the public
- Strongly delivers upon all Investment Objectives
- Presents an optimised value for money proposition

15. PROGRAMME REFINEMENT

15.1 Incorporating Workshop No.2 feedback

15.1.1 Workshop structure

The primary purpose of Workshop No.2 was to present the programmes to the wider stakeholders and gain feedback that would assist in the identification of an emerging preferred programme.

An overview of the six programme themes was provided to the wider group ahead of the workshop session, as well as presented during the workshop. The presentation also reminded attendees of the scope of the project, process to date and provided a refresh of the key problems and urban design vision ("we want a Richmond that…"). To further support development of the UDS and integration with the PBC, street typologies and example good practise urban design images from elsewhere were provided as additional information on a side table that attendees could view at any time.

Workshop attendees were split into three groups. Each group was given a colour (blue, green or yellow) to help manage the workshop activities and aid record keeping. Each group were also given the long list of interventions in a matrix showing which programme each was in, maps of each programme, the draft project team MCA, and indicative high-level costs.

During the session, activities were held to help stakeholders understand the differences between the programmes and then to identify an emerging preferred programme.

The first activity focused around clarifying each of the programme and to identify:

- Any aspect of any programme that was not clear.
- If the differences between programmes were clear.
- If anything seemed to be missing from any of the programmes.

During the second activity the groups were invited to discuss which of the programmes they felt most closely represented their 'preferred programme', and if any interventions from other programmes should also be included. Groups were also asked to identify any items that they could not agree on and why.

15.1.2 Key feedback

The high-level messages deduced from the workshop were:

- All groups agreed that the 'Do Maximum' should be used as the basis for forming the 'preferred programme'.
- Stakeholders agreed that Hope Bypass designation, which is due to lapse in 2023, should have its timeframe extended. The key reason is that it was agreed that further work, and monitoring of the future transport mode trends would be required before a decision on the form and function of the transport corridor can be made.

  There were two distinct viewpoints amongst the group regarding the potential Hope Bypass:

  - Supporters of a new bypass noted that it was needed to resolve increasing congestion issues, with the biggest concern being the impact on freight movement and associated economic impacts. It was however acknowledged that it would take time for such a project to be funded, investigated, designed, and ultimately constructed.
  - Stakeholders who were not supportive of the bypass argued that short term measures could provide the infrastructure needed to promote behaviour change. However, there is no certainty that, even with a comprehensive suite of active and public transport infrastructure, that capacity issues would be resolved. As such, there was agreement that the designation should be retained, and the bypass included as a long-term mitigation.
- Stakeholders agreed that setting in place infrastructure at an early stage that encourages mode shift should be undertaken in the first instance.
- Staging will be key to delivering transformational change for Richmond.
- Planning must consider all modes with a focus on safety.
- Planning must also consider both Richmond's current urban area as well as the future growth areas.

15.2 Refining and staging the programme

Whilst the Do Maximum was agreed as being the best starting point, there was acknowledgement amongst the stakeholder group that this will likely need to be 'scaled back' to make it affordable. The 'accessibility' and 'liveability' programmes, which both scored well, were used in the first instance of understanding the interventions the best contribute to delivering the investment objectives of the business case.

Ultimately the emerging preferred programme that was presented to the public was a hybrid between the liveability and the Do Max. The interventions for delivery in the early years were primarily from the 'Liveability' programme and it was a popular stakeholder programme. The remaining interventions specific to the Do Max were identified for implementation in later years, to enable monitoring into the effectiveness of early interventions effectiveness.

15.2.1 Programme refinement

Following strong feedback received during Workshop No.2, the project team refined a programme that was formed initially around the Do Maximum programme. The refinement process involved:

- Considering how the network would work as a whole, and whether additional interventions would be needed to compliment core components of the programme.
- Taking a pragmatic approach to establish what could reasonably be achieved, from both funding and constructability points of view, for the short (0-3 year), medium (4-10 year) and long term (11-30 year) timeframes.

15.2.2 Staging

The importance of staging had come through strongly during Workshop No.2. Taking a staged approach means that investment is initially targeted at interventions that most strongly achieve the project outcomes and/or are essential for creating long term mode shift.

The time periods being considered as part of this PBC are:

- **Short-term.** Interventions that address immediate issues, are straightforward to implement at relatively low cost or low risk or are currently under investigation for delivery.
- **Medium-term**. Interventions that will address many of the issues but due to cost, deliverability, feasibility or land development, cannot be implemented in the short term. This group also includes some second stage interventions, which rely on implementation of short-term interventions.
- **Long-term**. Interventions that are likely to be needed to address the issues but cannot be implemented earlier due to cost or complexity. In most cases, they rely on monitoring of short and medium-term interventions prior to scope being fully defined. This group also includes some second or third stage interventions, which rely on implementation of short and medium-term interventions.

15.2.3 Prioritising interventions

To help establish which interventions were best suited for the short, medium, and long term programmes, a priority was given to each intervention. This helped to guide the understanding the relative merits of projects in achieving the overarching project outcomes. The priority given was either:

- **Core** - interventions that are fundamental for addressing the key identified problems.
- **Desirable** - interventions which would deliver strong benefits and help achieve the overall project vision.
- **Optional** - interventions that have merit towards achieving project outcomes but are not necessarily fundamental to solving the identified problems, and the benefits are potentially not readily quantified.

The refinement and staging processes were cross referenced by staff at TDC and Waka Kotahi against current and future budget commitments.

The emerging programmes were then used to inform decision making through respective LTP and NLTP processes. It also enabled Waka Kotahi to develop a consultation package for wider public engagement and consultation with iwi.

15.2.4 Interventions not taken forward from the 'Do Maximum'

For clarity, the following interventions from the original 'Do Maximum' programme were not taken forward to the preferred programme:

- **Public Transport MAX** – this would have captured an extensive rollout of high frequency services and bus stops across Richmond and the Tasman region. Removed from the preferred programme as the cost would be excessively high and the relative benefits were unclear.
- **Improve access for fire station on Oxford Street –** following liaison with TDC it was agreed that that this was not a major issue that would warrant inclusion within the preferred programme.
- **Richmond Bus Terminus** – a scaled back and staged upgrade to the bus stop/terminus within the Town Centre was instead progressed.
- **Two more green spaces in the heart of Richmond** – locations were unspecified and would involve a high land purchase cost. Otherwise, land may simply not be available (i.e. private ownership).
- **All Richmond Town centre (inside ring roads) to be a shared environmen**t – the project team agreed that this was not easily achievable, and unlikely to be acceptable to the community.
- **Use the Wellington Traffic Operations Centre (WTOC) to optimise the signal timings** – TDC and Waka Kotahi confirmed that the signals have been optimised already.
- **Real-time travel information (ITS)** – TDC and Waka Kotahi agreed that this would not provide significant benefit.

15.3 LTP Submission and refinements with partners

The latter phases of developing this PBC coincided with the timing of TDC's LTP. Due to the close collaboration between the project and client teams during PBC development, TDC staff were able to use placeholders in the LTP to help with Council budgeting. These placeholders were also reflected in the RLTP.

Following Workshop No.2, and through the process of programme refinement, the project team worked closely with TDC staff to define the emerging preferred programme's interventions and cost estimates. Initial staging and prioritising were further refined to support Council's LTP budget placeholders, and to give TDC staff the necessary project background to support preparation of officer recommendations for Councillor deliberations.

At the same time, Waka Kotahi staff cross-checked Tasman State Highway projects to ensure alignment with the NLTP. This also enabled project interdependencies to be checked for alignment.

This phase was finalised in an LTP submission, from the project team to TDC (refer to **Appendix J**).

15.4 Responding to public consultation

Public engagement on the emerging preferred programme occurred between 19 July 2021 and 13 August 2021. During the engagement period 1,163 pieces of feedback were submitted. The feedback was made up from:

- 328 direct engagement at drop in events
- 657 Social Pinpoint comments
- 95 Social pinpoint surveys
- 37 email or postal surveys
- 41 emails or letters from individuals
- 9 emails or letters from organisations

Key themes

The following key themes emerged in the feedback:

- Binging forward the timing of the Hope bypass
- Removing the Hope bypass from the programme
- Congestion and delay in the area surrounding the Gladstone Road (SH6) and Queen Street intersection
- General agreement with the cycling infrastructure proposed in the programme
- General agreement of the public transport services and infrastructure proposed in the programme.

Changes to the programme based on feedback

A post engagement was review was undertaken collaboratively between TDC, NCC and Waka Kotahi. The outcome was agreement around the following changes to the preferred programme:

1. Expansion of the short-term project on SH6 for *'investigating current phasing of traffic signals'* to include potential changes to the road layout, inclusion of the Stratford Street intersection and inclusion of safe walking and cycling crossings.
2. Extension of the medium-term project to create separated cycleways, to include the sections of Lower Queen Street between McShane Road and Sandeman Street.
3. Extension of the short-term project prioritising freight and public transport, to include the whole of Gladstone Road between Bateup Road and Queen Street.
4. Inclusion of a short-term project to provide more bike parking infrastructure in Richmond's main town centre.
5. Inclusion of a medium-term project to improve the intersection of Hill Street and William Street for walking and cycling.
6. Inclusion of an interim short-term project to create a flush medium on Lower Queen Street by reallocating on-road parking space.
7. Inclusion of a short-term project to improve the intersection of Wensley Road and Waverley Street for walking and cycling.

15.5 Responding to 2021-24 NLTP

The 2021-24 NLTP was publicly released on the 7th September 2021 and provides some certainty around funding for several of the short-term projects included within the emerging preferred programme. Indeed, the emerging programme was used to inform council's NLTP submissions.

The impact to the preferred programme was moving the following previously identified short-term projects to become high priority (i.e. year 4) medium term (4-10 year) projects:

- Separated cycle lanes on Salisbury Road. *Potentially design could start in the short term.*
- Salisbury Road / Talbot Street intersection - additional pedestrian crossing.
- Talbot Street / McGlashen Avenue crossing improvements
- William Street / Hill Street improvements for walking and cycling

15.6 Preferred programme

The preferred programme offers a whole of transport solution for Richmond. Maps which show the preferred programmes for the 0-3, 4-10 and 11-30 year time periods are provided as Figure 34 to Figure 36.

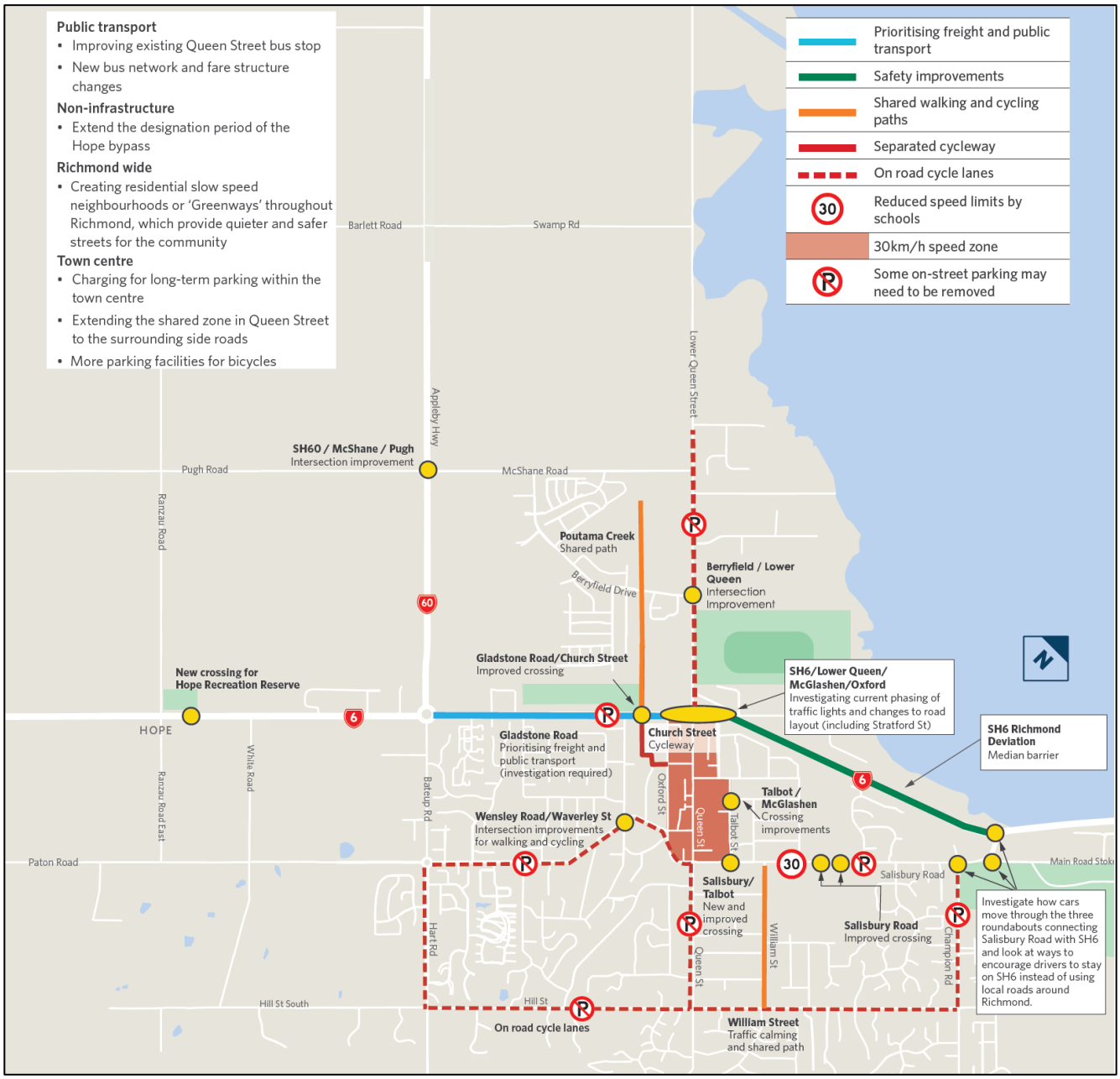


Figure 34: Preferred programme – Short Term (2021 to 2024)

Note that extending the Hope Bypass designation also forms part of the short-term programme. Furthermore, the RLTP and NLTP priority order identified by TDC is aligned with short/medium/long term preferred packages.

Figure 35: Preferred programme – Medium Term (2024 to 2031)

Figure 36: Preferred programme – Long Term (2031 to 2050)

15.7 Applying the Intervention Hierarchy

The Preferred Programme thoroughly applies Waka Kotahi's intervention hierarchy, as demonstrated within Figure 37. Generally, the Preferred Programme does not propose investing in any infrastructure to increase capacity for private vehicles until the long term programme, and then only if required.

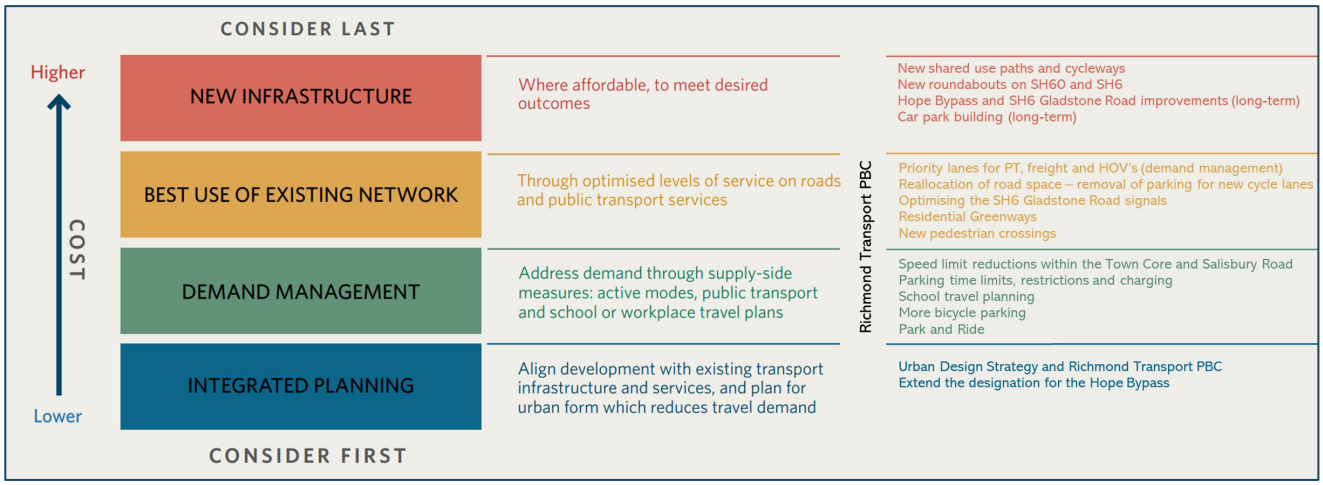


Figure 37: Application of the intervention heirachy

15.8 Comparison of Programmes

Figure 38 provide a comparison of each of the programmes, including the refined Preferred Programme. The intent of the table is to show the strength to which each programme would deliver the Investment Objectives, the level of stakeholder buy-in and the broad economic benefits.

Although the Preferred Programme does not have the highest BCR, it is still considered to be preferred because:

- It is more affordable than the 'Do Maximum' and still delivers significant benefits.
- The 'Enabling Growth' programme has a slightly higher BCR but it would not strongly deliver upon all the Investment Objectives – especially 'place quality'.
- The Liveability (excluding the Hope Bypass) programme presents the best overall BCR range. However, the Hope Bypass is a fundamental element of the long-term programme. Any short-to-medium term benefits gained by a Liveability (excluding the Hope Bypass) programme could largely be lost in the long-term if rat-running through the local road network returns. Traffic modelling has indicated that the Hope Bypass is an essential component for 'keeping the right traffic on the right roads' and reducing potential rat-running through areas of high place value.

	Investment Objective	Baseline	Programme							
			Do Minimum	Addressing immediate Issues	Accessibility	Liveability (ex. Hope Bypass)	Liveability (inc. Hope Bypass)	Enabling Growth	Do Maximum	Preferred Programme
INVESTMENT OBJECTIVES	**Place quality** Reducing traffic on local roads	• AADT of 14,000 vehicles per day on Salisbury Road	Moderate disbenefit	Minor disbenefit	Minor benefit	Minor benefit	Moderate benefit	Low benefit	High benefit	High benefit
	Accessibility 'Key routes' delivering high quality walking, cycling and PT options	• No notable separated cycle facilities on key routes (i.e. to schools or town centre) within Richmond.	Neutral	Minor benefit	Moderate benefit	High benefit	Moderate benefit	Moderate benefit	Moderate benefit	High benefit
	Safety Improved safety perception and reduction in cyclists on footpaths	• 19% cyclists use the pavements	Moderate disbenefit	Minor benefit	Moderate benefit	Minor benefit	High benefit	Low benefit	High benefit	High benefit
	Route efficiency Freight travel time along SH6 Gladstone Road	• 12 minutes during peaks compared to 7 minutes during the peak (2019)	Major disbenefit	Moderate disbenefit	Neutral	Minor disbenefit	Moderate benefit	Moderate benefit	High benefit	High benefit
	Mode share Mode share for journeys to work and school	• Journeys to work by public or active modes = 12% • Journeys to school by public or active modes = 51%	Moderate disbenefit	Minor benefit	Moderate benefit	Moderate benefit	Moderate benefit	Low benefit	High benefit	High benefit
Stakeholder ranking			**Low**	**Low**	**High**	**High**	**High**	**Moderate**	**Very High**	**Very High**
MCA	Investment Objectives		High disbenefit	Neutral	Moderate benefit	Moderate benefit	High benefit	Moderate benefit	High benefit	High benefit
	Implementability		Highly implementable	Highly implementable	Moderately implementable	Moderately implementable	Some difficulty	Some difficulty	Some difficulty	Some difficulty
	Opportunities and Impacts		Minimal impacts	Minimal impacts	Minimal impacts	Minimal impacts	Manageable risks	Manageable risks	Manageable risks	Manageable risks
	Overall		Low risk, low benefit	Low risk, low benefit	Low risk, moderate benefit	Low risk, moderate benefit	Moderate risk, high benefit	Moderate risk, high benefit	Moderate risk, high benefit	Moderate risk, high benefit
BCR	Cost Range ($m)		$0.5m - $1.5m	$22m – $26m	$107m – $140m	$99m – $127m	$254m - $360m	$262m – $378m	$358m – $510m	$261m – $338m
	Benefit Cost Ratio (BCR)		1.1 – 3.1	1.4 – 3.3	0.9 – 2.3	1.0 – 2.3	0.9 – 1.8	0.8 – 1.7	0.9 – 1.8	0.8 – 1.5

Recommended

Figure 38: Programme Summary

16. PREFERRED PROGRAMME ASSESSMENT

16.1 Overview

The preferred programme includes:

- Safety improvements to 16 intersections.
- 6 km of new separated cycleways.
- 15 km of new on-road cycleways.
- Reduced speed limits along Salisbury Road and through the town centre.
- A staged approach to delivering a high-quality public transport network and services.
- Targeted measures to reduce rat-running on local streets.
- A focus on improving the place quality of the town – with more 'people focused' streets.

16.2 Benefits of investment

16.2.1 Delivering the investment objectives

Table 14 shows the strength to which the preferred programme is expected to deliver the investment objectives.

Table 24: Investment Objectives

Investment Objectives	Preferred programme	Alignment
Place Quality		
• Traffic volumes on key local roads to reduce by 25% in 2028.	• Reduction of around 33% of traffic on Salisbury Road during peak periods in 2028 (Do Min vs Preferred Programme) • Reduction of around 15-20% of traffic on Wensley Road during peak periods 2028 (Do Min vs Preferred Programme)	Strong
Accessibility		
• 75% of 'key routes' offer high quality active and/or public transport options by 2030.	• All key routes identified within the UDS, aside from Darcy Street, to have either on-road or full separated cycle lanes within the next ten years. This accounts for approximately 90% of all key routes.	Strong
Safety		
• Reduce the proportion of cyclists riding on the footpath along Wensley Road and Salisbury Road to 5%, from the current 19%. • Increase the number of people who stated that they feel safe cycling in Richmond.	• This Investment Objective can only be answered during post-implementation surveys. However, modelling to date has estimated that the programme will deliver a safety benefit (see Section 16.2.3) and the economics has identified a significant number of new cyclists will be created (up to 600 per day). • Providing 6km of separated cycleway (plus 15km of on-road cycleways) which connect key places to schools is expected to significantly reduce the number of cyclists riding on the pavement to below 5%.	Strong
Route efficiency		
• Freight travel time along SH6 between Hope and the 'three roundabouts' remains within 2 minutes of current travel times for the next 10 years.	Traffic modelling forecasts travel time along SH6 between Hope and the 'three roundabouts' as: • Modelling identified an increase in travel time for freight in 2028 (see Section 16.5). This is because the Hope Bypass is not programmed until the 4 to 10 year period. The modelling does not however capture mode shift, or the potential for freight priority lanes. Freight priority lanes are therefore an important feature of the short-term programme for achieving improved freight reliability. • With the Hope Bypass a 33% improvement in freight travel time is expected.	Low for 2028 Strong for 2048
Mode share		
• Mode share for journeys to work by public or active modes	An additional 360-600 cyclists per day[35] across an enhanced network which captures:	Strong

[35] Based on a back-calculation of the number of additional cyclists from the total economic benefit for cycling improvements

Investment Objectives	Preferred programme	Alignment
(people living and working in Richmond) increases from 12% in 2018 to 22% by 2030. • Mode share for journeys to school by public or active modes increases from 51% in 2018 to 70% in 2030.	• 6 km of new separated cycleways • 15 km of new on-road cycleways. Traffic modelling has indicated that to achieve the Investment Objective, a reduction of around 200 vehicle trips will be required by 2030[36].	

16.2.2 Reducing the likeliness of DSIs

The *Richmond PBC Safety Tool* has been used to assess high level benefits of the programme, with a key input into the calculations being future forecast traffic volumes. The tool, which applies the crash predication formulas in Waka Kotahi's Monetised Benefits Manual, estimates that the programme will save one DSI per year.

Whilst this is a relatively small number, it should be considered that the baseline is relatively low. Essentially the programme will reduce the estimated number of DSIs from seven to six per year. This result is purely from a reduction in rat-running. Interventions such as separating cyclists from traffic will further improve safety. Hence, in reality the safety improvement would be better than the model predicts.

16.2.3 Reducing rat-running on local streets

A key factor which helps to achieve both the liveability and safety objectives is how successful the programme is in reducing rat-running on local streets. Reducing speed limits and narrowing the road carriageway (by introducing cycleways) are two measures which will go some way to discouraging through traffic using local streets. However, the key intervention that would deliver a significant step change would be the introduction of a new road along the Hope Bypass designation.

Figure 39 provide a flow difference plot for the 2028 PM peak, comparing the Do Minimum with the preferred programme.

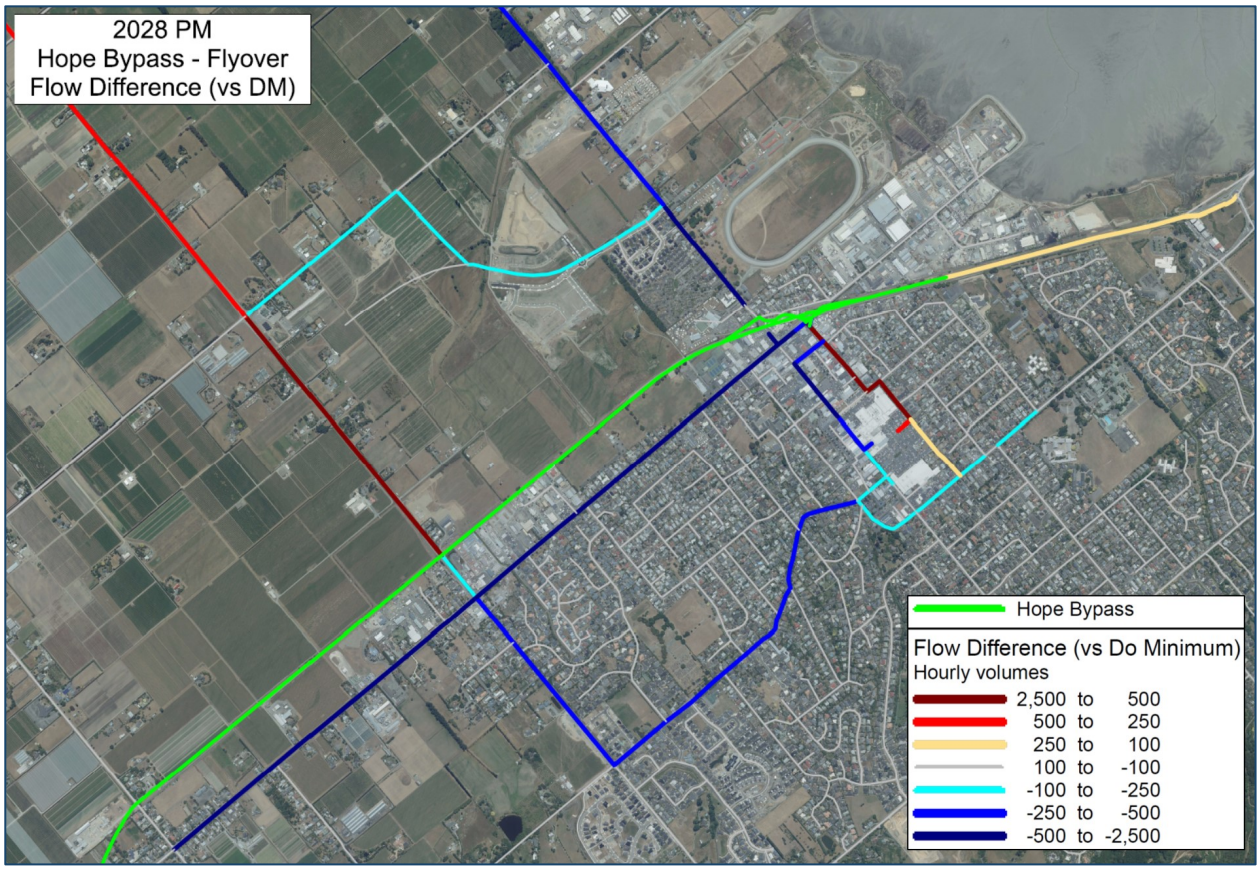


Figure 39: Flow difference – with/without the programme (2028 PM)

[36] Note that the target refers only to school and work trips originating and finishing in Richmond, and that a significant proportion of trips are longer (e.g. Richmond to Nelson).

16.3 Alignment vs key strategies

Table 25 provides an assessment of the preferred programme against key strategies.

Table 25: Programme alignment vs key strategies

Strategy	Preferred programme alignment
National strategies	
Draft Government Policy Statement (GPS) on Land Transport Funding (2021)	Strong alignment by ensuring interventions focus on high risk areas as well as safety outcomes for all modes across the whole network, integrate land use and transport, improves transport corridors in a way appropriate for movement and place, and by creating opportunities for Richmond's communities to respond to environmental priorities.
Arataki: 10 year transport plan	Strong alignment through development alongside an Urban Development Strategy to ensure improved urban form, greater levels of safety and an urban mobility transformation
Road to Zero	Strong focus and case for investment in safety and associated infrastructure improvements
Climate Change Response (Zero Carbon) Amendment Act (2019)	Contributes by making a strong case for investment in a total transport system solution for Richmond
Regional / Local strategies	
Nelson Tasman Future Development Strategy (FDS)	Strong alignment with a case for investment in Richmond's transport network necessary to meet the level of anticipated growth
Regional Land Transport Plan Tasman 2021-24	Strong response to the problems identified in the RLTP by making a case to reduce network constraints and delays, improve access, improve safety outcomes and improve infrastructure for all modes
Tasman 2018 Transportation Activity Management Plan	Responds to the problems identified in the TAMP through a partnership focus on an integrated transport solution for Richmond, and establishing a case for change to address delays on main routes for traffic and freight
Transport for Life, Walking and Cycling Strategy 2019-39	Strong alignment by introducing a range of interventions that improve provision for active modes by making it safer and easier to bike and walk.
Nelson/Tasman Public Transport Review 2020	Strong alignment by prioritising implementation of the most important elements, and signaling ongoing improvements over the next ten year period.
Richmond and Motueka Town Centre Parking Strategy 2018-38	Aligns with Parking Strategy by prioritising parking interventions to make better use of existing resources, introducing a new management approach to parking in Richmond and address parking issues in residential streets.
Richmond Network Optimisation Framework 2020	Implements modal priorities identify in the NOF and proposes interventions to address many of the potential conflict and network deficiencies identified.
Other business cases / projects	
Nelson Future Access Project	Programme aligns with regional priorities and contributes to shared regional goals/objectives of Nelson/Tasman Future Development Strategy and Nelson Future Access
SH6 safer speed review	Aligns with Waka Kotahi's speed management programme by implementing speed changes on roads where reducing speed limits could prevent deaths and serious injuries, and where communities are calling for change.
Climate change	
Climate Change Response (Zero Carbon) Amendment Act 2019	Aligns by supporting a suite of interventions that enables Richmond's communities to prepare for, and adapt to, the effects of climate change through travel choice and land use.
He Pou a Rangi - The Climate Change Commission	Aligns by strongly focusing on implementation of active and public transport interventions as those having the greatest potential to lower transport emissions

16.4 Alignment vs the Urban Design Strategy

As part of the UDS, a collective vision for Richmond was established at the start of the project. Table 26 shows how the preferred programme will help deliver the vision for Richmond.

Table 26: Programme alignment vs Urban Design vision

Vision	Preferred programme alignment
An **urban future for Richmond** that is contained, equitable and dense, with housing, employment, retail and community facilities and services distributed in a way that supports more intensive living including active travel and public transport.	Contributes by balancing competing demands and priorities in a transport improvement programme that provides for all modes and ensures Richmond's transport network is fit for purpose for the future planned land use scenarios.
Intensification that reduces sprawl and supports the best of urban living, with a diversity of housing, transport and activity choice, with easy access to daily needs and employment.	Contributes by prioritising a package of interventions that create safe, slow traffic streets across Richmond's intensification zone to improve livability outcomes, support community cohesion and encourage active modes.
A healthy and productive community that is enabled to choose **walking and cycling** as a primary form of travel to the places they need to go, through the provision of safe, well-function and connected infrastructure.	Contributes by creating an integrated network of safe, separated direct on-road routes and off-road routes throughout Richmond; improving safety and reducing delays at crossings, and introducing supporting infrastructure to make walking and cycling an easy, everyday choice.
A **public transport** network that is convenient, comfortable, easy to use and understand, so that people are enabled to choose public transport as their primary form of travel to the places they need to go.	Contributes by prioritising implementation of the most important public transport network and service improvements and ensuring staged ongoing improvements over the next ten year period.
Car parking provision that makes the most efficient use of valuable land, providing a balanced approach to the needs of all modes of transport, while meeting the reasonable demands of residents, customers, visitors and workers in Richmond town centre.	Contributes by introducing parking management measures that ensure those who need to park are prioritised and that parking resources appropriately respond to land use demand.
Streets that appropriately **balance movement and place** functions, especially at key destinations within Richmond, and that prioritise different modes of transport across the whole network to achieve an optimal, total transport system.	Contributes by delivering the movement and place framework developed through the NOF across Richmond's intensification zone and new development zones (West and South) to strength residential and retail environments, improve safety in Richmond's most valued places, and prioritise interventions that improve access for walking, cycling and through public transport.
A **town centre that is alive** with people both during the day and in the evening, with active streets and buildings at the ground floor, and high-quality public spaces, where people want to spend time.	Contributes by reducing and managing vehicle speeds in Richmond's most valued places.

16.5 Alignment with the NOF

The Richmond Network Operating Framework (NOF) looks to integrate land use and transport by establishing a strategic multi-modal network that supports growth and identifies appropriate transport connections for various land use types. As part of the NOF development, the One Network Framework was applied (see Appendix F).

The NOF identifies the modal priorities by time of day and the current operating gaps which need to be addressed if the future network is to be realised. The identification of these gaps has helped to shape this PBC. Table 27 shows that the preferred programme will strongly deliver the desired mode hierarchy as outlined within the NOF. The long-list itself was originally informed by interventions identified in the NOF.

Table 27: Alignment with the NOF

Corridor	NOF	Richmond PBC	Alignment
Town Centre			
Queen Street	Walking and cycling are encouraged at all times along the section of Queen Street that runs through the CBD. Public Transport at all times is strongly encouraged along Queen Street but only encouraged along the ring roads. General Traffic is neutral throughout	• Speeds reduced to a 30km/h environment. • Public transport improvements, including new super stops. • Parking time restrictions and charging.	Strong

Corridor	NOF	Richmond PBC	Alignment
	the day along Queen Street between Wensley Road and State Highway 6. Between Wensley Road and Salisbury Road, traffic along Queen Street is discouraged.		
Ring Roads (Oxford Street, Talbot Street and McGlashen Avenue)	Walking is strongly encouraged along Oxford Street, Talbot Street and McGlashen Avenue always. Public transport is always encouraged along Oxford Street and general traffic is always encouraged along Oxford Street, Talbot Street and McGlashen Avenue. Cycling is always neutral along Oxford Street, Talbot Street and McGlashen Avenue.	• Pedestrian crossing improvements. • Public transport service improvements. • Reconstruction of Lower Queen to improve bus level of service. • Parking building to encourage people to walk into town. • Cycling promoted on alternative corridors.	Strong
Key suburban routes			
Wensley Road	General traffic was discouraged along Wensley Road during the morning and afternoon peaks. Cycling and walking was strongly encouraged during the peaks and encouraged in the interpeak.	• High quality cycleway along Wensley Road. • Improved crossing at Oxford Street / Wensley Road. • Wensley Road / Paton Road / Bateman Road intersection upgrade for active modes.	Strong
Salisbury Road	General traffic was discouraged along Salisbury Road during the morning and afternoon peaks and neutral during the interpeak. Cycling and walking is encouraged during all times. Public transport was strongly encouraged at all times. This prioritisation reflects the proximity of the education facilities.	• Separate cycleway, with removal of parking. • Queen Street / Salisbury Street intersection upgrade. • 30kph speed zone (potentially variable speed). • School travel planning. • Salisbury Street / William Street – upgrade to improve safety for active modes. • Bus priority at signals (bus detection).	Strong
Hill Street	General traffic is neutral at all times along Hill Street. Cycling and Walking is encouraged, and Public Transport is Strongly encouraged at all times.	• On road cycle lanes • Queen Street / Hill Road (safety and capacity improvement) • Champion Street / Hill Road (safety and capacity improvement)	Strong
William Street	Walking and cycling was strongly encouraged at all times along William Street and general traffic was strongly discouraged during the morning and afternoon peaks to reflect the proximity of the education facilities.	• Salisbury Street / William Street – upgrade to improve safety for active modes. • Traffic calming. • Separated cycle facility or shared path.	Strong
SH6 Gladstone Road			
SH6	Moving freight and general traffic is prioritised over pedestrians and cyclists along the corridor. Freight and General Traffic are strongly encouraged while cycling is strongly discouraged. The route is one of only a few dedicated routes for freight and hence cycling is discouraged for safety reasons. It is important that pedestrians and cyclists can cross the corridor and access suitable routes.	• Short term capacity improvements at key intersections • New signalised pedestrian crossings • Potential bus/freight priority lanes • Hope Bypass. Cycle lanes can then be introduced along Gladstone Road. • SH6/White - safety and capacity improvement (roundabout)	Strong

16.6 Hope Bypass

To extend the lapse period of the Hope Bypass designation, Waka Kotahi will need to prove that the designation is reasonably necessary to secure or enable the functioning of the transportation network and should not be fanciful or theoretical. Specific and convincing reasons will be needed, as well as a reasonable degree of certainty about the designations use and timeline.

Appendix K includes a memo which provides advice regarding the planning requirements to extend the designation and to give effect to the designation moving forward.

This PBC has demonstrated that, at the very least, the designation should be extended to allow time for detailed investigation into the potential form and function of a potential bypass to be undertaken. Whilst there was some disagreement amongst some stakeholder groups around how the designation should be used, there was consensus that the corridor should be retained for transport purposes.

The PBC-level assessment and modelling established that:

- Without the bypass travel time reliability along SH6 Gladstone Road could worsen – depending on the benefits being delivered by potential freight priority lanes. This is because interventions which are targeted at improving liveability, such as reduced speed limits on Salisbury Road, discourage rat-running (and hence places more demands on SH6). The Hope Bypass is forecast to bring a 33% travel time benefit for freight travelling between Hope and the three roundabouts for the 2048 future year when compared to a 'Do Minimum' scenario.
- A bypass would deliver significant travel time benefits for through traffic, and as a result would reduce the level of rat-running on local streets. The bypass would therefore strongly support the desired safety and liveability objectives for the project.
- The form of the intersection between the bypass and Lower Queen Street would most likely need to be grade-separated (flyover). A traffic modelling scenario for an at-grade solution identified that a significant proportion of the travel time benefits gained by the bypass could be lost unless grade-separation is provided. The need for a flyover would need to be clearly communicated with the community, and design will need to be conscious of the aesthetics of a flyover that would be relatively close to the town centre.
- The Hope Bypass would not necessarily be a high-speed road (>60kph). It could potentially be a 50kph road with a service lane that could support some adjacent land use. Potential forms and functions for the road should be considered as part of a separate business case (earmarked in the TDC long-term plan).
- Careful consideration will need to be given to how the designation could be used to support the active transport network. The assumption of this PBC is that the bypass would include a fully separated off-road cycle (or shared) path that would run the length of the designation, with at least one safe (signalised) crossing point).
- The indicative BCR for the Hope Bypass is around 1.1 to 1.4 – refer to the Economic Case.

Triggers for the Hope Bypass

The traffic modelling assessment undertaken as part of this PBC is not sufficiently detailed to be able to provide, with any suitable degree of confidence, an indicative date for when the Hope Bypass required from a traffic operational perspective. A micro-simulation model would be required to better understand the future year impacts of adopting a 'Do Minimum' approach, and agreement would need to be sought around 'what is acceptable' in terms of future year delays for travel through Richmond. Going forward these questions can be answered as part of a Detailed Business Case for the SH6 corridor.

Ultimately, the question of when the Hope Bypass is required is dependent on several factors. These include:

- The level of mode shift for journeys to education and work that the short-term programme can deliver.
- Uptake in public transport following improvements to services.
- Where land use development occurs, and how this compares to what we expect now.
- Similarly, when land use development occurs.

Ongoing monitoring (already funded through the 2021-24 NLTP) will be essential to understand:

- How much worse delays on SH6 are getting?
  - *Travel time analysis (e.g. Tomtom, google traffic)*
- Whether traffic volumes on local streets are decreasing.
  - *Origin-destination surveys and traffic counts on key local rat-runs*
- The uptake in walking, cycling and public transport.
  - *School travel plan surveys, Census 2023, household travel surveys, bus patronage*
- The rate of land use development
  - *Number of approved resource consents, review of aerial imagery.*

Addressing Climate Change

During the second workshop, some stakeholders raised concerns around a potential misalignment between the Hope Bypass proposal and a government directive for transport infrastructure to help reduce carbon emissions. The key concern was that the Hope Bypass would encourage more car-based travel and induce additional trips.

The impact to climate change was a key consideration as part of the development of the preferred programme. Overall, it is expected that the project to deliver a strong reduction in carbon emissions when compared to the Do Minimum scenario, and that the Hope Bypass would also support these outcomes.

The rationale behind this statement is outlined below:

- The staging of the preferred programme is centred around providing a step-change in terms of active and public transport provisions. Journeys to education have been targeted (e.g. with the Salisbury Road cycleway), as changing the travel habits (and mindsets) of the younger generation is key to delivering long term mode shift.
- In the short and medium term programme, the focus is around making more efficient use of current road infrastructure. This aligns with Waka Kotahi's intervention hierarchy, with the focus being on 'people movement' rather than 'vehicle movement'. Bus priority lanes are a key element of these programmes and will help increase the number of people that can travel along SH6 Gladstone Road during peak times. By nature, these priority lanes will worsen travel times for single occupancy vehicles.
- The Hope Bypass is programmed for the long-term. This is because traffic modelling evidence identifies that by 2028 the impacts of traffic growth (driven by housing development in southern and western Richmond) will push the capacity of the existing network to the limits.

  Vehicle carbon emissions are influenced in part by total network travel distances and travel times. Initial traffic modelling has identified that, when compared to the Do Minimum scenario, the Hope Bypass will reduce congestion and rat-running on the road, meaning an overall reduction in vehicle kms and hours.
- Using the Hope Bypass designation as a multi-modal corridor, and not just vehicle-focused. A shared-use path (physically separated from the road) should be a key feature. This will provide residents of Richmond West with a quick and direct route into the town centre and Salisbury Street schools. A high quality active mode route will also help offset some of the embedded carbon effects that will come with the construction of the new transport corridor.
- The Hope Bypass will draw traffic further away from the town centre and key streets with high place value, and thus improve the air quality in those areas.

A key desire for stakeholders and the community is to reduce rat-running on local streets, and by doing so, make them safer and more liveable. In the short-term this will be achieved by slowing speeds through the town centre and on Salisbury Street, and by reallocating road space for active modes. However, without the Hope Bypass in place, rat-running through local streets will return (to a level which exceeds existing levels) and many of the benefits gained through the short and medium term programmes would be lost.

If the projected growth in Richmond was low, a programme of only active and public transport (inc. park and ride) measures would more likely be appropriate. However, the number of new houses proposed in Richmond is substantial and not all the additional travel demands can be accommodated through new active and public transport infrastructure. Without the Hope by-pass, the additional movement of people will also impact the movement of freight to and from the port.

16.7 Traffic Modelling Test

A test was undertaken using the TRACKS strategic traffic model to understand the scale of the network benefits should the following project investment objectives, be achieved:

- Mode share for journeys to work by public or active modes (people living and working in Richmond) increases from 12% in 2018 to 22% by 2031.
- Mode share for journeys to school by public or active modes increases from 51% in 2018 to 66% in 2031.

Model runs were undertaken for the worst performing peak period (PM).

Methodology

The model matrices for the PM peak period cover the following trip types:

1. Work to home (WTH)

2. Home to work (HTW)
3. Home to business (HTB)
4. Business to home (BTH)
5. Home to other (HTO)
6. Other to home (OTH)
7. Non-home based (NHB)

This meant that specific shifts from 'car' to 'non-car' for journeys to/from work (HTW/WTH trips) and education (included in the model as a portion of the HTO/OTH trips) could be captured. The nature of the zone structure means factoring of matrices could also be targeted for just 'Richmond to Richmond' trips; meaning a more accurate representation of mode shift could be established[37].

The modelling identified that the reduction of 160 trips and 330 trips in the 2028 PM and 2048 PM peak hours respectively. This indicative estimate for the number of new cyclists closely correlates to the estimate used as part of the economic analysis, which applies a different methodology (in line with the Monetised Benefits and Cost Manual).

The modelling suggests that active mode infrastructure alone would not deliver the long-term network congestion relief benefits that are desired. This is largely because:

- There are several trip types where it is more difficult to achieve mode shift – for example retail trips.
- A significant proportion of trips in the local network are not internal 'Richmond-to-Richmond' trips. It is more difficult to encourage mode shift with longer journey distances.

The test shows how a 'total transport solution' is required to achieve a significant reduction in vehicle trips. This means that, along side new active mode infrastructure, public transport improvements and restrictions on parking will be very important. The test also further highlights the benefits of the proposed Hope Bypass in helping to deliver travel time reliability benefits.

16.8 Investment Prioritisation Framework

16.8.1 GPS alignment

The Investment Prioritisation Method (IPM) for the 2021–24 National Land Transport Programme (NLTP) replaces the Investment Assessment Framework used for the 2018-21 NLTP. It includes moving from two prioritisation factors to three (as was the case before 2018), to give effect to the GPS 2021. This also includes the three-factor priority order matrix and the Indicative Efficiency Rating tool to prioritise activities for inclusion in the 2021–24 NLTP.

Table 28 provides an assessment of the preferred programme using the IPM.

Table 28: Investment Prioritisation Assessment for the Preferred Programme

Priority	GPS alignment	Comment
Better Travel Options Impact on access to opportunities	VERY HIGH	
	High • New walking/cycling link forms part of a large or major urban area network **Very High** • >8% change in proportion of population within 15 minutes access of social opportunity (namely primary or secondary education, GP surgery or supermarkets) by a given mode or modes (public transport, walking, cycling, driving) in the morning peak.	The preferred programme will see an extensive network of cycleways (both on and off street) which will cover the whole of the Richmond urban area, including the new development areas in the west and south. The network will see safe cycle routes running along all local collector roads, providing connections to all areas of high place value. This includes all schools and the town centre. The programme strongly meets the HIGH criteria of "new walking/cycling link forms part of a large or major urban area network". It could be argued that the programme will deliver upon the threshold for VERY HIGH. Currently access to social opportunities are available, in that, physical connections which could be used for walking and cycling are available. However, most of these connections involve cycling on road with traffic; and as such are not necessarily realistic alternatives for most people in the community. The preferred programme would provide SAFE access to social opportunities by active modes for at least another 8% of the Richmond community.

[37] Rather than applying a global factor which would otherwise assume that Richmond to Nelson trips would also have a significant shift in mode choice.

Priority	GPS alignment	Comment
Improving Freight Connections Impact on network productivity and utilisation	HIGH	
	High • Improving connections between nationally significant production and distribution points. **Very High** • >31% improvement in predictability (reduction in variability) of travel time on priority routes for freight.	SH6 is recognised as a key freight route which links the Port of Nelson and Nelson Airport to the Top of the South Island. A micro-simulation model would be required to establish the exact travel time reliability benefits that the Hope Bypass would bring. However, the strategic traffic model has indicated that a 33% improvement in freight travel time could be expected during peak periods.

16.8.2 Scheduling

Scheduling indicates the criticality or interdependency of the proposed activity or combination of activities with other activities in a programme or package or as part of a network. The scheduling factor has two criteria: interdependency and criticality. The highest rating between these two criteria determines the scheduling rating.

The definitions are:

- **Criticality**: the significance of the activity or combination of activities' role as part of the network, and the degree of impact to users, particularly due to availability (or not) of alternatives.
- **Interdependency**: Degree to which the activity is necessary to unlock the benefits of another related or integrated investment (e.g. a major housing or industrial development).

Note that the scheduling rating is only required for the **short-term programme**, as described below.

Table 29: Scheduling assessment (short-term programme)

Priority	Alignment	Comment
Interdependency	MEDIUM	
	Medium • Non-delivery of proposed activity in the 2021 NLTP has a moderate impact on realising the estimated benefits of the programme/package, i.e. one or more benefits may not be achieved or may be reduced, or may be delayed for up to 3 years. High • Activity/combination of activities is part of a programme, package or another investment (e.g. housing development), and its delivery in the 2021–24 NLTP period is required to enable further implementation of that programme, package, or investment. • Non-delivery of the proposed activity in the 2021–24 NLTP has a significant impact on realising the estimated benefits of the programme/package, i.e. one or more benefits will not be achieved or will be delayed for more than three years.	• Most of the interventions in the 'short-term' programme have been funded through the 2021-24 NLTP. • Not delivering the suite of initial improvements the to active and public transport network will have a significant impact to achieving long term benefits of the whole programme. Richmond's transport network, and SH6 Gladstone, is operating at a tipping point where a small increase in vehicle traffic will result in increasing delays and rat-running. This will impact the key liveability objective. Setting in place the infrastructure now to encourage mode shift is essential, as this is the foundation of the entire programme. • Not delivering this infrastructure likely brings forward the need for the Hope Bypass. • In the short-term additional capacity is being provided via interventions that target mode shift. This additional network capacity (via reduction in cars) is necessary to facilitate a high planned increase in housing. • There is certainty around the delivery of interventions which target a reduction in vehicle traffic which would then increase network capacity. In the short-term this is required to enable short term housing projects. Developments may otherwise happen but could be of a smaller scale or located on the Richmond fringe (which encourages more vehicle use).
Criticality	HIGH	
	• Need to undertake this activity in order to deliver/prepare for remainder of programme/package where its implementation is to begin in 2024 NLTP	• Richmond is key growth area with a significant amount of new housing proposed to help resolve New Zealand's housing supply issue.

16.8.3 Economic (efficiency) assessment

The BCR for the preferred programme is 0.8 to 1.5.

16.8.4 Priority

The **short term programme** has a priority order of **2** based on:

- GPS alignment = Very high
- Scheduling = High
- Efficiency = Low (BCR 1.0-2.9)

16.9 Outcomes being delivered by the Preferred Programme

The relative split of the benefits (vs. each of the Investment Objectives) was qualitatively undertaken for each intervention and the derived economic dollar value (high estimate) was then applied. The breakdown of the benefits is provided within Table 30 along with the original stakeholder identified weightings (based on the ILM).

Table 30: Broad outcomes delivered by the Preferred Programme

Investment Objective	Economic benefit	ILM Weighting	Alignment
Place Quality	21%	20%	Very Strong
Accessibility	13%	15%	Very Strong
Safety	29%	30%	Very Strong
Route Efficiency	22%	20%	Very Strong
Mode Share	15%	15%	Very Strong
All	**100%**	**100%**	**Very Strong**

The table shows that there is very strong alignment between the desired split of benefits vs. the actual calculated economic benefits of the Preferred Programme.

17. ECONOMIC CASE

17.1 Approach

A 'PBC level' economic evaluation has been undertaken for the preferred programme. 'PBC level' means that a benefits range have been derived using 'typical' benefit of cost ratios (BCRs) for various intervention types[38] and applying a back-calculation using indicative cost estimates. The derived benefits are then sense checked as necessary to reflect local conditions. This approach was agreed with Waka Kotahi at the start of the project.

Notwithstanding the above, for this project, the TRACKS traffic model has also been used to provide a more robust estimation of benefits for the proposed Hope Bypass. The assessment of Hope Bypass benefits has been undertaken in accordance with the full procedures of Waka Kotahi's Monetised Benefits and Costs Manual (MBCM) using 40 and 60 year analysis periods with a 4% discount rate.

A sense check of the relative benefits of each intervention was undertaken, considering the location of the intervention and appropriateness of each 'typical' BCR ratio on a case-by-case basis.

17.2 Key assumptions

The key assumptions used as part of the evaluation are:

- The programme will be delivered in stages. The total costs for the 1 to 3, 4 to 10 and 11 to 30 year periods have been fully applied in the first year of each period. This approach is intended to reduce the risk of full claiming all programme benefits, without the costs being captured. This approach will slightly reduce the overall BCR.
- Travel time and vehicle operating costs (VOC), as derived from the TRACKS model, are 'flatlined' after 2048. The intent is to ensure that potential benefits are not over-estimated.
- Cost for the Hope Bypass applied in Year 11 (2031) with first year of benefits being 2035.

17.3 Cost estimates

Rough order programme cost estimates were prepared for each of interventions as part of the MCA phase. The range of the cost estimates reflect the significant uncertainty in the exact form of several options within the programmes (e.g. extent of seal widening, type of intersection upgrades). The costs assume that no land acquisition will be required.

17.4 Summary

Table 31 provides a summary of the economic assessment. A BCR range has been provided, and separate 'with' and 'without' the Hope Bypass BCRs have also been established.

The results for a 40-year analysis period have been presented (in line with the MBCM), as the Hope Bypass would be considered a significant long-term piece of infrastructure.

Table 31: BCR – 40 years @ 4%

	Cost		Benefit		BCR	
	Low	High	Low	High	Low	High
0 to 3 year	$17m	$21m	$20m	$50m	1.0	3.0
4 to 10 year	$87m	$111m	$82m	$143m	0.7	1.6
11 to 30 year (ex. Hope Bypass)	$48m	$65m	$50m	$85m	0.8	1.8
Programme (ex. Hope Bypass)	$152m	$196m	$153m	$278m	0.8	1.8
Hope Bypass (11 to 30 year)	$109m	$142m	$113m	$113m	0.8	1.0
Programme (inc. Hope Bypass)	$261m	$338m	$266m	$391m	0.8	1.5

[38] Sources include the Safety Intervention Toolkit (v8), High Risk Rural Roads Guide and recently completed Waka Kotahi PBCs

The analysis identifies that:

- The programme is expected to deliver a BCR of between 0.8 and 1.5.
- The indicative BCR range for the Hope Bypass is between 0.8 and 1.0.

17.5 Sensitivity analysis

Several sensitivity tests have been undertaken to provide a likely BCR range for the preferred programme, focusing on the most influential factors:

- 60-year analysis period @ 4%.
- Introducing the Hope Bypass at an earlier date, with first year of benefits being 2030.

Table 32 provides the economic sensitivity analysis. A mid-range (i.e. between the low and high) BCR has been used as the basis for comparison. It shows that under most sensitivity tests that the BCR remains above 1.

Table 32: Economic sensitivity analysis

	Mid-Range BCR	
	Sensitivity Test	Base
60-year analysis period @ 4%	1.3	1.2
Earlier construction of the Hope Bypass	1.2	1.2

Costs would also be a key influential factor. However, at a PBC level the benefits apply typical BCRs which are linked to costs (i.e. the higher the cost, typically the higher the benefit). As such, it is not possible to undertake a sensitivity test based on costs; rather the 'high' and 'low' range BCRs capture the uncertainty.

18. FINANCIAL CASE

18.1 Programme cost

Cost estimates for the various interventions included within the preferred programme have been based on a series of assumptions regarding the nature of each intervention, and baselining against the costs for recent examples. Where available, cost estimates undertaken by TDC as part of the draft LTP submission (March 2021) have been used.

A key assumption for the cost estimates was that no land purchase would be required (or is vested with the Council). However, it is anticipated that, through the process of subdivision and land development, additional width within the road reserve may be acquired by Council. It is also anticipated that some costs related to infrastructure upgrades may be paid by or contributed to by developers.

Table 33 breaks down the costs (rounded to the nearest $1m) for each intervention type and funding source.

Table 33: Financial Case

Intervention type	TDC / NCC - subsidised	TDC LTP - subsidised	TDC LTP - unsubsidised	Waka Kotahi	Waka Kotahi (+ developer contribution)	Total
Bike Parking		$1m				$1m
Car Parking			$27m			$27m
Cycle lanes / shared path		$28m				$28m
Efficiency		$1m		$297m		$298m
Intersection Upgrade		$8m		$7m		$15m
Maintenance		$5m				$5m
Pedestrian crossing		$1m		$1m		$2m
Planning / monitoring		$1m		$1m		$2m
Public Transport	$25m	$7m				$32m
Reduced Speed		$17m				$17m
Safety		$20m		$47m	$10m	$77m
TOTAL	$25	$89m	$27m	$353m	$10m	$504m

Appendix L provides the indicative capital costs for each intervention within the preferred programme. The table also includes the priority and 'next phase' for each intervention.

18.2 Programme risks

An assessment of the risks in delivering the core elements of the preferred programme have been considered and are summarised in Table 34. Additional risks are likely to be identified as the project progresses, and these should be captured in a risk register during the next phase of work.

Table 34: Programme risks

Category	Risk	Mitigation options
Technical	• Difficulty in achieving optimisation (travel time benefits) on SH6, particularly with the proposed short term interventions that are proposed. • Richmond's rate of growth may result in a greater increase in traffic than expected. • Reducing speed limits along Salisbury Road and through the town centre will discourage through traffic to use these streets, but a consequence could be an increase in demand (and subsequent congestion) on SH6 Gladstone Road.	• Undertake SSBCs and/or traffic modelling for low-cost/low-risk project. • Monitoring of impact to travel patterns / traffic volumes on local streets post implementation of slower speed zones. • Monitoring of population growth.
Operational	• Multi-partner programmes can be challenging to co-ordinate and deliver. • May be difficult to resource delivery of the programme.	• Recruitment at a local council level and an implementation of a

Category	Risk	Mitigation options
	• Maintaining safe and effective travel for all modes during construction phases along arterial routes. • Increased maintenance requirements following changes (e.g., additional amenity features). • It may be difficult to recruit additional bus drivers to support the increased bus frequencies. • The Hope Bypass potentially could induce additional traffic, resulting in increased travel demand and congestion further along SH6 (towards Nelson, outside of the project area).	programme manager (if necessary). • Temporary traffic management plans will be needed for all construction activity. • Detailed Business Case for the Hope Bypass (or SH6 Gladstone Road corridor).
Financial	• Cost of preferred programme in a constrained funding environment. There is currently no funding committed to the next stage of the business case, or any projects included in the preferred programme for the medium and long term. Funding for several short-term interventions has been allocated through Council's LTP. • Costs may be radically different depending on the exact form that projects take – e.g. if projects were to result in relocating kerb lines (and the associated service relocations, pavement extensions and traffic management) or purchase of land. • Uncertainty of funding support for all projects, and potential investors. • Additional costs and time delay if land acquisition is required or other unanticipated cost escalations occur. • Uncertainty around how much developer contributions may be collected towards interventions.	• NLTP funding already secured for the short-term measures. • Business cases (IBC / SSBC / DBC) to provide further confidence around potential cost implications. The Business cases would also resolve uncertainty regarding funding and potential developer contribution avenues.
Stakeholder / Public	• Consultation with iwi may highlight effects on sites of cultural significance. • Business Case process and community engagement has raised community and stakeholder expectations that work will be undertaken, prior to funding being committed. • Some proposed interventions may be controversial and spark public debate. • Likely that key stakeholders have different priorities and preferences and may not agree with the preferred programme.	• Council will continue with on-going liaison with iwi in as and when projects are being progressed through the design and implementation phases. • Further consultation (through later business cases) for various programme interventions (as necessary)
Safety	• Optimisation on SH6 may increase risk in locations where pedestrian activity is expected to be very high. • A reduction in parking supply may result in illegal parking.	• To be captured as part of future Hope Bypass / SH6 Gladstone business case. • Monitoring of parking via surveys and regular parking enforcement monitoring.
Economic	• Investment may not offer value for money if measures to not reduce traffic volumes on local streets, or improve travel time efficiency, to the level estimated through the modelling – noting the assessment at this stage is only to a high-level.	• To be captured as part of future Hope Bypass / SH6 Gladstone business case.
Governance	• Risk if there is a lack of a collaborate approach in the delivery of projects	• Progress in a similar, cohesive, manner for future projects with funding partners and neighbouring councils.

18.3 Funding

TDC have confirmed the status of funding approval for the range of short-term interventions.

There is currently no guaranteed funding for any project on the state highway, as these are subject to Waka Kotahi Board review of this PBC. Table 35Table 35 provides a summary of the short term funding mechanisms and identifies which projects have a dependency or link to proposed project in Nelson (through the NFA PBC or otherwise).

Table 35: Short term (0-3 year) funding mechanisms

Funding		Nelson Link	Do Min	Name
Core projects				
Full	NLTP (51%) | TDC (49%)	Y	N	PT Strategy - Phase One
Full	NLTP (51%) | TDC (49%)	N	N	On-road cycle lanes on Hill Street, Champion Road, Queen Street and Hart Road
Full	NLTP (51%) | TDC (49%)	N	N	Richmond West Active Transport Connections
Full	NLTP (51%) | TDC (49%)	N	Y	Shared walking and cycling path along Potama Creek
Partial	NLTP (51%) | TDC (0%)	N	N	Church Street cycle lanes
Potential	Subject to PBC	N	N	Gladstone Road / Church Street - At-grade pedestrian crossing
Partial	NLTP (51%) | TDC (0%)	N	N	William Street to slow and calm traffic (+ intersection treatments)
Partial	NLTP (0%) | TDC (49%)	N	N	Berryfield/Lower Queen Intersection Upgrade
Potential	Subject to PBC	N	N	SH60 / McShane / Pugh intersection upgrade
Full	NLTP (51%) | TDC (49%)	N	N	Salisbury Road - zebra crossing opposite schools
Potential	Subject to PBC	N	N	New and improved crossing points at the Hope Recreation Reserve
Full	NLTP (51%) | TDC (49%)	N	N	Improve school patrol crossings - assumed four locations
Full	WK (100%) - completed	N	N	SH6 - Speed limit review
Full	NLTP (51%) | TDC (49%)	N	N	Residential greenway - trial
No	Not funded	N	N	Bicycle parks within the core Richmond area
Full	TDC (100%)	Y	N	Charge for off-street parking
Full	TDC (100%)	Y	N	Parking time restrictions in the inner core to discourage driving
Full	WK (100%)	N	Y	Richmond Deviation WRSB median barrier
Potential	Subject to PBC	Y	N	Gladstone Road - special vehicle lanes (post investigation)
Potential	Subject to PBC	Y	N	SH6 / Lower Queen / McGlashen / Oxford improvements
Potential	Subject to PBC	Y	N	SH RAB ramp metering (3 RAB's site) - Investigation
Full	WK (100%)	N	N	RMA planning to extend the Hope Bypass Designation
Full	NLTP (51%) | TDC (49%)	Y	N	Ongoing monitoring to understand changes to active and PT trips
Full	NLTP (51%) | TDC (49%)	Y	N	Richmond Town Centre superstop (interim measures)
No	Not funded	N	N	Flush median on Lower Queen Street (parking removed)
No	Not funded	N	N	Wensley / Waverley Street - Walking and Cycling improvements
Desirable projects				
Full	NLTP (51%) | TDC (49%)	N	N	30kph speed for Salisbury Road
Full	NLTP (51%) | TDC (49%)	N	N	30kph speed environment in Richmond Core

Whilst some projects have not yet allocated been allocated funding (through the 2021-24 NLTP or otherwise) this does not necessarily mean the project will not receive short-term funding.

The remaining Do Minimum interventions have already been funded and completed. These are:

- SH6 speed limit review.
- Champion Road roundabout improvements.
- Borck Creek Bridge.

PART C: DELIVERING AND MONITORING THE PROGRAMME

19. MANAGEMENT CASE

19.1 Governance arrangements

Overarching funding decisions for this programme lie with the elected members of TDC in relation to local road projects, as well as with Waka Kotahi in relation to state highway projects and national funding prioritisation.

It is envisaged:

- TDC will be the lead agency for all projects on Council roads.
- Waka Kotahi will be the lead agency for improvements on SH6 and SH60 (including where improvements are at an intersection with a local road).
- TDC will make PBC funding requests to Waka Kotahi, as appropriate, through agreed channels e.g. Transport Investment Online.
- TDC and NCC will be the lead on public transport changes.

19.2 Decision Making

Decisions on changes to the transport network are made at different levels, depending on the scale and impact of the decision. Immediate decisions to be made in relation to this programme are:

Table 36: Design making

Agency	Responsibility
Tasman District Council	• Endorse PBC to submit • Agree funding contribution and conditions
Waka Kotahi	• Endorse PBC to submit • Review against NLTP funding criteria • Agree funding contribution and conditions

19.3 Cost management

It is highly likely that costs will change through later phases and be further refined for pre-implementation and implementation phases. The ultimate responsibility for cost sits with the lead agency of each respective project.

It is critical that project scopes are clearly defined at the start of each phase, and that any changes to the scope are recorded along with the impact on cost. The Waka Kotahi Cost Estimation Manual (SM014) 2015 sets procedures for scope and cost management that should be utilised.

To enable ongoing cost management, it is recommended that consultants and contractors involved in future stages of work provide the following information, in accordance with relevant procedures, to the TDC and Waka Kotahi project managers monthly and highlight issues arising as early as possible:

- Budgeted cashflow (baseline and risk adjusted baseline).
- Value of work completed in the preceding month and contract to date (including rates and quantities for all items not listed as “lump sum” or “each” within the contract).
- Forecast value of work completed and revised cashflow through to project completion.
- Exception reports outlining the reasons for not meeting the financial targets.
- Any approved or proposed variations to the scope of work.

19.4 Management of the programme

Appendix M provides details around how each intervention within the preferred programme is likely to be managed. It outlines who the lead agency is, potential packaging of work, timing and a suitable procurement method. The table is a tool for helping Waka Kotahi and TDC understand potential funding avenues alongside their organizational priorities.

Table 33 breakdowns the costs of the programme into timeframes, intervention type and lead agencies.

Table 37: Management Case

	0 to 3 years	4 to 10 years	11 to 30 years	Total
Tasman District Council	$10.0m	$74.3m	$55.4m	$139.6m
Bike Parking	$0.1m	$0.7m		$0.8m
Car Parking	$0.3m	$1.1m	$26.0m	$27.4m
Cycle lanes / shared path	$3.3m	$23.5m	$0.6m	$27.4m
Efficiency		$1.0m		$1.0m
Intersection Upgrade	$3.1m	$4.8m		$7.8m
Maintenance			$4.6m	$4.6m
Pedestrian crossing	$0.5m	$0.4m		$0.9m
Planning / investigations / monitoring	$0.2m	$0.8m		$0.9m
Public Transport	$1.0m	$6.5m	$24.1m	$31.7m
Reduced Speed	$1.4m	$16.1m		$17.5m
Safety	$0.1m	$19.6m		$19.7m
Waka Kotahi	$12.3m	$60.8m	$291.4m	$364.5m
Cycle lanes / shared path			$0.7m	$0.7m
Efficiency	$3.8m	$3.0m	$290.3m	$297.1m
Intersection Upgrade	$6.5m			$6.5m
Pedestrian crossing	$0.8m			$0.8m
Planning / investigations / monitoring	$0.2m	$1.3m		$1.5m
Reduced Speed	$0.3m			$0.3m
Safety	$0.8	$56.5	$0.5	$57.8m
Total (all agencies)	$22.2m	$135.0m	$346.8m	$504.1m

19.5 Stakeholder Communications and Engagement Plan

A detailed Stakeholder Communications and Engagement (C&E) plan should be developed to support implementation through the programme lifecycle. It will be the responsibility of TDC and Waka Kotahi to develop the plan, with support from communications specialists. The plan will be jointly owned by the partners.

Engagement and communications for the programme should be supported with messaging and logo that maximise simplicity and consistency, and to avoid confusion.

The C&E Plan it should be linked to and include regular monitoring and reporting on monitoring, so a public feedback loop can clearly see mode shift and safety benefits that are being achieved.

19.6 Benefits Realisation Plan

This section outlines the recommended responsibilities for managing future benefit realisation. This Benefit Management Plan has been developed and is to be used in tandem with the Appraisal Summary Tables (AST). Please refer to **Appendix N** for the AST for the Do Minimum and Preferred Programme.

Table 38: Benefits Management Plan

Inclusive access	Economic prosperity	Healthy & safe people	Resilience & security	Environmental sustainability	Non-Monetised Benefit Measure	Responsibilities	Source	Schedule
✓	✓	✓	✓		Personal and collective risks	Waka Kotahi (state highways) and TDC (local roads)	Megamaps / evaluation of CAS data	Frequently automatically updated online
					Safety perception surveys	TDC	Customer insight surveys (similar to those previous undertaken)	Following implementation of the first series of short-term interventions and cycleways
					No. cyclists using the footpath rather than the road (on the key cycle routes)	TDC	Traffic counts (similar to those previous undertaken)	Annual monitoring
✓	✓		✓		Proportion of population living within travel threshold of key social opportunities by different modes	TDC	Census	Every five-year census cycle
✓	✓	✓		✓	Mode shift from single occupancy private vehicles	TDC	Customer insights, Census data	As regular as possible, and following completion of the short-term programme of interventions
					Spatial coverage of cycleways and paths	TDC	GIS	Following implementation of each new cycleway

A full benefits realisation plan is to be developed with TDC as a next step following PBC approval.

20. COMMERCIAL CASE

20.1 Immediate actions to progress the project

TDC and Waka Kotahi will be responsible for procuring the activities for which they are the lead. Each will be bound by their individual procurement strategies.

It is likely that TDC will procure services through their Professional Services Panel. Projects of any value can go through the panel. There are four professional consultancies on the TDC panel and, while the panel arrangement allows TDC to still go directly to the market, they typically use their panel. Waka Kotahi will procure using their normal procurement processes.

The following pieces of work need to be procured or completed urgently:

- Stakeholder Communications and Engagement Plan, to communicate the key messages from this piece of work, and the next steps, as well as develop the approach for the lifecycle of the programme.
- PT SSBC to review fares and improve frequencies on key routes, with a view to implementing the changes in the next 1 to 3 years to ensure services are in place in time to help support mode shift.
- Planning work to extend the Hope Bypass designation (refer to **Appendix P**).
- Design and investigation for core short-term interventions, such as:
    - Design for the Salisbury Road cycle lanes.
    - Investigation into priority lanes along Gladstone Road.
- Parking Management Plan, to initiate a conversation with the community about parking and improve parking management tools, wayfinding, and pricing structures. Identify opportunity for trials, which could be used to gain public input to projects and ultimately improve public buy-in.
- Tasman Walking and Cycling Strategy.

20.2 Risk management

Table 39 summarises the key risks for the next stages of delivery.

Table 39: Key risks

Risk description	Risk cause	Risk score	Owner	Treatment strategy
That the funding available to implement business case recommendations, and the recommendations, do not align.	Future budget drivers and decisions based on a range of elements, not only this business case.	Critical	TDC and Waka Kotahi	Maintain contact with levels in TDC and Waka Kotahi that are appropriate for team. Update cases to be as realistic as possible for cost/budget profiles. Parties to signal funding priorities as early as possible.
That decision making is poor or slow.	Decision makers are not aligned or not prepared to commit to significant change.	Critical	TDC and Waka Kotahi	Maintain contact with appropriate levels in Waka Kotahi and TDC. Reinforcement of requirement for timely decisions.
There is the threat that the projects lose community support.	Community and individuals progressively understand more about the projects and the impacts on individuals.	High	TDC and Waka Kotahi	Comprehensive engagement strategy on-going after business case completion, with frequent touch points with the community and stakeholders.
Parking control and management measures are not strong enough to act as a "push" factor for mode shift.	Parking implementation plan has not been developed, so uncertainty about its contents.	High	TDC	Include Waka Kotahi as a key partner as part of the development of the parking implementation plan.

Risk description	Risk cause	Risk score	Owner	Treatment strategy
Land use development does not proceed as anticipated or is inconsistent with patterns assumed in this work, upon which the mode shift and infrastructure requirements are based.	Private development and subdivision consents do not align with Spatial Plan	High	TDC	Work with land use planners and to ensure they understand the implications of deviation from the spatial plan. Transport Planners provide feedback as part of the consent approval process.
There is a threat that personnel experienced in this project may leave the relevant roles (or organisations).	People move, change careers or seek promotion/different roles.	High	TDC, Waka Kotahi managers	Management to remain aware of the vulnerabilities of staff movement/changes on this project. Recommend a second (backup) team member who is appropriately informed and current.
There are detail design changes required in later stages.	Detail design can identify necessary changes to scope/cost/programme.	High	TDC and Waka Kotahi	Involve the right people early in frequent challenge sessions and peer review.

20.3 Change control

At the outset of each phase of an individual project, it is critical that the scope of work is clearly defined between the client and consultant/contractor. It should also be communicated between TDC and Waka Kotahi where it will result an adjustment of programme and benefit realisation. Change can then be managed within an understanding of the tolerances of each project (related to funding, scope, risk, quality, and benefits).

It is recommended that a change control register is established for each project, and across the programme to ensure that interdependencies of change are managed appropriately. The programme change control register will sit alongside the programme risk register and should be managed by the project manager.

20.4 Programme performance and review

A monitoring programme will be developed to support implementation through the programme lifecycle. This is the recommended approach to monitoring the outcomes of the business case to track how well the benefits are being achieved. Monitoring will be a joint responsibility of each of the partners.

20.5 Programme assurance arrangements

This PBC has been subject to client team review by staff from TDC and Waka Kotahi throughout its development, as well as internal review by the consultant team. Recommended project assurance deliverables for future phases are set out in Table 40.

Table 40: Project assurance deliverables

Item	Component	Description	Owner
Funding	Approval by TDC, Waka Kotahi, and Waka Kotahi on behalf of crown funding	Internal approvals will be required for each of the projects, along with approval within the LTP and NLTP.	TDC/Waka Kotahi
Property	Acquisition	Internal approvals required for future property purchase, if required. Acquisition must follow all relevant legal processes.	TDC/Waka Kotahi
Cost estimate peer review	Design and future business case elements	Independent peer review of cost estimates for pre-implementation.	TDC/Waka Kotahi (carried out by independent consultant)

Item	Component	Description	Owner
Economic peer review	Design and future business case elements	Independent peer review of the economic appraisal for pre-implementation.	TDC/Waka Kotahi (carried out by independent consultant)
Detailed design	Design elements	Internal approvals of design standards used, particularly where standards are varied, or an innovative approach is used.	TDC/Waka Kotahi
Safety audit	Independent safety audits are to be carried out at each stage	Detailed design audit to be completed and issues resolved (for pre-implementation). Post-construction safety audit to be completed following implementation.	TDC/Waka Kotahi (carried out by independent consultant)
Tender phase	Tender processes	A procurement strategy is required to guide all procurement process. This is subject to internal approval.	TDC/Waka Kotahi
Construction	Oversee of construction and sign off for completion	Internal procurement and contractual processes to be followed and approvals sought, including client field assurance.	TDC/Waka Kotahi
	Health and safety	Ensure health and safety plans are in place, appropriate, and followed throughout construction.	TDC/Waka Kotahi + contractor
	MSQA	Independent external provider to provide quality assurance throughout construction	To be engaged

20.6 Procurement

Table 41 provides a breakdown of programme costs vs the likely method of procurement.

Table 41: Procurement method vs cost

Procurement method	Tasman District Council	Waka Kotahi	Total
Direct appoint	$1.8m	-	$1.8m
Invited tender	$0.2m	$0.2m	$0.3m
Open tender	$105.4m	$316.8m	$422.2m
Other	$0.2m	-	$0.2m
SNP	-	$46.9m	$46.9m
TDC Maintenance Contract	$23.4m	-	$23.4m
TDC Panel	$8.6m	$0.7m	$9.2m
Total	$139.6m	$364.5m	$504.1m

The categorisation of each intervention by procurement type was developed by the wider project team during a specific meeting, with input from the Waka Kotahi and TDC project managers. Procurement requirements (for example a tender to the open market) would be dependent on the size, scale and complexity of the intervention that is proposed to be progressed. A Detailed Business Case, which would be procured through the open market, for the Hope Bypass (or wider SH6 Gladstone Road corridor) would be required.

20.7 Lessons learnt

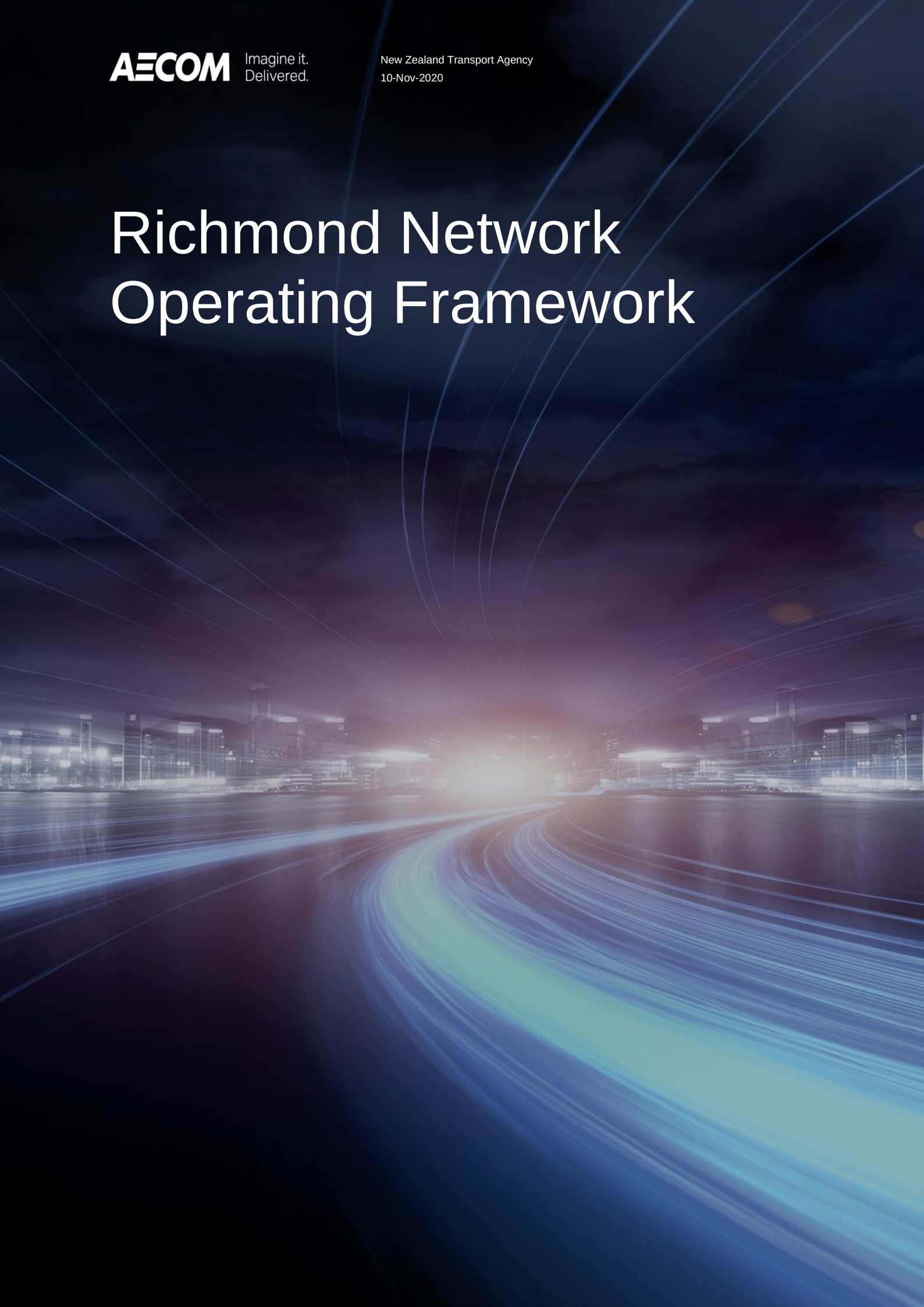
Lessons to be learned reviews will be undertaken at agreed times throughout the respective contracts and as part of project close-out reports. It will be the responsibility of individual project owners to complete these reviews with respective suppliers and share these reviews with the project Steering Group.

Appendix A NOF map

AECOM Imagine it. Delivered.

New Zealand Transport Agency
10-Nov-2020

Richmond Network Operating Framework



Richmond Network Operating Framework

Client: New Zealand Transport Agency

Co No.: N/A

Prepared by

AECOM New Zealand Limited
Level 19, 171 Featherston Street, Wellington 6011, PO Box 27277, Wellington 6141, New Zealand
T +64 4 896 6000 F +64 4 896 6001 www.aecom.com

10-Nov-2020

Job No.: 60532294

AECOM in Australia and New Zealand is certified to ISO9001, ISO14001 AS/NZS4801 and OHSAS18001.

Quality Information

Document	Richmond Network Operating Framework 60532294
Ref	\\nzwlg1fp001.au.aecomnet.com\projects\605x\60532294\6. draft docs\6.1 reports\richmond network operating framework report\richmond network operating framework final v2.docx
Date	10-Nov-2020
Prepared by	Luke Elsen
Reviewed by	Graeme Doherty

Revision History

Rev	Revision Date	Details	Authorised	
			Name/Position	Signature
1	21-Aug-2020	For Review	Graeme Doherty Technical Director	
3	04-Sep-2020	Final	Graeme Doherty Technical Director	
3	25-Sep-20	For Client Review	Graeme Doherty Technical Director	
3	11-Nov-2020	Final	Graeme Doherty Technical Director	

Table of Contents

List of Tables

List of Figures

Executive Summary

A Network Operating Framework (NOF) is a process for transport planning and management which allows for an integrated and streamlined approach. The transport system is complex, with competing network users, changes in mode share and the relationship between transport infrastructure and travel patterns constantly evolving. The purpose of the framework is to assist planning for the transportation network by identifying key routes for all modes, places of priority within the community, operational gaps in the network and interventions that will resolve current deficiencies and meet future aspirations of the network. The framework encompasses all users of the transport network and they are classified as pedestrians (all forms of active travel except cycling e.g. mobility scooters, running, walking), cyclists, general traffic, public transport and freight. The framework assigns a priority for each user on routes at particular times of the day which helps to manage congestion, promote safety and resolve competing demands for road space.

This Richmond Network Operating Framework was developed for the Richmond Study Area. The Study Area is bounded by Saxton Road to the north east, the Waimea River to the north west, the Wairoa River to the West and the Richmond Range to the south. Richmond is part of the Tasman District, however, due to part of the study area in Nelson, the Nelson City Council was included in the working group.

Stakeholders developed the overarching strategic objectives and network principles during a workshop based on planning policies and documents from national and local government. The key themes articulated were:

- Create a comprehensive transport network for Richmond by integrating public transport, walking, freight, cycling and general traffic planning
- Produce a sensible road hierarchy for all modes which suitably prioritises different modes of transport
- Provide a safe network that is appropriate for all ages and ability levels
- Ensure that scheduled services are provided consistently and main routes in the network have consistent travel times
- Promote movement between key destinations by providing a direct and efficient route of travel

The specific Strategic Objectives for each mode are as follows:

- Strategic Objectives
  - Cycling
    - Provide a network for cyclists that allows all ages and abilities to travel safely along direct and efficient connections between key destinations.
  - Walking
    - Provide a network for pedestrians (all forms of active travel except cycling) that allows all ages and abilities to travel safely along direct and efficient connections between key destinations.
  - Public Transport
    - Provide an accessible public transport system that provides connectivity throughout Richmond by ensuring a reliable and efficient service that encourages patronage.
  - General Traffic
    - Provide a general traffic network that compliments other modal networks and creates connectivity throughout the region by using efficient routes at safe speeds while considering the land use of nearby places.

- Freight
    - Provide an efficient freight route that uses appropriate roads to connect inter-regional trips with access to industrial and commercial areas within Richmond.

A strategic network for all the five transport modes was created which consisted of a ‘primary’ and ‘secondary’ network. The primary network consists of routes which have a higher ‘movement’ function and provide a link between key destinations in the Study Area. The secondary network includes feeder routes that connect lower priority areas to the primary routes and key destinations. The strategic networks for each mode revealed that there would be conflicts in certain popular areas where many primary routes overlapped. This was later addressed by the development of modal priorities by time of day.

A gap analysis was undertaken which first required the development of an agreed Functional Level of Service (FLoS). A FLoS was applied to each mode and key routes in the transport network were assigned an aspirational FLoS 10 years in the future. The future aspirational network was compared to the current network which allowed gaps in the network where the current network is not satisfactory to be determined. The road width gaps are presented in Appendix I and the footpath width gaps are presented in Appendix J. The main gaps in the walking network were along Queen Street, Wensley Road and Salisbury Road.

Modelling of the future transport network in 2028 and 2048 was conducted to understand which routes were vulnerable to becoming congested. The predicted Annual Average Daily Traffic (AADT) highlighted which roads were going to be insufficiently classified and equipped to deal with future traffic flows. The main routes that require a higher One Network Road Classification (ONRC) are Wensley Road, Salisbury Road, Hill Street and State Highway 6. As expected, the same routes had a high Vehicle/Capacity ratio. This analysis allowed through put gaps in the network to be determined and enable interventions to be focused. The One Network Framework (ONF), which reflects on both movement and place by assigning street families to each road, was applied to the Richmond network, both existing and 10years into the future.

In comparing the existing and the future ONF, gaps were identified along Salisbury Road, Champion Road, Hill Street. William Street, Queen Street, Talbot Street, McGlashen Avenue, Oxford Street, Wensley Road, Hart Road, Bateup Road, Lower Queen Street and State Highway 6. This is shown graphically in Appendix L..

Using all the information that was collated, the modes were prioritised at different times of the day to recognise both place and movement outcomes. When assigning the priority of the route, the adjacent land use, strategic objectives and principles, other modal routes and the predicted future hierarchy of the route were all considered. Mode priority maps were created for the morning peak, inter-peak and afternoon peak which display all the modes and their respective priorities. The Modal Priority Maps are presented in Appendix O.

A long list of interventions to address both the mode prioritisation and ‘gaps’ in the network was created. These interventions are the main output of the NOF and will inform the Richmond Programme Business Case and future improvements in the network. The long list of interventions for the PBC including the Network Operations Plan (NOP) is shown below in Table 1. In the future, there will be changes in policy, planning land use and infrastructure requirements that alter the strategic direction of transport planning. For this reason, the Network Operating Framework is a live process which requires updating to reflect the strategic objectives of the region. In doing so, the Network Operating Framework will continue to be a crucial component of future planning and the development of an integrated transport network.

Table 1 Long list for the PBC including the Network Operations Plan (NOP)

Route	Intervention
Wensley Road	Update to accommodate walk and cycle corridors. Likely to involve land purchase and retaining especially over rise between Crescent and Dorset. Tasman District Council have previously looked at other options for active modes but no practical alternatives exist.
Upper Oxford Street	Walking and cycling gap to address especially where current cycle lane shares with footpath at pinch point.
Salisbury Road	Suggested treatments to achieve ONF outcomes are: • Utilise existing signals to facilitate walking/cycling crossing movements over through traffic movements during am and pm peaks; • Use speed management at school zones – variable speed limits during am and pm peaks; • Zebra crossings with raised platforms and cycle bypass (like a very large speed cushion); • Speed tables at intersections • Cycling to be separated from peds and general traffic utilising plastic bollard type solutions in the short term and physical buffer in longer term. Remove parking for separated cycleway; Public Transport (PT) – remove parking and create peak hour priority lanes (long term). Use bus jumps at signalised intersections short term.
State Highway 6 (Richmond Deviation to SH60)	Moving freight and general traffic is more important than movement of pedestrians and cyclists along corridor. Movement of pedestrians and cyclists crossing the corridor is equally important. • Grade separation of active modes across SH6 at Jubilee Park (priority 1), Lower Queen (priority 2), Eastern Hills (priority 3); • Model the Hope bypass – can the desired ONF preferences be achieved on a revocated Gladstone Road; • Use the Wellington Traffic Operations Centre (WTOC) to optimise the signal timings to achieve desired ONF time of day preferences • Peak hour clearways – Priority lanes to effect mode shift and less overall private vehicles – can balance between crossing corridor and through movement along SH6 achieve ONF preferences; • Detune side roads that intersect SH6 especially those with wide throats that result in poor crossing level of service for pedestrians • Partial or full closures of some of the intersections along SH6 • Optimise SH6 / Lower Queen /McGlashen / Oxford intersections as short-term low cost, low risk interventions. Consider following: ○ Review length of lanes on approach to McGlashen SH6 intersection to prevent right turn queue blocking straight through movement ○ Allow left turn from McGlashen and right turn from Richmond Deviation to run at same time (median needed?) ○ Close left turn slip lane from Lower Queen Additional turning lane on Oxford Street
Oxford Street and Ring Road	From Oxford/Wensley to Gladstone encourage PT and general traffic. Discourage general traffic along Queen Street from SH6 up to intersection with Salisbury and encourage on ring road. Cycling is neutral (SH6 to Wensley) on Oxford and Talbot/McGlashan. Talbot to Croucher is a secondary cycle route and encouraged. McGlashan is a priority for general traffic.
Lower Queen Street	Discussions on methods to achieve ONF outcomes provided the following suggestions: • Use signals to discourage general traffic in the interpeak;

Route	Intervention
	• In the short term strongly encourage freight – possible turning bans at SH6/Lower Queen St area; • Remove free left turn; • Special signal function giving priority to PT by stopping state highway traffic; • Closing Queen Street at Gladstone except buses and freight; • Widen between Stratford and Gladstone to enable left turn Stratford into SH6; • Walking and cycling separated facilities; PT park and ride at showgrounds.
Queen St – McIndoe to Gladstone	Close Queen St arm except for buses and freight to enable place priority
William Street	A primary cycling route – using separated facility with general traffic but use a non-separated facility if through traffic significantly reduced through: • Humps • Speed management • Chicanes Consideration of partial closure to create neighbourhood greenway
Upper Queen Street	Neutral for general traffic, encourage and separate pedestrians and cyclists, and encourage PT.
Champion Road	Same as for Upper Queen Street but encourage general traffic. Long term separated facilities for active modes however in short term shared path.
Hill Street	Long term (beyond 10 years) north of Champion could be a PT route. There are no current cycle facilities but in the future it will be separated from general traffic. Parked cars are an issue when using the road. • Short term – painted cycleways on road in uphill lanes. • Lower priority until residential uptake for Richmond south development is realised; • Footpath gaps – not room for bins on footpath – operational solution or bylaws, education, policy North of Champion cycle route proposed along pipeline hard against Saxton field boundary – separated from general traffic alignment.
Queen Street (Wensley to Salisbury)	Broaden out paths - similar to recently completed shared zone. Speed management to 30km/h environment.
McShane Road	Encourage freight, walking and cycling and discourage general traffic. Shared paths to service secondary route for active modes.
Remainder of residential roads	Discourage increases in general traffic and manage the speed of vehicles. Encourage walking and cycling.

The desired future transport network is a contrast to the currently operating transport network. This does not suggest that the desired future transport network is overly ambitious but rather that the current network inadequately accommodates all modes. The width gap analysis of the roads and footpaths in the network displays how key routes in the network are currently deficient. These gaps will become critically insufficient in the future due to the predicted increase in traffic volume and corresponding changes in route classification. With local planning focusing on intensifying the development of Richmond CBD, it is critical that transport planning provides routes that enable the movement of people and goods into the CBD without adversely affecting the amenity of the area. This can only be achieved by providing a variety of routes for all modes which will relieve congestion and provide a safe environment within the transport corridors. To achieve this and the other objectives outlined in the strategic planning, numerous interventions are required for all modes on a variety of routes. This NOF has successfully highlighted which interventions are necessary so a programme can

be formed to improve the transport network and ensure that the prosperity of Richmond is not impeded.

1.0 Introduction

1.1 Network Operating Framework Purpose and Objectives

A Network Operating Framework (NOF) is a process for transport planning and management which allows for an integrated and streamlined approach. The transport system is complex, with competing network users, changes in mode share and the relationship between transport infrastructure and travel patterns constantly evolving.

The purpose of the framework is to assist planning for the transportation network by identifying key routes for all modes, places of priority within the community, operational gaps in the network and interventions that will resolve current deficiencies and meet future aspirations of the network. This facilitates the provision of an integrated approach to managing congestion, safety and the competing demands of road users while also supporting future planning and development of transport and travel choices. This is done by establishing the future networks based on modal priority to meet strategic goals.

The framework encompasses all users of the transport network and they are classified as pedestrians (all forms of active travel except cycling e.g. mobility scooters, running, walking), cyclists, general traffic, public transport and freight. The framework assigns a priority for each user on routes at particular times of the day which helps to manage congestion, promote safety and resolve competing demands for road space.

The Network Operating Framework provides a 'one network' view across modes and network ownership. This means that a 'systems thinking' approach which combines land and transport planning will be implemented so that a cohesive transport network can be developed. By using this holistic approach and focusing on a 'Movement and Place' strategy the mode priorities, surrounding land use and future growth can be better considered. It does this by enabling collaboration throughout the process and allowing operational and planning decisions to inform the strategy. The key planning principles of a NOF outlined by Austroads are:

- Focusing on moving people and goods rather than vehicles
- Understanding that transport supports broad community goals
- Taking a systems approach of thinking which sees transport as a 'network' rather than links and nodes
- Consulting stakeholders and collaborating with them is a key part of the process.

1.2 Purpose of this Report

The purpose of this report is to outline how a recommended Network Operating Framework was determined for Richmond, the process undertaken, and the outputs derived.

This report will recommend activities for Waka Kotahi and Tasman District Council for consideration within the Richmond Programme Business Case (PBC) and inform the operation of the network.

1.3 Stakeholder Involvement

The stakeholders involved in the formation of the Richmond Network Operating Framework and the steering group were:

- Tasman District Council (TDC)
- Nelson City Council (NCC)
- Waka Kotahi New Zealand Transport Agency (WK).

Other stakeholders involved in the Stakeholder Workshop:

- Road Transport Association (RTA NZ)
- NZ Police
- NZ Automobile Association
- Bicycle Nelson Bays
- Richmond Unlimited (business association for Richmond CBD).

A Governance Group was established to determine the level of engagement necessary with stakeholders and provide approval of key technical pieces of work such as: hierarchies and levels of service developed, the strategic networks for each mode, and approval of the interventions suggested. The Governance Group consisted of members from WK, TDC and NCC.

1.4 Background

The Network Operating Framework for Richmond was initiated following a recommendation by the WK Richmond Arterial Investigation Strategic Case. The Strategic Case was undertaken as part of the work included in the 2015-2018 National Land Transport Programme. The Richmond Arterial Investigation Strategic Case was carried out due to a recommendation in the Three Roundabouts Study to better understand the wider transport network in Richmond.

The Three Roundabouts Study investigated the three roundabouts at State Highway 6, Main Road Stoke/Salisbury Road and Salisbury Road/Champion Road. The investigation sought to solve traffic congestion and safety issues. The conclusion from the investigation was that there was a lot of weaving traffic travelling through the roundabouts either because of the roading layout or because of upstream and downstream congestion. The investigation team realised that fixing the congestion at the three roundabouts may adversely affect the traffic flow along Salisbury Road and into the Richmond CBD. This problem was linked to a Nelson to Brightwater Roading Study from 2008 which supported the Hope Bypass. This resulted in the initiation of the Richmond Arterial Investigation Strategic Case.

The Richmond Arterial Investigation Strategic Case concluded that if additional capacity was required in the Richmond network in the future, the Hope Bypass is a reasonable long-term solution. In the short to medium-term, investigating improvements to the network will provide some indication into when the Hope Bypass will be necessary. The Strategic Case then proposed that a Network Operating Framework be undertaken to determine the future transport demand and what interventions can make the best use of the existing network. This would inform the trigger level at which investment for the Hope Bypass will be warranted.

2.0 Framework Development

Information provided by Waka Kotahi and the Austroads Guide to Traffic Management Part 4: Network Management Strategies helped to develop this Network Operating Framework (NOF). The NOF uses a workshop with stakeholders to provide strategic direction and ensure community perspectives are reflected in the outcomes. The Richmond Network Operating Framework was generally developed using the process shown in Figure 1 below.

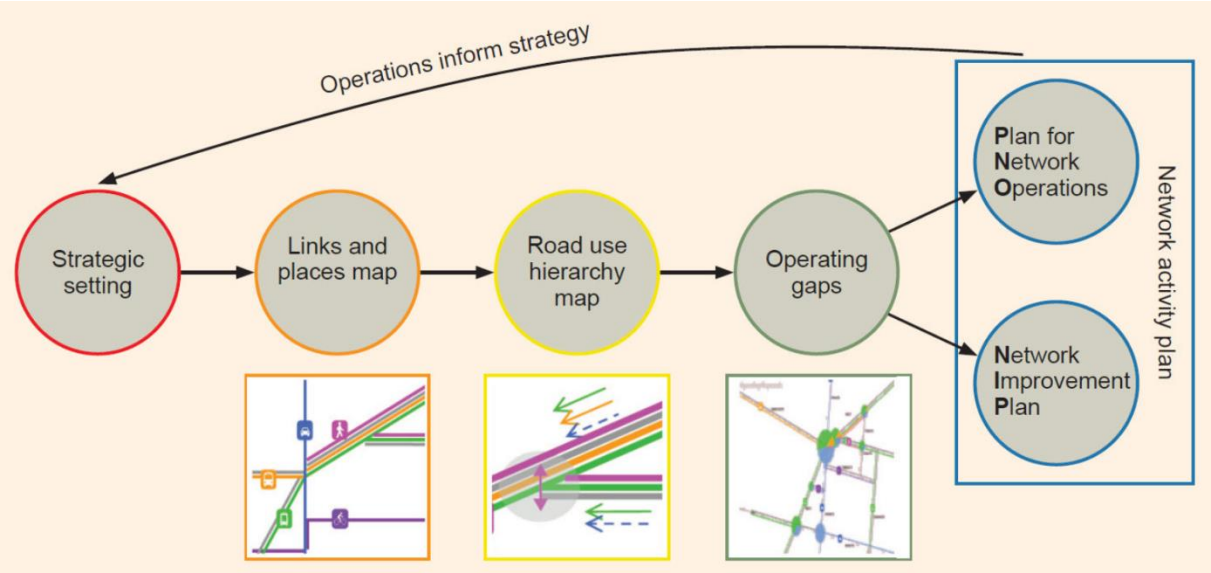


Figure 1 Network Operating Framework Process (Waka Kotahi)

The Richmond Network Operating Framework began with the Governance Group in 2017, followed by meetings with the Steering Group to decide upon the structure of the NOF. In July 2017, a stakeholder workshop was undertaken during which the strategic objectives and principles (strategic setting) and Network Operating Hierarchy maps (links and places maps) were decided upon. The steering group then developed the mode priority maps (road use hierarchy maps) and 'gap' maps (operating gaps) which informed interventions that resolved the 'gaps' in the network (the network activity plan). The minutes taken from the meetings are provided in Appendix A.

2.1 Strategic Objectives and Network Principles

The strategic objectives and principles guide the development of the NOF and were formed during the first workshop with the subsequent input of stakeholders (see 1.3 above). A comprehensive range of national, regional and local planning and policy documentation was used to inform the strategic objectives. Therefore, the strategic objectives incorporate government policies and objectives, road user requirements and network performance targets. The objectives are developed for each of the modes in the network; general traffic, freight, public transport, walking and cyclists.

For each strategic objective, a corresponding set of principles was developed. The principles provide another level of detail by categorising each mode route as either 'Primary' or 'Secondary'. The 'Primary' network Principles relate to the main transport function of the mode and can include topics like improving traffic efficiency and road safety. The 'Secondary' network Principles enable the transport mode to support broader goals such as aesthetic value and environmental benefits. The Strategic Objectives and Network Principles are discussed in more detail in Section 4.2.

2.2 Network Operating Hierarchy

During a workshop with stakeholders, network maps were created for each mode in the transport network showing both the 'Primary' and 'Secondary' network. This is called a Network Operating Hierarchy (NOH) and it reflects the strategic goals and principles. The primary network describes the

most important and heavily used routes and the secondary network displays the feeder routes for each mode. The network was overlaid on aerial imagery to show how the routes link land uses in the area. The outputs of the transport network by mode and hierarchy are provided in the appendices. The NOH is discussed in more detail in Section 6.0.

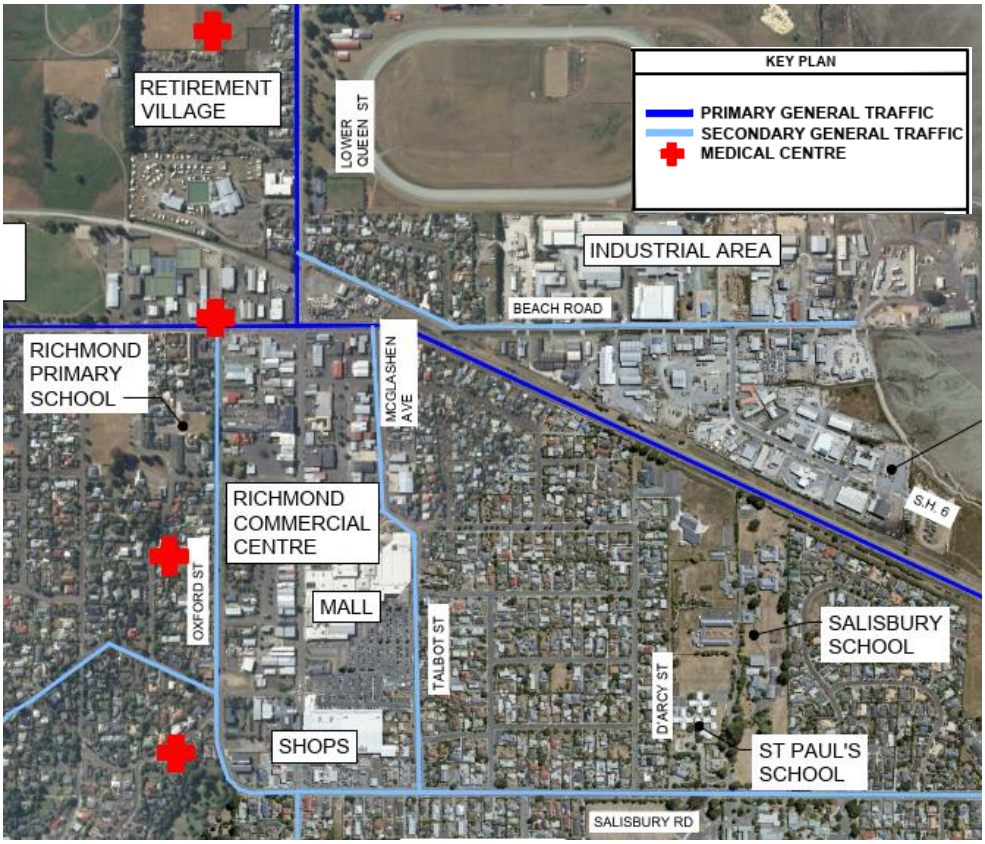


Figure 2 Figure showing Primary and Secondary network of a NOH

Places were identified during the workshop using documentation from previous reports and local knowledge. Places of Interest were categorized as Health Centres, Industrial Areas, Parks & Reserves, Commercial and Retail Areas, Retirement Villages or Education Facilities. Future Development Areas were outlined on a map based on the Tasman District Council Future Development Strategy. Using the Places of Interest and Future Development Areas Maps, an Activity Area Priority was determined. This assigned a priority to each Activity Area, with 1 being the highest priority and 4 the lowest. The land use and places of interest are discussed further in Section 5.0.

2.3 Gap Analysis

During a Steering Group workshop, the current performance of the network was compared against the strategic intent which is represented as the desired future network state. The difference between the current and the future is an operating gap which highlights areas of the network that are deficient. These operating gaps are a key output of the NOF and are critical to developing effective activities and interventions to plan for the future. The gap analysis is discussed in greater detail in Section 7.0.

2.4 Mode Prioritisation

Each mode was assigned a level of encouragement relative to the other modes for each time of the day. The day was split into Morning Peak (8am to 9am), Inter-peak (11.00am to 1.00pm) and PM Peak (4:30pm to 6pm). The encouragement level was displayed on a map so decision making and trade-offs between the modes could be identified. The justification for the encouragement level and the overall formation of the Mode Priority Maps (or ONF Maps) was provided by the strategic setting in the first step of the NOF process. Mode prioritisation is discussed further in Section 8.0.

3.0 Network Context

This Richmond Network Operating Framework was developed for the Richmond Study Area shown in Figure 3. The Study Area is bounded by Saxton Road to the north east, the Waimea River to the north west, the Wairoa River to the West and the Richmond Range to the south. Richmond is part of the Tasman District which is a unitary authority. A small part of Nelson City Council network is also in the study area between Champion Road and Saxton Road thus the Nelson City Council (also a unitary authority) was included in the working group.

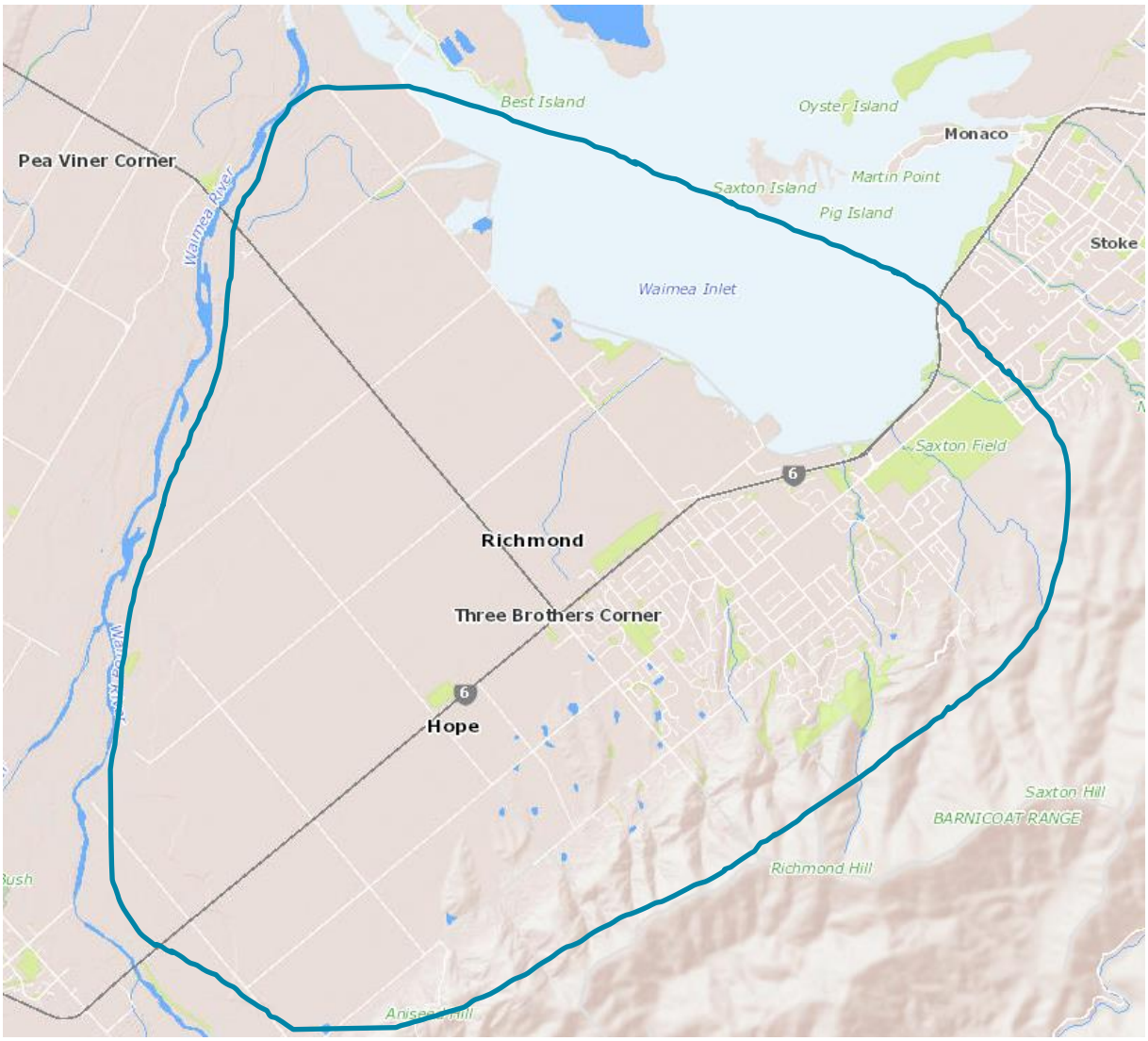


Figure 3 The Richmond NOF Study Area

The key areas identified in the Study Area are:

- Richmond Central Business District
- Education Facilities
- Industrial Areas
- Medical Facilities
- Retirement villages and aged care facilities.

4.0 Strategic Context

The Tasman District Council Tasman Resource Management Plan (TRMP) has a section on Land Transport Effects (Chapter 11) which outlines a range of policies that manage both the effects on transport safety and efficiency and effects on the environment.

The issue of concern for transport safety and efficiency is the location, development and implementation of subdivision and land use activities. Increases in population, tourists, commercial operations and heavy traffic volumes are putting pressure on the existing land transport network. This pressure is primarily on the physical capability of the roads which may lead to adverse travel times and hazardous driving conditions. Therefore, the objective of the plan is "*a safe and efficient transport system, where any adverse effect of the subdivision, use or development of land on the transport system are avoided, remedied or mitigated".* The plan has a series of policies that manage the development of urban areas, restrict land uses generating significant traffic volumes, manage vehicle access and parking, avoid adverse effects on the integrity of the road network. These policies aim to minimise the development of any current or future ribbon developments because they are deemed to adversely effect traffic safety and efficiency. Instead the plan seeks to attain a more compact urban form which enables a traffic to pass through the network efficiently.

Another objective of the plan is "*the avoidance, remedying, or mitigation of adverse effect on the environment from the location construction, and operation of the land transport system".* To achieve this objective, the plan outlines a series of policies that align well with the functions of a NOF. The policies address the effects of traffic volume and speed on the safety of pedestrian areas, promote transport routes that avoid adverse effects on the health of people environment and promote multiple route options for walking and cycling. The roading network has a significant effect on surrounding land use due to noise and air pollution, safety impacts and space requirements. Therefore, the transport network must appropriately designate routes for each mode that allows for the movement of people and goods without causing detriment to the places they pass through.

4.1 Operating Framework Horizon

The Network Operating Framework details an aspirational transportation network. Some parts of the network may currently fulfil these aspirations, but other parts of the network may not. This creates an operating gap that requires intervening actions in the future to accomplish the aspirational transportation network. Therefore, the NOF is undertaken with 2 timeframes, the current timeframe and the future timeframe. The current timeframe is within three years and covers known and progressing consent applications. The second time horizon is the time required for completing the aspirational transport network which the working group agreed is 10 years.

4.2 Strategic Objectives and Network Principles

Refer to the meeting minutes in Appendix A for the agreed Strategic Objectives and Network Principles. In summary these are:

- Strategic Objectives
  - Cycling
    - Provide a network for cyclists that allows pedestrians of all ages and abilities to travel safely along direct and efficient connections between key destinations.
  - Walking
    - Provide a network for pedestrians (all forms of active travel except cycling) that allows all ages and abilities to travel safely along direct and efficient connections between key destinations.
  - Public Transport
    - Provide an accessible public transport system that provides connectivity throughout Richmond by ensuring a reliable and efficient service that encourages patronage.
  - General Traffic

        - Provide a general traffic network that compliments other modal networks and creates connectivity throughout the region by using efficient routes at safe speeds while considering the land use of nearby places.
    - Freight
        - Provide an efficient freight route that uses appropriate roads to connect inter-regional trips with access to industrial and commercial areas within Richmond.

- Network Principles
    - Cycling
        - Primary: Maintains, promotes and enhances cycling activity between key destinations and within the primary network
        - Secondary: Supports local movement
    - Walking
        - Primary: promote walking by linking key desire lines
        - Secondary: Supports local movement
    - Public Transport
        - Primary: Core bus corridors
        - Secondary: Connects passengers to the core network. Less services
    - General Traffic
        - Regional: Provides primarily for longer distance / inter-regional through trips that minimises conflict with adjacent land use.
        - Arterial: Provides for the mobility needs of longer distance trips i.e. arterial roads within Richmond and may include adjacent land use pressures.
        - Primary Collector: Provides access to/from traffic routes to key destinations. May also provide circulation routes and gateways into the CBD/activity centre.
        - Secondary Collector: Collects and distributes localised traffic.
        - Access: Predominantly local access to abutting properties. Low levels of traffic/restricted access and not usually controlled. An access route can be become a destination route as its function changes.
    - Freight
        - Primary: longer distance, inter regional trips, heavier weight
        - Secondary: General movements

5.0 Land Use and Places

Land uses and places in the Study Area have a significant influence on the strategy used when developing a transport network. The Tasman Resource Management Plan (TRMP) provides current land use maps for the region. This meant that during the steering group meetings the land use was overlaid on aerial imagery which allowed the group to identify the priority places in the study area. This process is detailed in the minutes in Appendix A. Refer to Appendix B for the detailed maps showing the places identified and their priority used to inform the NOF.

5.1 Growth and Development in Richmond

The Tasman Long Term Plan for 2018-2028 outlines that there is an expected increase of 4,400 residents over the next 10 years in the region with high population growth in Richmond, Motueka,

Brightwater, Wakefield and Mapua. This will require a further 3,000 new dwellings to be created and 243 new business lots. This growth will require the improvement and/or addition of roads, footpaths and other public amenities such as parks, libraries, and community centres. To fulfil this need, $27.8 million has been allocated to improve or maintain the services to the community.

The Nelson/Tasman Future Development Strategy adopted in July 2019 outlines that in the long term extra business area land may be needed in Richmond. There is potential for a prime business location adjacent to the designation for the Hope bypass.

The strategy also calls for the intensification of current urban areas so multi storey terrace housing and low rise apartments with mixed uses are required in Richmond. In Richmond South there are plans to restrict development on the highly productive land. Instead there are calls for the controlled expansion of housing on the Hill Street South and Paton Road Foothills. Land here would be suitable for a range of densities from 300 to 1,000 square metres. This area can be easily connected to the existing public transport network and transport infrastructure.

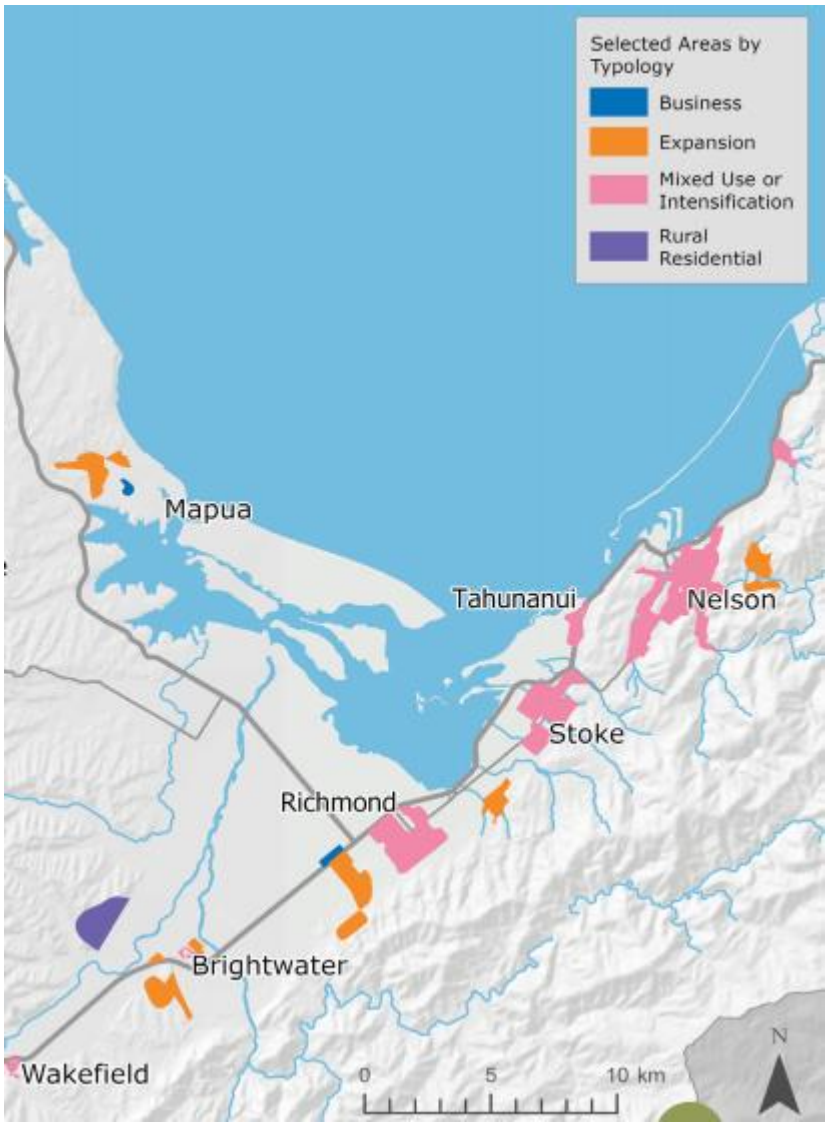


Figure 4 **Types of development in selected growth areas. Taken from the Nelson Tasman Future Development Strategy**

5.2 Land Use and Network Operating Framework

One of the key processes of the Network operating Framework is to integrate the land use and transport planning. To achieve this the key places in the Study Area needed to be determined. The key places that the steering group decided upon were:

- Health Centres
- Industrial Areas
- Parks & Reserves
- Commercial and Retail Areas
- Retirement Villages
- Education Facilities.be

The map showing the key places in the study area is shown in Appendix B.

Once the key places had been identified certain areas of the study area were assigned a priority as an 'Activity Area'. 'Activity Areas' are regions in which there is a high volume and frequency of movement and where there is a focus on the amenity of the place. The 'activity areas' are assigned a four-level place priority with 1 being the highest priority with the most activity and 4 being the lowest.

The Future Development Areas discussed in Section 5.1 and the Place Priorities are displayed together on a map in Appendix C.

6.0 Network Operating Hierarchy

An effective transport network does not just meet the requirement of vehicle traffic. To create a fully integrated transport network all transport modes must be considered and evaluated alongside one another. In order to prioritise certain routes, identify conflicts in the network and resolve issues, a hierarchy for the modes must be established. This requires the formation of a 'Network Operating Hierarchy' which displays the 'Primary' and 'Secondary' routes in the network as a map. This makes it clear which routes are of the highest importance and others that act as feeders. By analysing the transport network as a combination of different modes and understanding the relationships between routes and places an integrated transport network can be envisaged. This aspirational network provides the performance targets for each mode, and questions if the current network is meeting the performance targets.

Refer to Appendices D- G for the detailed maps showing the NOH (by mode).

6.1 Changing Transport Network

During the course of the project Waka Kotahi transitioned from the One Network Road Classification (ONRC) system to the One Network Framework (ONF). This meant that the ONRC was reviewed and refined using local knowledge to modify the Network Operating Hierarchy so that it drew on the principles from the ONRC but was appropriate for the ONF.

During the steering group meeting the future projects being planned both within the Study Area and in the wider district were considered. The Nelson Future Access Project and Hope Bypass could potentially have a significant influence on the transport network and the growth in the area. Another constant discussion point was the evolving mode share and the need to provide and encourage low carbon transportation options to meet local, regional and national climate change targets within the transportation sector.

6.1.1 Walking Network

The walking network, in congruence with the strategic objectives defined in Section 4.2, provides safe and direct walking routes (and other active modes excluding cycling) that promote walking within the Study Area by linking key pedestrian desire lines between origins and destinations. These

connections are between suburban centres, transport hubs, areas of high employment, recreational spaces and major education centres.

The walking network links the CBD and education centres, residential areas and hospitals, retirement villages and parks. There are key connections from the public transport hub that link with the routes into the CBD. Some of the key routes in the walking network are:

- Main Road Stoke (North of Saxton Field) and along Salisbury Road and into the Richmond CBD
- Champion Road, Hill Street, and Hart Road
- Queen Street and through the CBD
- Bill Wilkes Reserve and Washbourn Gardens.

The secondary network supports local movement to neighbourhood centres, areas of high public amenity and recreational spaces. The walking network is shown in Appendix D.

6.1.2 Cycling Network

The cycling network maintains and enhances cycling activity to, through and between key destinations in the Richmond area. The key destinations identified by the Steering Group include suburban centres, transport hubs, major employment nodes and significant education centres. As outlined in the strategic objectives and principles, the primary cycling network aims to promote cycling by catering for novice riders by creating a low stress and safe environment. This will require the design of cycleways that have sufficient width and clearance from general traffic. To make cycling an appealing transport option when compared with vehicles it is important that the time of journey is similar. Therefore, a safe and direct route for more experienced cyclists must also be provided.

The Primary Cycling Network links key cycling desire lines between origins and destinations. In most cases the primary network links the suburbs with the Richmond CBD. The Steering Group acknowledged that the primary cycle routes typically run east-west so there was an effort to assign north-south connections. The primary cycle routes in the Study Area include:

- Main Road Stoke (North of Saxton Field) and along Salisbury Road and into the Richmond CBD
- The coastal route along State Highway 6 past the Richmond Aquatic Centre and then joining up with Salisbury Road
- Hill Street North and connecting with Champion Road William St connecting the south western area of Richmond and the large education area along Salisbury Road
- The Queen St route between Hill Street and Salisbury Road
- The South Western Route along Wensley Road
- The route linking Richmond West and the Great Taste Trail from Jubilee Park into the CBD along Church Street
- The north western link along Lower Queen Street.

The secondary cycling network supports localised movement to areas of high amenity such as parks and recreational spaces and provides links from residential areas to the primary network. Secondary cycle routes in the study area include roads such as Hill Street, Gilbert Street, Hart Road and between recreation areas such as Bill Wilkes Reserve and Washbourn Gardens and along Reservoir Creek.

The Cycling Strategic Network can be seen in Appendix E.

6.1.3 Public Transport Network

The public transport network (or future IT developed equivalent) aims to promote an accessible and reliable public transport service to high activity areas including the Richmond CBD and other transport hubs. The public transport network also aims to provide a link to sub-regional and suburban centres such as Motueka, Wakefield and Mapua. The public transport network consists solely of a bus system but other public transport options could be considered in the future. To increase patronage on the Public Transport network it is imperative that a consistent and reliable service can be provided which

also requires the rest of the transport network performing harmoniously. A public transport network relies upon walking and cycling routes to complete the initial and final stage of a public transport journey. The public transport network can become unreliable, slow and frustrating if general traffic and freight are congesting the road.

The primary public transport network is the core bus corridor that typically supports multiple bus routes and reflects the draft public transport network recently developed by a joint study by TDC and NCC in early 2020. The primary bus routes are along:

- Stoke Main Road and Salisbury Road
- Champion Road
- Hill Street
- Queen Street and Lower Queen Street
- Oxford StreetWensley Road
- Bateup Road
- Berryfield Drive.

The secondary public transport network consists of other bus corridors that are typically characterised by lesser numbers of services. The secondary network supports the primary network by delivering passengers and buses to the core network. The secondary network routes are along State Highway 60 to Appleby and State Highway 6 to Brightwater.

The Public Transport Network is displayed in Appendix F.

6.1.4 General Traffic Network

The General Traffic network provides numerous routes which allows for consistent, safe and efficient movement of vehicles through the study area. The network consists of a range of roads with differing hierarchies that provide for the various levels of movement and place functions. The general traffic network has historically been the network which has been the focus of transport planning as it consists of the largest proportion of users. This means that it has a large effect on other modes in the transport network, so it is important that the general traffic network complements the other modal networks whilst still fulfilling the strategic objectives of the network.

The primary traffic network provides for inter-regional travel, long distance trips and high volume routes between key destinations in and through Richmond. The network consists of a mix of motorways, urban connectors and activity streets which reinforces the focus on movement rather than place. The main routes in the primary network are along State Highway 6, State Highway 60, Lower Queen Street and Main Road Stoke.

The secondary traffic network collects and distributes local traffic and connects residential areas to the primary network. The network consists of mainly urban connectors and activity streets which aligns with the purpose of the traffic network which focuses on the movement of vehicles. Some of the routes in the secondary network include Wensley Road. Hart Road, Hill Street, Salisbury Road, Queen Street and Champion Road.

The map of the primary network is shown in Appendix G.

6.1.5 Freight Traffic Network

A strategic freight network enables efficient freight supply chains and integrates effectively with national freight networks (e.g. ports) and local freight demand centres (e.g. Nelson Pine Industries). The freight network enables access across Richmond to service, businesses, households and community needs. Heavy freight deteriorates the road pavement and therefore freight routes should be limited to routes which have been designed to experience frequent heavy loads. Heavy freight also significantly contributes to congestion due to the size of the vehicles and slower accelerations. Therefore, it is paramount that the freight routes are strategically placed.

The primary freight network caters for inter-regional through trips, High Productivity Motor Vehicles (HPMV), over-weight and over dimensioned traffic. The primary freight network in the Study Area is along State Highway 6 and along State Highway 60.

The secondary freight network caters for general heavy vehicle movements and 50 MAX vehicles. The secondary freight routes include Lower Queen Street, McShane Road, Beach Road, Lansdowne Road, Main Road Stoke, Saxton Road and Nayland Road.

The freight network is provided in a map in Appendix F.

7.0 Gap Analysis

7.1 Functional Level of Service (FLoS)

The Working Group developed a functional level of service table for each mode to describe differing performance levels. The FLoS was used to understand the gaps in the network. For each mode a desired FLoS was assigned and the difference between the current FLoS and the desired FloS provided the current gap for each mode. FLoS examples from Austroads helped to inform the criteria for each level which were then modified by the steering group to suit the Richmond Area. The FLoS for all modes is show in Appendix H.

The Steering Group accepted that if a FLoS was identified for each mode for the peak period then that level of service would also provide for the other time periods of the day. This means that a FLoS is constant throughout the day. The functional level of service for the current timeframe is used for the future too however the future FLoS may change over time with updates to the NOF as expectations change, e.g. for surfacing, vertical grade and lighting for pedestrians and cyclists.

7.2 Width Gaps

Using road hierarchies and RAMM data supplied by Tasman District Council a gap analysis was undertaken which show the ONRC road classifications compared to TDC Land Development Manual standards for road and footpath widths. The results showed a number of roads and footpaths that did not meet the width requirements. The explanation for this was that the roads are now considered to be a higher classification than when they were originally built. Once the gaps in the network have been identified, decisions can be made about how the gaps can be resolved. Remedies include widening the road to obtain the desired width, downgrading a road's classification or accepting the gap. Width gaps were undertaken on roads and footpaths to understand the gaps in the walking and general traffic network.

Each road in the general traffic network was assigned a hierarchy based on the ONRC classification. The road classifications and their associated minimum widths are shown below in Table 2. Road width data from RAMM was then compared against the required width to determine the gaps. The road width gaps are shown in Appendix I.

Table 2 Minimum road widths for gap analysis

Classification	Carriageway width (m)
Urban	
Arterial	16.5m
Primary Collector	14m
Secondary Collector	13m
Access	8m
Rural	
Arterial	13m
Primary Collector	8.5m

Classification	Carriageway width (m)
Secondary Collector	7.2m
Access	7.2m
State Highway	
Standard Carriageway	10m
Standard with median	12.4m
Standard with median and parking	13.4m

Each road in the walking network was assigned a FLoS which contained a width requirement for the footpath on both sides of the road. As shown in Appendix H, FLoS A requires a width of 3 m, FLoS B & C require a width of 2 m and FLoS D,E & F all require a width of 1.5 m. RAMM data containing the footpath widths was compared against the required width from the FLoS which provided the width gaps. The walking gaps in the network are shown in Appendix J. Note that there was no gap analysis conducted for the cycle network because the current cycling network is negligible which would result in a gap map that essentially mirrors the aspirational cycling network.

7.3 ONF Gaps

The Richmond Transport network was first classified using the One Network Road Classification (Shown in Appendix K) and then updated to the One Network Framework released by Waka Kotahi. A ONF was created for the current network and the future aspirational network in 10 years. The difference between the current network and the future network provided the gaps in the network which highlights the roads that require interventions. The current, future, and gaps for the ONF can be found in Appendix L.

7.4 Traffic Modelling

Undertaking a NOF involves scenario testing that takes into account future developments for the network. To develop the programmes for interventions in the network the Steering Group acknowledged that future scenarios would require traffic modelling.

The Steering Group agreed that an existing TRACKs model for the Richmond area required updating so that changes to land use and land use zones as resolved in the 2019 Future Development Strategy could be incorporated. Calibration and validation of the traffic model was required which involved traffic counts at specific locations around the area. The updated outputs from TRACKS were used as inputs for a SATURN model which considered the state highway, arterial routes and primary collector routes. The SATURN model enabled the analysis of individual routes and provided a higher level of confidence in the outputs, particularly at intersections and individual routes.

The do minimum network was modelled in TRACKs and SATURN based on the 2018 traffic network and outputs related to Levels of Service and Annual Average Daily Traffic (AADT) (for general traffic and HCV) were reviewed. The maps produced show what, if the network was not altered, would happen to the road classification and AADT. A V/C ratio is the ratio of traffic volume over the theoretical capacity of the road. A value close to one indicates that the road is heavily congested. VC maps indicate the main congestions in the Study Area and are shown in Appendix M. As expected, the VC modelling show areas of high congestion predicted along State Highway 6, State Highway 60 and Lower Queen Street.

The modelling produced predictions for the AADT in 2028 and 2048 using current traffic counts and growth estimations. The predicted AADT calculated by the model requires changes in the road hierarchy. The maps from SATURN in Appendix N show the hierarchy of the road required to satisfy the predicted AADT. Maps were produced for 2028 and 2048, a map for all traffic and a separate map for Heavy Commercial Vehicles (HCV's) was created. Sections of roads that had a predicted AADT that exceeds the current classification were highlighted with the classification required to meet the predicted AADT. For example, in 2028 Wensley Road the predicted AADT meets the requirements of

its classification as a Primary Collector but in 2048 the predicted AADT exceeds the requirements for a Primary Collector so it is classified as an Arterial road.

The modelling uses approximations and assumptions to predict future patterns. It is not a prophesy of what the transport network will become but rather a tool that can be used to inform strategic planning in the present. The results from the modelling show that the traffic network will become heavily congested in the future. Changes in the classification of the roads and the resulting upgrades to align with the Functional Level of Service will inform what interventions are necessary to create the aspirational transport network for Richmond.

8.0 Mode Prioritisation

Each of the modes were allocated a prioritisation using five levels of encouragement for three periods of the day, correlated to the agreed prioritisation by Activity Area (Place priority). The three periods that the modes were evaluated for were morning peak, inter-peak and afternoon peak. During different periods of the day the priority of modes change so a level of encouragement was assigned. For example, during the morning peak a route that has a school nearby might encourage walking and cycling and discourage traffic but during the interpeak traffic is encouraged and walking and cycling is neutral. Assessing the modes at different times of the day better reflects the use of the routes in reality and by analysing the nearby land use the prioritisation can be established. Once each mode was prioritised conflict points in the network could be determined and interventions that address the conflicts were addressed.

The level of encouragement assigned to each mode was drawn on the map with different arrows representing different levels of encouragement. The assigned level of encouragement does not suggest that volume or frequency should increase but rather that it is encouraged relative to the other modes. The arrows representing the level of encouragement based on place and time is shown below in Figure 5. The Mode Priority Maps are displayed in Appendix O and key routes are summarised in sections 8.1 to 8.4 below.

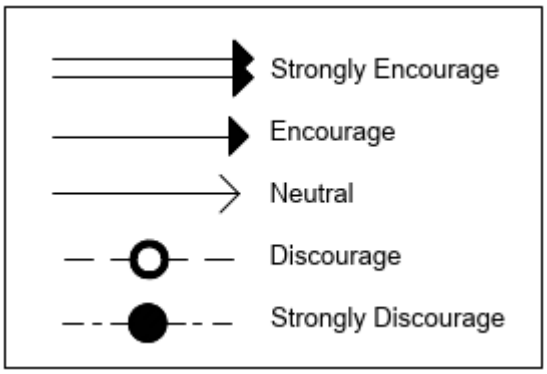


Figure 5 Arrows representing the five levels of encouragement

Interventions determined to inform the Network Improvement Plan (NIP) and Network Operations Plan (NOP) are provided in the subsections below but summarised in Appendix P.

8.1 Richmond CBD

The Richmond CBD has a range of encouragement levels for all the modes throughout the times of day. The priorities of the CBD are summarised in Figure 6.

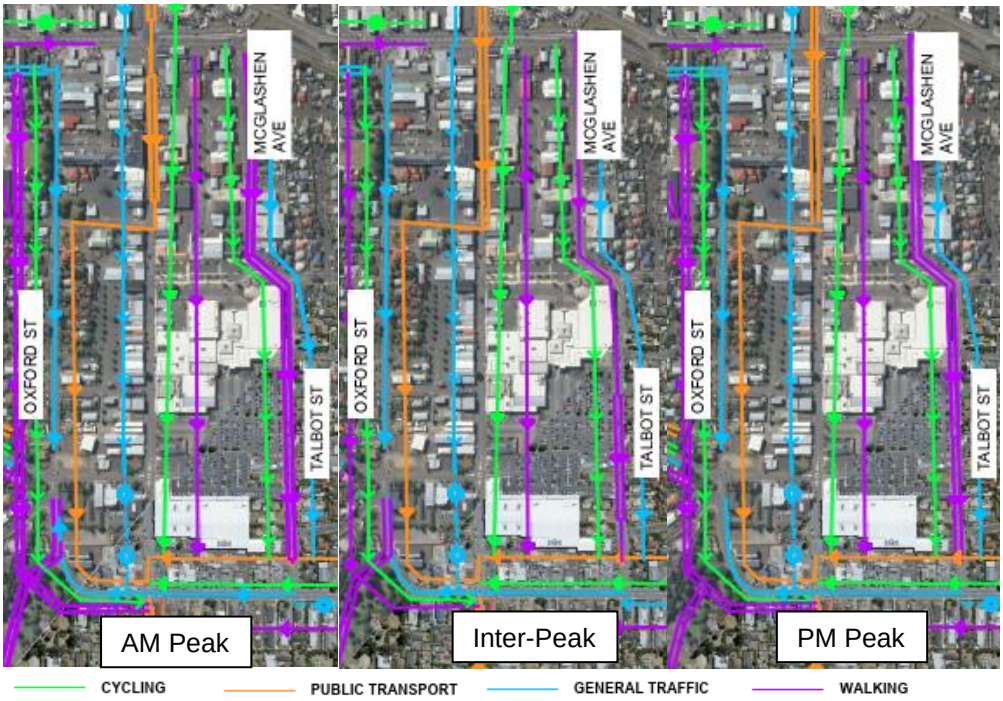


Figure 6 Example Modal Hierarchy Maps by time of day for Richmond CBD

8.1.1 Queen Street

Walking and cycling are encouraged at all times along the section of Queen Street that runs through the CBD. Public Transport at all times is strongly encouraged along Queen Street but only encouraged along the ring roads. General Traffic is neutral throughout the day along Queen Street between Wensley Road and State Highway 6. Between Wensley Road and Salisbury Road, traffic along Queen Street is discouraged.

8.1.1.1 Interventions

From Wensley to Salisbury Road the footpaths could be broadened similarly to the recently completed shared zone and speeds could be reduced to a 30km/h environment.

8.1.2 Ring Roads (Oxford Street, Talbot Street and McGlashen Avenue)

Walking is strongly encouraged along Oxford Street, Talbot Street and McGlashen Avenue at all times. Public transport is encouraged at all times along Oxford Street and general traffic is encouraged at all times along Oxford Street, Talbot Street and McGlashen Avenue. Cycling is neutral at all times along Oxford Street, Talbot Street and McGlashen Avenue.

8.2 Key Suburban Routes

8.2.1 Wensley Road

General traffic was discouraged along Wensley Road during the morning and afternoon peaks. Cycling and walking was strongly encouraged during the peaks and encouraged in the interpeak.

8.2.2 Salibsury Road

General traffic was discouraged along Salisbury Road during the morning and afternoon peaks and neutral during the interpeak. Cycling and walking is encouraged during all times. Public transport was strongly encouraged at all times. This prioritisation reflects the proximity of the education facilities.

8.2.2.1 Interventions

The existing signals could be utilised to promote active modes movements over through traffic movements during the morning and afternoon peaks. Within the school zones variable speed limits could be used and zebra crossing with raised platforms could manage speeds. Cycling could be separated from pedestrians and general traffic by utilising plastic bollards to in the short term. In the

long term, a physical buffer could be constructed for the separated cycleway by removing parking. Another long term treatment is to remove carparking and create peak hour priority lanes and bus jumps at signalised sections in the short term.

8.2.3 Hill Street

General traffic is neutral at all times along Hill Street. Cycling and Walking is encouraged, and Public Transport is Strongly encouraged at all times.

8.2.3.1 Interventions

There are currently no cycle facilities along Hill Street but in the future cyclists will be separated from general traffic. Once South Richmond is further developed the demand of Hill Street for cycling and walking will increase. In the short term, uphill sections of road can be painted with cycleways and the issue of parked cars can be addressed. The removal of bins from the footpath will reduce the footpath gaps and could be addressed through operational solutions, bylaws, education or policy.

8.2.4 William Street

Walking and cycling was strongly encouraged at all times along William Street and general traffic was strongly discouraged during the morning and afternoon peaks to reflect the proximity of the education facilities.

8.2.4.1 Interventions

William Street is a primary cycling route so unless general traffic volume is significantly reduced a separated cycle facility will be required. Through traffic could be significantly reduced through the use of humps, chicanes, speed management and partial closures.

8.3 State Highway SH6 and SH60

8.3.1 State Highway 6

Moving freight and general traffic is prioritised over pedestrians and cyclists along the corridor. Freight and General Traffic are strongly encouraged while cycling is strongly discouraged. The route is one of only a few dedicated routes for freight and hence cycling is discouraged for safety reasons. It is important that pedestrians and cyclists can cross the corridor and access suitable routes.

8.3.1.1 Interventions

Grade separation of active modes across SH6 at Jubilee Park (priority 1), Lower Queen Street (priority 2) and Eastern Hills (priority 3). Modelling of the Hope Bypass will inform whether the desired ONF preferences can be achieved on a revocated Gladstone Road. The Wellington Transport operations Centre (WTOC) can optimise the signal timings to achieve the desired ONF time of day preferences. Peak hour clearways or priority lanes which effect the mode shift and reduce the proportion of private vehicles can balance between crossing corridor and through movement along SH6 to achieve the ONF preferences. Detune side roads that intersect State Highway 6, especially roads with wide throats that result in poor crossing level of service for pedestrians. Partial or full closures of some of the intersections along State Highway 6 may be required.

A short-term low cost and low risk intervention is to optimise the State Highway 6 and Lower Queen Street, McGlashen Road and Oxford St intersections. The following options should be considered:

- A review of the length of lanes on the approach to the McGlashen Road intersection to prevent the right turn queue blocking straight through movement;
- Allow a left turn from McGlashen Road and right turn from the Richmond Deviation to run at same time;
- Removal of the left turn slip lane at Lower Queen Street;
- An additional turning lane on Oxford Street.

8.3.2 State Highway 60

In reviewing the VC plots, further work needs to be done to understand the delays around the SH60 intersections. The State Highway 6 and Pugh Road/McShane Road intersection, Bartlett Road/Swamp Road intersection, Blackbyre Road T-intersection and Lansdowne Road T-intersection are predicted to become very congested. Some of the roads will have more traffic turning into and out of SH60 so interventions e.g. right turn bay facilities and slip lanes like those at the Pugh Road/McShane Road intersection may be required.

8.4 Other Routes

Other routes were also reviewed, as above, and these routes could use the similar interventions (as above) to realise the desired outcomes. Refer to Appendix O for the maps that show the mode priorities and Appendix A for specific locations as recorded in the minutes of the workshop.

9.0 Future Application of NOF

In the future, there will be changes in policy, planning land use and infrastructure requirements that alter the strategic direction of transport planning. For this reason, the Network Operating Framework is a live process which requires updating to reflect the strategic objectives of the region. In doing so the NOF will continue to be a crucial component of future planning and the development of an integrated transport network.

10.0 Conclusions

The Network Operating Framework supports transport planning by providing inputs required for an aspirational transport network. This Network Operating Framework developed strategic objectives and principles, developed a strategic network, assigned priorities for different times of the day and identified the gaps for each mode. The process has identified a Network Operating Hierarchy for each mode for the next 10 years. This was done by linking the ‘movement’ function of the transport network with the ‘place’ function of the adjacent land use while aligning with the 10-year strategic vision for Richmond. By involving multiple stakeholders and assessing the transport network with all modes being evaluated with the strategic objectives in mind an integrated approach was carried out. The process has culminated in a long list of activities known as the Network Improvement Plan (NIP) and specific interventions that will inform the Richmond Programme Business Case.

Through consulting with local stakeholders, the strategic objectives of the Richmond transport network were determined. The stakeholders aspire to have a transport network which provides a choice of different mode routes that deliver a safe, accessible and direct journey to key destinations in the area. The transport network is shifting from a vehicle-centric system and is now focusing on both the ‘movement’ and ‘place’ functions of transport routes to ensure that the amenity of key areas is not compromised. This Network Operating Framework has taken a holistic approach and allowed the perspectives of key stakeholders in the community to shape the strategic direction of the transport network.

The desired future transport network is a contrast to the currently operating transport network. This does not suggest that the desired future transport network is overly ambitious but rather that the current network is inadequate. The width gap analysis of the roads and footpaths in the network displays how key routes in the network are currently deficient. These gaps will become critically insufficient in the future due to the predicted increase in traffic volume and corresponding changes in route classification. With local planning focusing on intensifying the development of Richmond, it is critical that transport planning provides routes that enable the movement of people and goods into the CBD without adversely affecting the amenity of the area. This can only be achieved by providing a variety of routes for all modes which will relieve congestion and provide a safe environment within the transport corridors. To achieve this and the other objectives outlined in the strategic planning, numerous interventions are required for all modes on a variety of routes. This NOF has successfully highlighted which interventions are necessary so a programme can be formed to improve the transport network and ensure that the prosperity of Richmond is not impeded.

Appendix A

Meeting Minutes

Appendix B

Places Map

Appendix C

Future Development Areas and Place Priority Map

Appendix D

Walking Network Map

Appendix E

Cycling Network Maps

Appendix F

Freight & Public Transport Network Maps

Appendix G

General Traffic Network Maps

Appendix H

Functional Level of Service

Appendix I

Road Width Gaps

Appendix J

Footpath Width Gaps

Appendix K

ONRC Maps

Appendix L

ONF Maps

Appendix M

VC Plots

Appendix N

AADT Modelling

Appendix O

Modal Priority Maps

Appendix P

Long List for the PBC including the Network Operations Plan

Appendix B Urban Design Strategy

Richmond Urban Design Strategy

Part of the Richmond Transport Programme Business Case

Waka Kotahi and Tasman District Council
29 September 2021

Stantec

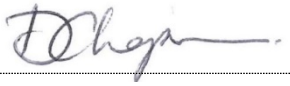
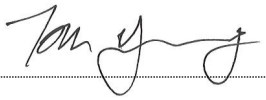
Revision Schedule

Rev No.	Date	Description	Signature or Typed Name (documentation on file)			
			Prepared by	Checked by	Reviewed by	Approved by
1	04/05/21	Draft	DC	TY	MS	MS
2	29/09/21	Final	DC	TY	MS	MS

Quality Statement

This document has been prepared for the benefit of Waka Kotahi and Tasman District Council. No liability is accepted by this company or any employee or sub-consultant of this company with respect to its use by any other person. This disclaimer shall apply notwithstanding that the report may be made available to Waka Kotahi and Tasman District Council and other persons for an application for permission or approval to fulfil a legal requirement.

PROJECT MANAGER	PROJECT TECHNICAL LEAD
Matt Soper	Daniel Chapman

PREPARED BY		
Daniel Chapman		30 / 04 / 2021
CHECKED BY		
Tom Young		03 / 05 / 2021
REVIEWED BY		
Matt Soper		04 / 05 / 2021
APPROVED FOR ISSUE BY		
Matt Soper		04 / 05 / 2021

STATUS v1 | Project No 310204514

Table of Contents

LIST OF TABLES

LIST OF FIGURES

Abbreviations

FDS	Nelson-Tasman Future Development Strategy 2019
IAP	Tasman Intensification Action Plan
NOF	Richmond Network Operating Framework
NCC	Nelson City Council
ONF	One Network Framework
PBC	Richmond Programme Business Case
RIDA	Residential Intensive Development Area
SHA	Special Housing Area
TDC	Tasman District Council
TRMP	Tasman Resource Management Plan
UDS	Richmond Urban Design Strategy

1.0 INTRODUCTION

1.1 OVERVIEW

Richmond is the Tasman District's main urban centre and is rapidly transforming from a rural service town to a metropolitan urban centre and commercial hub. Population growth since 2015 has occurred more quickly than Stats NZ predicted, which has meant housing and business land is being consumed at a faster rate. Careful planning is required now to ensure Richmond is a healthy and vibrant place to live, work and study.

To support the unprecedented growth and urban evolution that is occurring, Nelson City Council (NCC) and Tasman District Council (TDC) recently adopted a joint Tasman/Nelson Future Development Strategy (FDS).

Alongside this, the **Richmond Transport Programme Business Case** (PBC) is currently being developed. The purpose of the PBC is to better understand the current and future transport problems that Richmond is facing, and to establish a preferred programme of interventions. This project is a partnership between Waka Kotahi and TDC and seeks to establish a total transport system solution for Richmond.

1.2 PURPOSE OF THE UDS

This **Urban Design Strategy (UDS)** has been used to inform the development of the PBC, by outlining the urban design context. This has helped to ensure that the emerging preferred programme fully captures the key liveability outcomes that the local community desire.

Current Waka Kotahi and TDC policy has supported the development of this UDS. There is also a suite of planning and strategy documents either recently produced or in production, that set a clear scene for the urban design aspirations for Richmond. This strategy brings together those aspirations, alongside those of stakeholders engaged with during the PBC workshops. It frames up the high-level key moves to achieve the vision for a well-integrated and well-designed land use and transport future for Richmond.

The UDS also:

- Contributes to the framing-up of investment objectives for the PBC
- Informed the criteria used for assessing short-listed programmes of interventions
- Presents visual representations of street typologies proposed in the preferred programme, to support an understanding of the form these streets will take and how they relate to urban form aspirations for the future of Richmond.

1.3 OVERARCHING URBAN DESIGN OBJECTIVES/PRINCIPLES

Both Waka Kotahi and TDC are committed to good urban design practice. Urban design provides a sensitive and holistic approach to the planning and design of infrastructure, that meets the needs of the communities it serves and the environment in which it is constructed. This UDS is guided by key urban design objectives, as championed by Waka Kotahi and the Government:

Well-integrated urban form

Shaping good urban form means supporting safe and thriving cities through a well-integrated and well-designed land use and transport system. This encourages good quality, compact, mixed-use urban development that supports rapid and frequent transit systems. To achieve good urban form, land use and transport decisions should be jointly considered. When planning for new transport infrastructure, local spatial plans, growth and intensification strategies should be considered – and vice versa.

Mode shift: more public transport, walking and cycling

To increase the wellbeing of cities, urban mobility must be transformed. This means greater transport choice, less reliance on travel by private motor vehicles and more travel by public transport, walking, and cycling. To deliver this, urban areas need more attractive shared and active modes, good urban form, and integrated modes of movement.

Connecting people and places

Poorly designed roads in urban areas can reduce physical connections and social interactions by severing visual, physical, social or cultural linkages. Disconnected communities and poor physical connections to schools, open spaces, and neighbourhood centres can also disproportionately impact society's most vulnerable. This includes

children, elderly, low-income families, people with disabilities, and people without access to a car. Therefore, major transport projects must support community cohesion and maintain local connectivity.

Balancing movement and place

In the latter half of the 20th century, streets became primarily movement corridors for the automobile, rather than places for people to carry out public life, including movement. The wellbeing of people and communities, including their safety, relies on planning and designing streets to meet both movement and place functions.

Some streets or segments of streets require a stronger emphasis on the through movement of people and goods – by any transport mode – due to their function in the transport network. Others require a stronger emphasis on the place function to support people gathering and engaging with the activities afforded to them in that location, driven by the land use context.

1.4 GOVERNMENT POLICY STATEMENT ON LAND TRANSPORT

The Government Policy Statement on land transport (GPS) sets the Government's priorities for land transport investment over the next 10-year period. It also sets out how money from the National Land Transport Fund (NLTF) is spent on activities such as public transport, state highway improvements, local roads, and road safety. Waka Kotahi NZ Transport Agency and local authorities need to ensure spend on transport reflects Government priorities outlined by the GPS.

Those priorities are Safety; Better Travel Options; Climate Change and Improving Freight Connections.

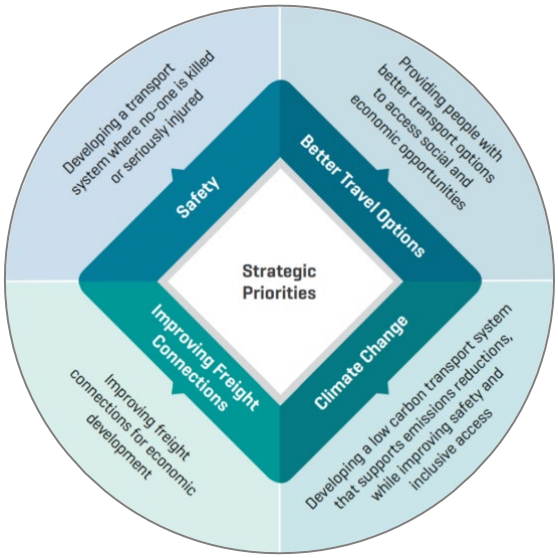


Figure 1: Government GPS Land Transport Strategic Priorities

1.5 NATIONAL POLICY STATEMENT – URBAN DEVELOPMENT

The *National Policy Statement – Urban Development (NPS-UD)* aims to ensure that New Zealand's towns and cities are well-functioning urban environments that meet the changing needs of our diverse communities.

The NPS-UD directs local authorities to enable greater supply and ensure that planning is responsive to changes in demand. It does this whilst seeking to ensure that new development capacity enabled by councils is of a form and in locations that meet the diverse needs of communities and encourages well-functioning, liveable urban environments. It also requires councils to remove overly restrictive rules that affect urban development outcomes in our cities. Key policies relevant to the UDS are:

- The intensification policies (Policies 3, 4 and 5) seek to improve land-use flexibility in the areas of highest demand – areas with good access to jobs, community services and good public transport
- The responsive planning policy (Policy 8) seeks to improve land-use flexibility by ensuring local authorities have regard to plan changes that would add significantly to development capacity
- The removal of minimum parking rates in district plans (Policy 11) seeks to improve land-use flexibility in urban environments, by allowing more housing and commercial developments, particularly in higher density areas where people do not necessarily need a car enabling urban spaces to be for higher value purposes.

Developers must still provide accessible car parking, but the number of other car parks they will provide will be driven by market demand.

1.6 CLIMATE CHANGE

1.6.1 Climate Change Response (Zero Carbon) Amendment Act 2019

The *Climate Change Response (Zero Carbon) Amendment Act 2019*[1] provides a framework by which New Zealand can develop and implement clear and stable climate change policies that:

- Contribute to the global effort under the Paris Agreement to limit the global average temperature increase to 1.5° Celsius above pre-industrial levels.
- Allow New Zealand to prepare for, and adapt to, the effects of climate change

It sets a new domestic greenhouse gas emissions reduction target for New Zealand to:

- Reduce net emissions of all greenhouse gases (except biogenic methane) to zero by 2050
- Reduce emissions of biogenic methane to 24–47 per cent below 2017 levels by 2050, including to 10 per cent below 2017 levels by 2030
- Establish a system of emissions budgets to act as stepping-stones towards the long-term target
- Require the Government to develop and implement policies for climate change adaptation and mitigation
- Establish a new, independent Climate Change Commission to provide expert advice and monitoring to help keep successive governments on track to meeting long-term goals.

1.6.2 He Pou a Rangi - The Climate Change Commission

The Climate Change Commission released their draft package of advice to Government on the steps Aotearoa must take to drastically reduce greenhouse gas emissions and address climate change in January 2021. In response, the government has pledged to release an Emissions Reduction Plan before the end of the year after receiving the final advice, which will set out how the first three emissions budgets will be achieved.

Of the advice provided in the report, the following elements are of relevance to the Richmond PBC:

- Transport is identified as one of the most important targets for change
- Their analysis “shows that reducing transport emissions is crucial to meeting our emissions budgets and reaching net zero by 2050”
- The report envisions "near complete decarbonisation of … land transport”
- Access to walking, cycling and public transport should also be upgraded
- It recommends that vehicle travel should be rapidly electrified and there should be a ban on fossil fuel vehicle imports by 2035
- Freight trucks should be decarbonised and significant amounts of freight should be moved onto rail and coastal shipping, which are easier to electrify.

1.6.3 Climate Change at Waka Kotahi and TDC

Both Waka Kotahi and TDC are committed to addressing climate change in terms of mitigation and adaptation. At Waka Kotahi, it is guided by *Toitū teTaiao - Our Sustainability Action Plan* and extends to all facets of their work programmes. At TDC, it is guided by the *Tasman Climate Action Plan,* and also extends into their policy and strategies.

These documents have similar objectives and both outline plans for reducing greenhouse gas emissions and achieving a low carbon transport system. There is an emphasis on creating a multi-modal land transport system where public transport, active or shared modes are the first choice for most daily transport needs. They also aim for greater resource efficiency in infrastructure and development.

1.7 NEW ZEALAND URBAN DESIGN PROTOCOL

The *New Zealand Urban Design Protocol* (the Protocol) was developed in 2005. Both Waka Kotahi and TDC are signatories to the Protocol and as such, make a voluntary commitment to specific urban design initiatives, guided by the essential design qualities of good urban design identified in the Protocol as the “Seven Cs”:

[1] https://environment.govt.nz/acts-and-regulations/acts/climate-change-response-amendment-act-2019/ accessed 15/04/21

- Context – the relationship between buildings, spaces and networks
- Character – distinctive character, heritage and identity
- Choice – ensuring diversity in lifestyle and transport options
- Connections – ensuring accessibility
- Creativity – expressions of creativity, innovation and imagination
- Custodianship – sustainable design solutions that will endure
- Collaboration – communicating and sharing knowledge.

1.8 WAKA KOTAHI

At Waka Kotahi, urban design is recognised as an approach that is sensitive to and integrated with the economic, environmental, and social requirements of the built and natural environments. The following strategies and policies capture the policy context for this Urban Design Strategy.

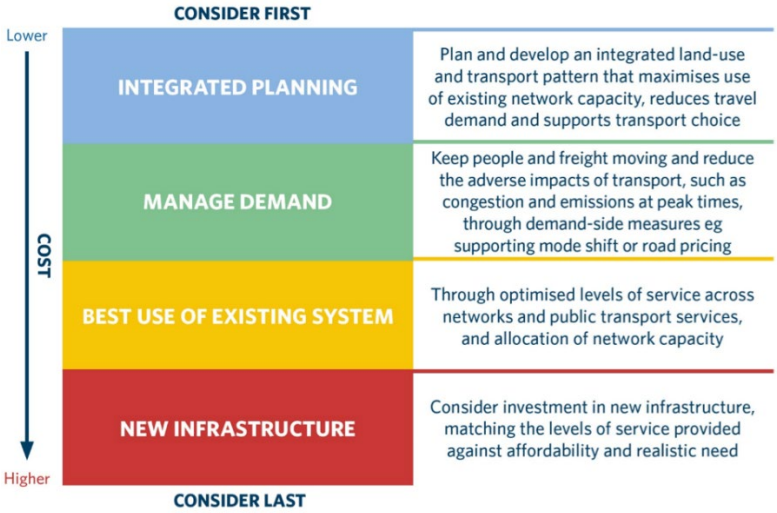


Figure 2: Waka Kotahi intervention hierarchy

Waka Kotahi commits to an Environmental and Social Responsibility Policy, as required under Section 96(1)(a) of the *Land Transport Management Act 2003*. To implement this policy, Waka Kotahi aims to integrate good urban design into all their activities.

Waka Kotahi is a signatory to *The New Zealand Urban Design Protocol* and its principles and intent are carried forward into Waka Kotahi policy and practice. Central to this and especially at a strategic level, is the integration of land-use and transport. The significance of this is demonstrated in the Waka Kotahi's Intervention Hierarchy (Figure 2).

1.8.1 Keeping Cities Moving

Keeping Cities Moving, published in September 2019, is Waka Kotahi's plan to increase the wellbeing of New Zealand cities by growing the share of travel by public transport, walking and cycling. It focuses on three main ways to support this mode shift:

- Shaping urban form
- Making shared and active modes more attractive
- Influencing travel demand and transport choices

1.8.2 Bridging the Gap

Bridging the Gap, published in 2013, outlines a commitment to ten principles of good urban design practice in transport projects. The urban design principles reflect Waka Kotahi's expectations for the integration of urban design in all phases of highway projects and the desired interdisciplinary approach to addressing urban design issues. The principles are applicable to all Waka Kotahi projects from the large and complex to the small and simple. They are:

- Designing for the context
- Integrating transport and land use
- Contributing to good urban form
- Integrating all modes of movement
- Supporting community cohesion

- Maintaining local connectivity
- Respecting cultural heritage values
- Designing with nature
- Creating a positive road user's experience
- Achieving a low maintenance design

1.8.3 One Network Framework

The One Network Framework (ONF), currently in development, is Waka Kotahi's proposed movement and place framework, supporting the integration of land use and transport. It enables consideration of how a street needs to be planned and designed to support both movement and place functions. This includes different mode priorities on streets, surrounding land uses, community wellbeing, economic activity and growth aspirations for the future. By assessing the movement and place functional requirements for the future state of a street, the changes needed to that street can be defined and programmed for future investment.

Within the assessment of the movement function, it prompts consideration of the needs of all modes of transport, so that the optimal use of limited road space can be defined. This results in modal priorities for streets, that can be static or dynamic, changing throughout the day as needs change.

1.8.4 Road to Zero

Road to Zero, published in December 2019, is the government's road safety strategy for 2020-2030. It marks a step-change in road safety for New Zealand, centred on a 'Vision Zero' approach. It moves away from the tacit acceptance that some level of road trauma and death an inevitable risk people must take when moving around. It shifts New Zealand to an approach that road users can and do make mistakes, but that those mistakes should not result in serious trauma or death. Put simply, it aims to design out trauma and death from New Zealand's transport network and is premised on no death or serious injury being considered acceptable.

Our vision is:

a New Zealand where no one is killed or seriously injured in road crashes. This means that no death or serious injury while travelling on our roads is acceptable.

1.8.5 Arataki - Our Plan for the Land Transport System 2021-31

Arataki - Our Plan for the Land Transport System 2021-31 outlines long-term objectives for the land transport system to adapt to evolving demands and changing needs. The following outcomes aim to be delivered in the Nelson-Tasman-Marlborough region over the next 10 years:

- Improve urban form – creating a well-integrated and well-designed land use and transport system that supports safe and thriving cities, with increased public transport access, walking and cycling options and reduced carbon emissions
- Transform urban mobility – increase transport choice and reduce reliance on travel by private motor vehicles
- Significantly reduce harms – support implementation of the Road to Zero Safety Strategy and regional safety strategies
- Tackle climate change – working to understand risks and opportunities to support climate change adaptation and mitigation. Affirms focus on reducing transport greenhouse gas emissions to tackle climate change and support the transition to a low-emission economy
- Supporting regional development.

1.8.6 Toitu te Taiao - Our Sustainability Action Plan

Toitu te Taiao - Our Sustainability Action Plan sets out the steps to deliver the objectives of Arataki. These involve using levers of control and influence available to Waka Kotahi. This document:

- Sets a vision is for a low carbon, safe and healthy land transport system
- Aims to achieve a multi-modal land transport system where public transport, active or shared modes are the first choice for most daily transport needs
- Emphasises freight movement and attractive tourism routes that tread lightly on the land and are sensitive to natural and built environments.

1.9 TDC POLICY

Through the TDC Urban Design Action Plan 2008 the council are committed to leading by example in the delivery of good urban design outcomes through investment in community infrastructure, such as streets and community facilities. This commitment is further captured and guided through the following policy documents and process:

- Tasman Resource Management Plan – Chapter 6 – Urban Environment Effects
- Urban Design Guidelines – to inform private development
- Rules for intensive subdivision or building construction (RIDA)
- Urban Design Panel – independent.

The Tasman Resource Management Plan (TRMP) identifies the following key issues for future development in Richmond[2]. Note that a review of the TRMP has commenced and the development of the new Tasman Environment Plan - Aorere ki uta, Aorere ki tai, which will eventually replace the TRMP and the Tasman Regional Policy Statement (TRPS), is being prepared.

- The management of peripheral growth in a manner that enables Council to progressively upgrade services on the western, south-eastern and north-eastern margins of Richmond
- Industrial and mixed business land located to minimise adverse effects on neighbours, on the Waimea estuary, watercourses and their margins, and on the productive potential of land
- Enhancement of the setting of Richmond, especially the coastal margin and the hill backdrop
- Upgrading of the amenity of the central business area, main highway routes and town entrances
- Maintaining the Central Business Zone as the central focus for intensive retailing, administration and community interaction, and as the core pedestrian-oriented area
- Meeting the demand for a range and choice of residential housing within the Residential Zone in Richmond.

The Urban Design Guidelines[3] includes guidance on the planning and design of streets, covering the topics of:

- Street type, including considerations of pedestrian comfort, safety, amenity and a clear hierarchy
- Street connectedness, including provision for all modes
- Street trees, including approach and benefits
- Garages and parking, including avoiding dominance on the street as a public space
- Building frontages to the street, including intervisibility between people inside and the street.

1.10 TDC STRATEGIES

A suite of plans and strategies recently developed by TDC, or soon to be released, describe a vision for Richmond and set out specific principles, objectives and priorities.

- Nelson – Tasman Future Urban Development Strategy 2019
- Tasman Intensification Action Plan 2020
- Draft Walking and Cycling Strategy 2019 (work in progress)
- Richmond and Motueka Town Centre Parking Strategy 2018
- Nelson/Tasman Public Transport Study 2020
- Richmond Network Optimisation Framework 2020
- Tasman 2020 Town Centre Health Checks

Given the recency and relevance of these, they have been fundamental to the identification of key issues in Section 4, and the key moves in Section 6. Their collective vision for Richmond has been summarised in Section 6.0 and a brief summary of the key points from each document is included in Appendix A.

2 Tasman Resource Management Plan, Chapter 6 – Urban Environment Effects, Section 6.8
[3] Tasman Resource Management Plan - Part II, Appendix 2 – Urban Design Guide

2.0 GROWTH AND DEVELOPMENT CONTEXT

The Tasman region is growing fast – faster than predicted year on year. It was the 7th fastest growing region in New Zealand between 2013 and 2018 (with 1.8% growth per annum[4]); Nelson was the 12th fastest growing region (with 1.1% growth per annum). In the five years between 2015 and 2020, average annual growth in Tasman increased to 2.2% (ranging between 1.9% and 2.4%). The latest provisional Stats NZ population estimate for Tasman, estimates the population grew by 2.4%, or 1300 residents, in the last year, to 56,400 as at 30 June 2020.

In 2016, the Government released the National Policy Statement on Urban Development Capacity (NPS-UDC). This directed local authorities to provide sufficient development capacity in their resource management plans, supported by infrastructure, to meet demand for housing and business space.

Statistics NZ had previously projected that the Nelson Urban Area's population was likely to grow by not more than 9.95% in the ten years between 2013 and 2023, meaning it was classified as 'medium growth', according to the NPS-UDC, falling just below the ten percent threshold defining 'high growth' urban areas. Tasman has exceeded this by some margin growing by over 15% in the seven years between 2013 and 2020.

Demand for housing is significantly outstripping supply. Due to geographical constraints, Nelson City (within the boundary of Nelson City Council (NCC) has struggled to meet demand and developers and property investors have shifted their attention to the nearest available flat land in Richmond and the whole of the Waimea Plains including Brightwater, Wakefield, Mapua (all within TDC jurisdiction).

2.1 STRATEGIC CONTEXT

2.1.1 Nelson Tasman Future Development Strategy

The Nelson Tasman Future Development Strategy (FDS, 2019) was developed in response to the NPS-UDC and was adopted by the TDC and NCC in July 2019. It sets out the long-term picture for their shared future urban growth, indicating that Nelson and Tasman may need to find space for up to 40,000 extra people and 24,000 extra homes to 2048. Richmond is identified as a key centre for growth and residential intensification, with capacity for intensification (or mixed use) in the urban area of the township and some residential expansion to the foothills of the Richmond Ranges. The long-term housing capacity for identified for Richmond is 952 additional units within intensification areas and 1,628 additional units within Richmond South expansion area. It also outlines that in the long term extra business area land may be needed in Richmond. There is potential for a prime business location adjacent to the designation for the Hope Bypass.

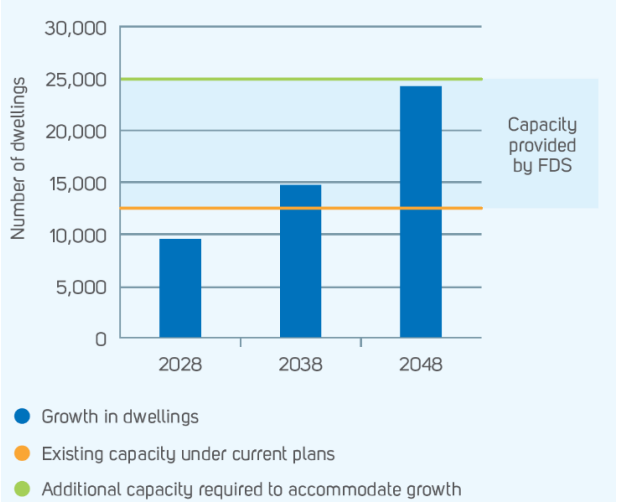


Figure 3: Growth capacity enabled by the FDS

The FDS identifies some high-level phasing of development. The central intensification area is scheduled for 2028-2038 and the southern expansion area is scheduled for 2038-2048. However, intensification is already underway and proposed to be extended between 2028-2038. The Richmond South expansion area was proposed for 2038-2048 in the FDS but now due to increased growth Council anticipates this being required earlier – about 2032.

Refer to Appendix A for further detail on the FDS.

2.1.2 Tasman Intensification Action Plan

While some land has been identified for expansion, the current LTP projects about 25% of the growth in Richmond is expected to occur in existing 'brownfield' areas in the form of intensification, and some of the greenfield development is expected to be medium density. The Tasman Intensification Action Plan 2020 is a sub

[4] www.stats.govt.nz/information-releases/subnational-population-estimates-at-30-june-2018-provisional

strategy of the FDS that outlines ways in which Council can enable intensification and sets out specific actions with timescales and departmental owners.

Recent development

Richmond is already experiencing significant residential development. It is anticipated that development currently underway in Richmond West will provide approximately 1,300 new dwellings, a new primary school, and a small local centre in the next 10 years. Most of this housing development is expected to be completed in the next 5 years[5]. Due to the pace of growth, housing developments like Richmond West have been progressing without investment in supporting transport infrastructure. Intensification is also already occurring in areas close to the town centre in the form of infill development and low-medium density redevelopment of single or amalgamated lots.

In late 2018, Queen Street was rebuilt with an award-winning design that created a pedestrian-focussed public space. Queen Street now has wide pedestrian-friendly footpaths, narrow vehicle lanes and a design speed of 30 kilometres/hour for a slower and safer overall environment.

Richmond's CBD has seen recent activity in the form of a modern retail development anchored by K-Mart and The Warehouse. A new commercial development has recently commenced at Richmond West on Lower Queen Street, centred around a luxury multi-screen cinema and casual dining, creating a new regional destination west of Central Richmond.

The Richmond north-eastern gateway area situated between Salisbury/Champion Roads/SH6 has also seen recent change. A service station and ancillary facilities have been developed near to the Richmond Aquatic Centre, and there is a Private Plan Change allows for a supermarket and ancillary development on the corner of Salisbury/Champion Roads.

In Richmond, residential building consents have continued to outstrip the creation of titles over the past year, meaning that vacant titles are being taken up faster than new titles are being created. Supply of lots is expected to increase significantly in the next 12-18 months based on developments consented or under construction[6].

Other growth areas

There are several outlying settlements in Tasman District which are also growing, with corresponding increases in traffic volumes. Wakefield, Brightwater, Mapua and Motueka have all grown in recent years and are identified in the FDS for further growth over the next 30 years. Motueka and Mapua to the north-west of Richmond connect via SH60. Brightwater, Pigeon Valley and Wakefield connect from the south via SH6. 'Lifestyle' development areas are also expanding in the Moutere Hills to the west and across the Waimea Plains.

This means that growth (and subsequently transport needs) is not going to be centred in only one location, but across both the Richmond urban area as well as from wider spread rural areas across Tasman.

2.2 RICHMOND GROWTH AREAS

The Tasman Resource Management Plan (Chapter 6) targets expansion and intensification over five areas as outlined below. This is overlaid by the intensification and expansion areas identified in the FDS, and Special Housing Areas (SHAs) as shown in Figure 4.

Richmond West – Limited urban expansion in the Lower Queen Street area to accommodate residential, business and industrial land. And limited expansion in Richmond West to McShane Road as the town edge and boundary between urban and rural land uses, with the exception of a light industrial park to be located outside the town boundary opposite the Medium Density Fibreboard plant. Several SHAs are identified in this area.

Central Richmond – Residential intensification through infill and redevelopment in the existing central residential area. Plan Change 66: Richmond Housing Choice identified areas for intensification within walking distance or close to town centres and urban facilities, collectively named the Residential Intensive Development Area (RIDA). The plan change became operative on 15 December 2018. It promotes and encourages intensive residential development and its objectives are to provide "for a diversity and choice of housing density and form to cater for a growing population, a changing demographic profile and a range of living options". The intensification areas identified within the FDS add additional areas to this.

Richmond South – Limited southward residential expansion between SH6 north of Hope and Hill Street, and a local commercial node, with Stage 1 being defined by Spur Ridges between Hart Road and Whites Road.

[5] Richmond Transport Strategic Case
[6] TDC, Richmond Settlement Area Report 2018

Development in this area is already well underway. The FDS expansion areas includes the area south of the Spur Ridges to Whites Road. Land here is proposed for a range of densities with lots from 300 square metres to 1,000 square metres in the foothills. This area is adjacent to Richmond and is easily served by extensions of existing infrastructure and public transport networks. TDC intends to develop a structure plan in the near future to guide development in this expansion area.

Richmond East – Limited residential intensification in areas not limited by natural hazards, and limited rural residential expansion on the south east hill slopes. Several Special Housing Areas are identified in this area.

Hope - Limited expansion in Hope to accommodate residential and business development.

2.2.1 Special Housing Areas

In 2017, the *Housing Accords and Special Housing Areas (Tasman) Order 2017* declared several growth areas to be SHAs, enabling developers to expedite residential developments. The SHA areas included significant parts of the Richmond West Development Area, signalling a change in land use aspiration towards a much higher proportion of residential development. Residential development in the Richmond West SHAs is well underway. Three other areas were identified in the foothills to the south-east of Hill Street.

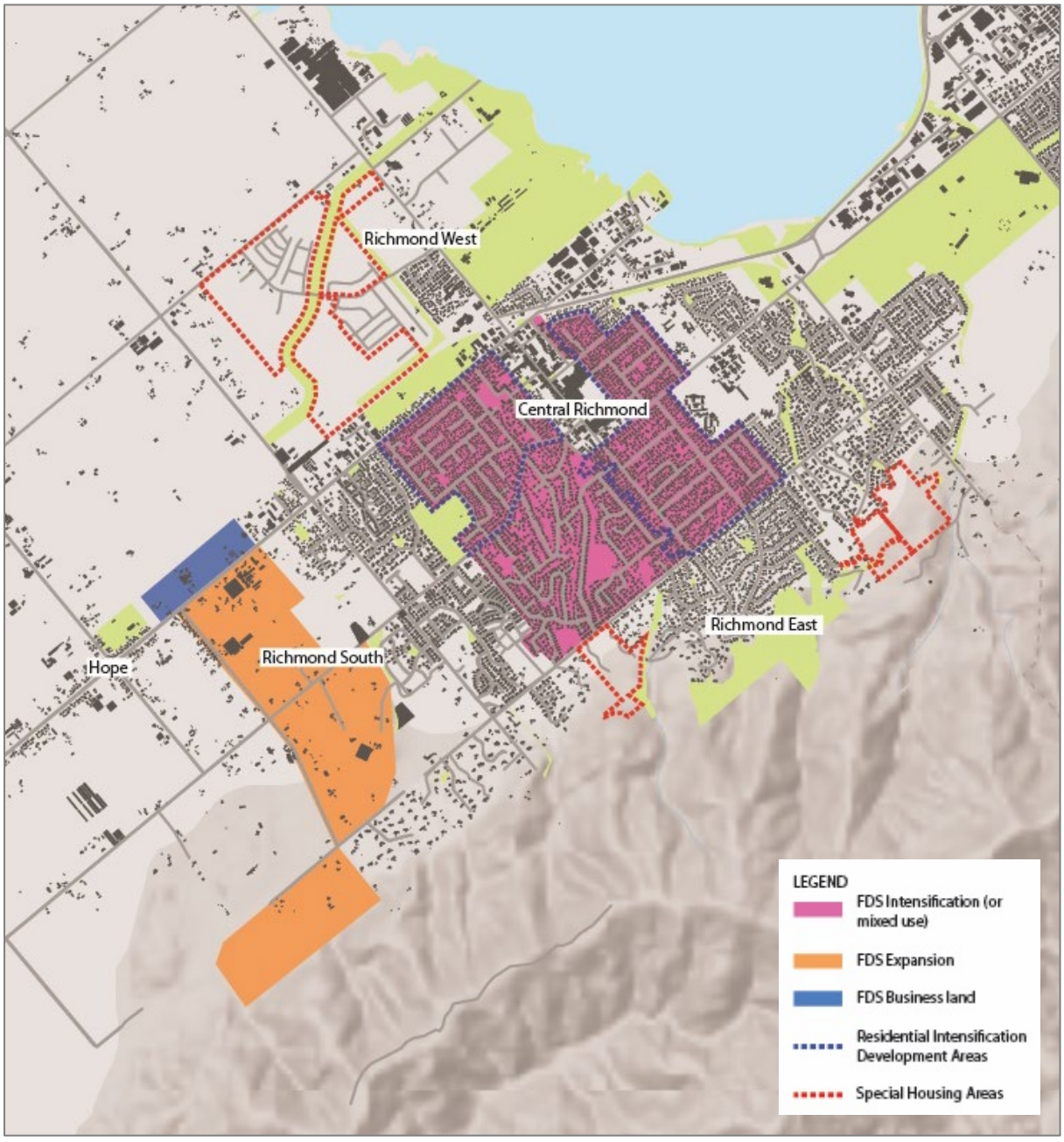


Figure 4: Richmond growth areas

3.0 DEMOGRAPHIC CHANGE

Demographic change is a key driver for shaping the urban form and the transport, as is identified by Waka Kotahi in their policy and guidance. The population of Richmond, and the Tasman region, is growing and changing, rapidly. This means the way that Richmond is planned for needs to shift to ensure it meets the needs of the anticipated population changes, while at the same time seeking to attract and retain the young people it needs to support its economic development and sustainable future.

In the *Tasman's Ageing Population 2018* report, it is projects that in Tasman, by 2038[7]:

- The number of older people (65+) will almost double and will make up more than a third of Tasman's population
- One in five Tasman residents will be 75 years or over
- Younger age groups will decline as a proportion of total population
- There will be over twice as many older people as there are children
- Tasman will be the second oldest population in the country.

For Richmond[8], the proportion of the population aged 65 years and over is projected to increase from 23% in 2018, to 38% by 2043, while all other age groups shrink in size. The average household size is projected to decrease from 2.6 people per household in 2018 to 2.3 people per household by 2043. It is expected that this will drive additional housing demand.

A recent study[9] estimated that under a high growth scenario, the percentage change in the 75+ years age category between 2018 and 2053 could be as much as 325.8%, vastly higher than all other age ranges. With this change comes a range of factors[10] that influence how growth is planned for, including:

- More residents with disabilities and health issues
- Demand for more accessible footpaths, seating and toilets
- Labour market shortages and more people working past the age of 65 years
- A growing consumer group for products and services preferred by older people
- Demand for smaller, accessible houses
- More residents on limited incomes
- An increasing number of volunteers
- A need to adapt the way information and services are provided.

This means there needs to be a complimentary shift in how access and mobility is provided for, and what sort of urban form is encouraged. According to a recent Council survey[11], residents aged 65 and over are more likely to prefer smaller dwellings, with 40% preferring a small house, unit or townhouse in town. This also happens to be what young adults are looking for, along with a preference for walkable, amenity rich, dense and diverse places.

Therefore, if planned and designed carefully, future development could support both the aging population and the attraction and retention of young talent to address potential labour market shortages.

[7] TDC, Tasman's Ageing Population, July 2018
[8] Richmond Settlement Area Report 2018
[9] Jackson, N., TDC and Wards – Population, Household and Dwelling Projections 2018-2053, 2019
[10] TDC, Tasman's Ageing Population, July 2018
[11] TDC, Intensification Action Plan, August 2020.

4.0 EXISTING RICHMOND

4.1 CONTEXT

4.1.1 Urban Form

Richmond has a generally concentric settlement pattern with a town centre at its core and residential surrounding it. Richmond has initially developed around a northwest – southeast axis, centred on Queen Street and the town centre. The old Nelson Section railway line, along the alignment of the current Great Taste Trail and the Hope Bypass designation, provided a clear boundary to the main urban area. Subsequently, SH6 has defined this northern and western boundary and growth has predominantly occurred along a northeast – southwest axis following SH6 and out to the foothills of the Richmond Ranges. This boundary has, until relatively recently, contained most of Richmond's urban activity.

Recent development has occurred around the edges of the urban area with a large urban extension in Richmond West. This westward expansion of Richmond's residential catchment, enabled through the SHA legislation, exacerbates the severance effects and safety impacts of SH6 – Gladstone Road and the Lower Queen Street – Gladstone Road intersection.

Figure 5: Richmond's urban form showing the scale, density and distribution of buildings (Richmond West not mapped)

Richmond's built form is generally low density, low rise, characteristic of suburban regional New Zealand. Most of the residential development is single storey detached housing. However, in recent years, multi-storey and multi-unit development has started occurring within the RIDA and adjacent to open space corridors within Richmond West. This signals a significant shift in housing diversity for Richmond, a positive step toward meeting the demands of the changing demographics. Larger lifestyle blocks extend south and east into foothills and west into the surrounding productive land.

The town centre is also predominantly low rise, but with a few newer developments of 2 and 3 storey punctuating the skyline. The core of the town centre along Queen Street has a reasonably fine grain to it, supporting a more urban and walkable experience. In the north-east edge of the centre, exists larger format retail buildings, including a modern shopping mall development (Richmond Mall), large format retail (Kmart) and a supermarket (Pak n Save) served by a large, continuous surface level carparking area. These larger format buildings and car parking areas have a detract from the urban experience of the town centre and its walkability.

The western end of the town centre, along SH6 – Gladstone Road near SH60, at the western end of Lower Queen Street and northwards along Beach Road is a mix of commercial and industrial buildings with associated parking and yards.

4.1.2 Street Network

Richmond is located on a key regional transport corridor at the convergence of SH6 and SH60. All regional roads from the south via SH6 and west via SH60 lead to Richmond and through-traffic to Nelson must pass through Richmond. It is a key focal point for the Tasman/Nelson economy, as traffic passes through it for key regional trips to primary locations such as the port, commercial and industrial areas, education, hospital and airport. There are no alternative routes for regional traffic, making the region vulnerable to the impacts of road closures and road accidents in Richmond.

SH6 and SH60 provide vital cross-district and inter-regional connections for freight and are the primary freight routes through Richmond. There are several high-profile destinations in Tasman, including the Abel Tasman National Park, Heaphy Track, and Golden Bay. This all leads to a high volume of traffic passing through Richmond along SH6. When congested, rat-running occurs through Richmond's inner streets, leading to safety issues and the erosion of place values.

The 'internal' street network of urban Richmond consists of core axial routes of Queen Street - Lower Queen Street and Wensley Road – Salisbury Road, inner ring routes around the town centre of Oxford Street, Talbot Street and McGlashen Avenue and outer ring routes of Champion Road, Hill Street, Hart Road, Bateup Road and McShane Road. Within and around these routes are networks of semi-gridded local streets in the flatter, older areas around the town centre, and serpentine, cul de sac streets in the undulating topography of the foothills and more recent development areas. Outside of the urban area, streets are laid out in a large grid extending through agricultural fields.

The recently completed Network Operating Framework (NOF) for Richmond identified the current and aspirational street typologies based on Waka Kotahi's One Network Framework (ONF). The current state shows a predominance of 'Urban Connector' typologies with few 'Civic Space' and 'Activity Street' typologies, indicating low influence from adjacent places of higher value on the current street design. Refer to section 4.1.3 below for areas of high place value.

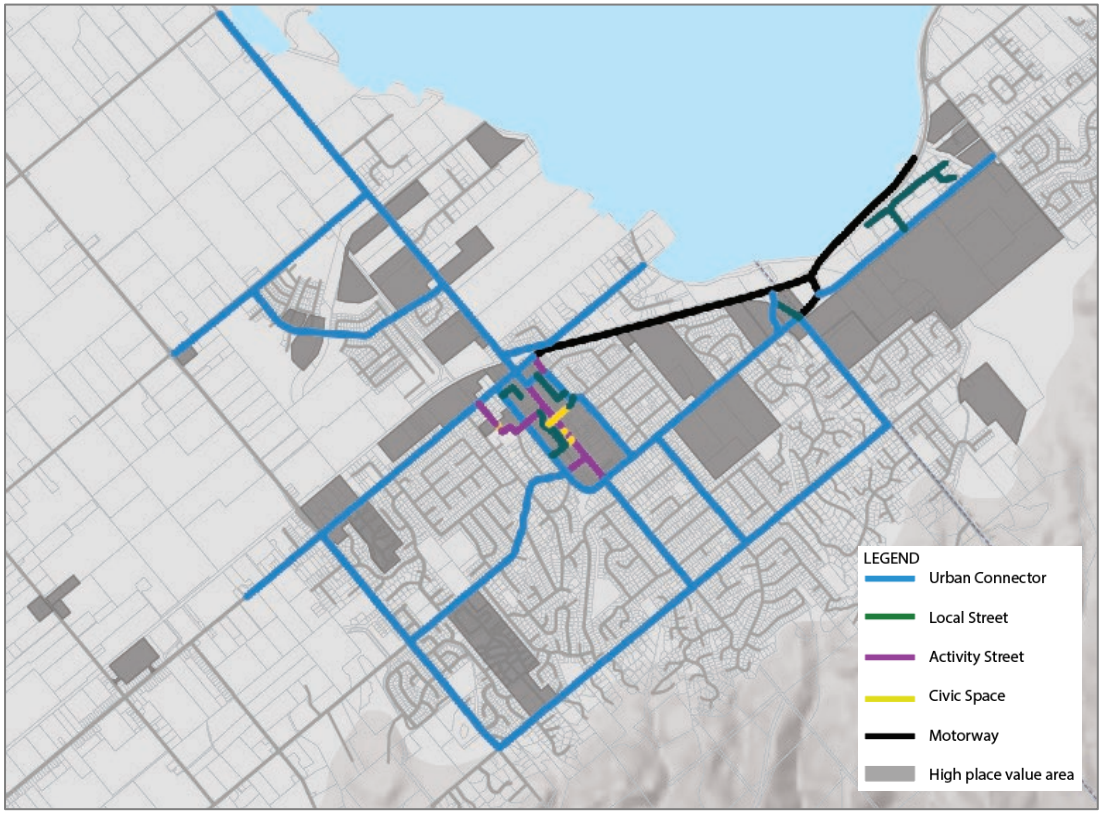


Figure 6: Current ONF Street Typologies

Due to the relatively flat topography, urban scale and axial street core, Richmond is well placed to support active transport. The areas identified for intensification in the Tasman Resource Management Plan and the FDS are within a 10-minute walk to the town centre. The remainder of Richmond is within a 10 – 15 minute cycle from the town centre. A network of walking and cycling routes has been identified by TDC and included in the Richmond NOF. This includes primary (dark green and dark purple) and secondary (light green and light purple) routes, both on-road and off-road, as shown below.

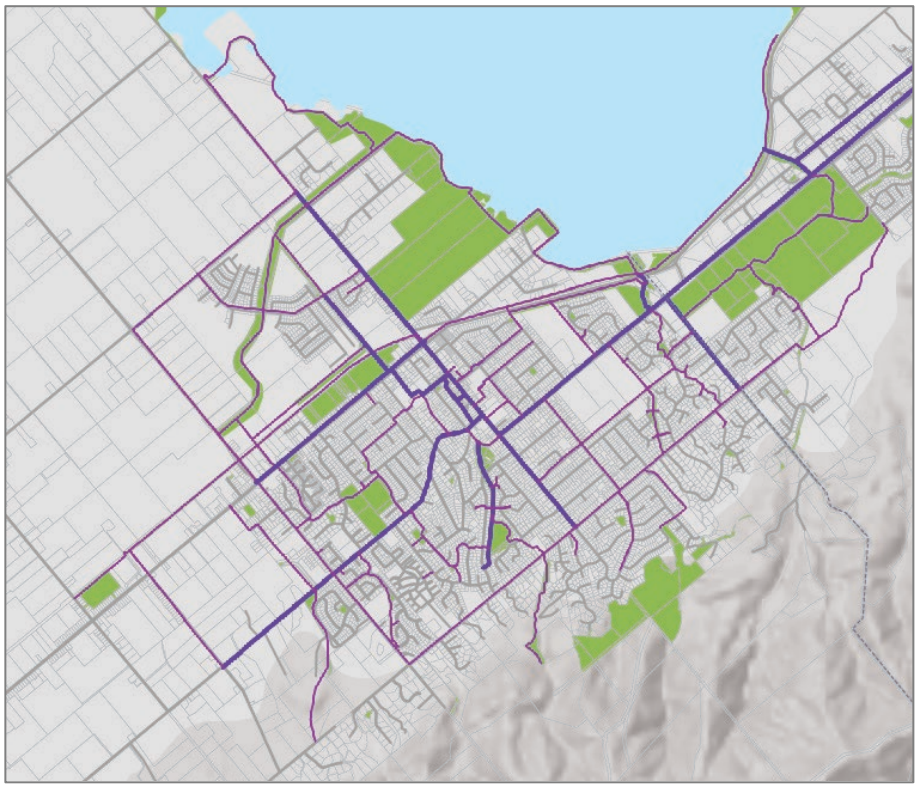


Figure 7: Walking routes

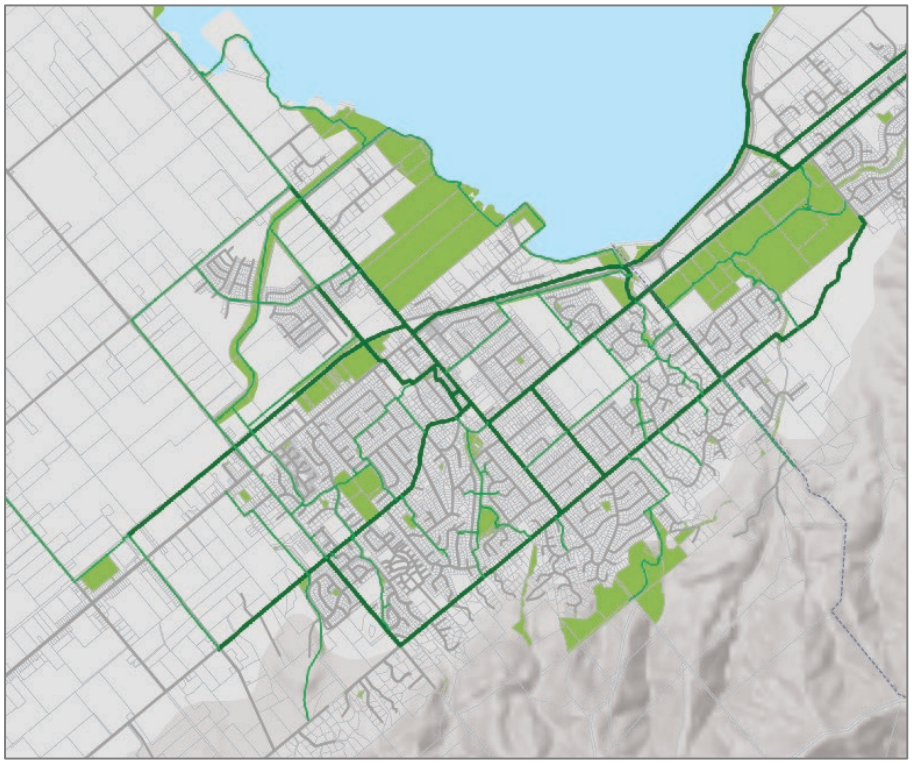


Figure 8: Cycling routes

4.1.3 Place value

Also as part of the development of the Richmond NOF, key destinations have been identified and classified into 4 levels of priority. Destinations, generally, are distributed across the entire Richmond area, however the highest priority places are mostly focussed along an L-shaped corridor following Lower Queen St, Queen St and Salisbury Road.

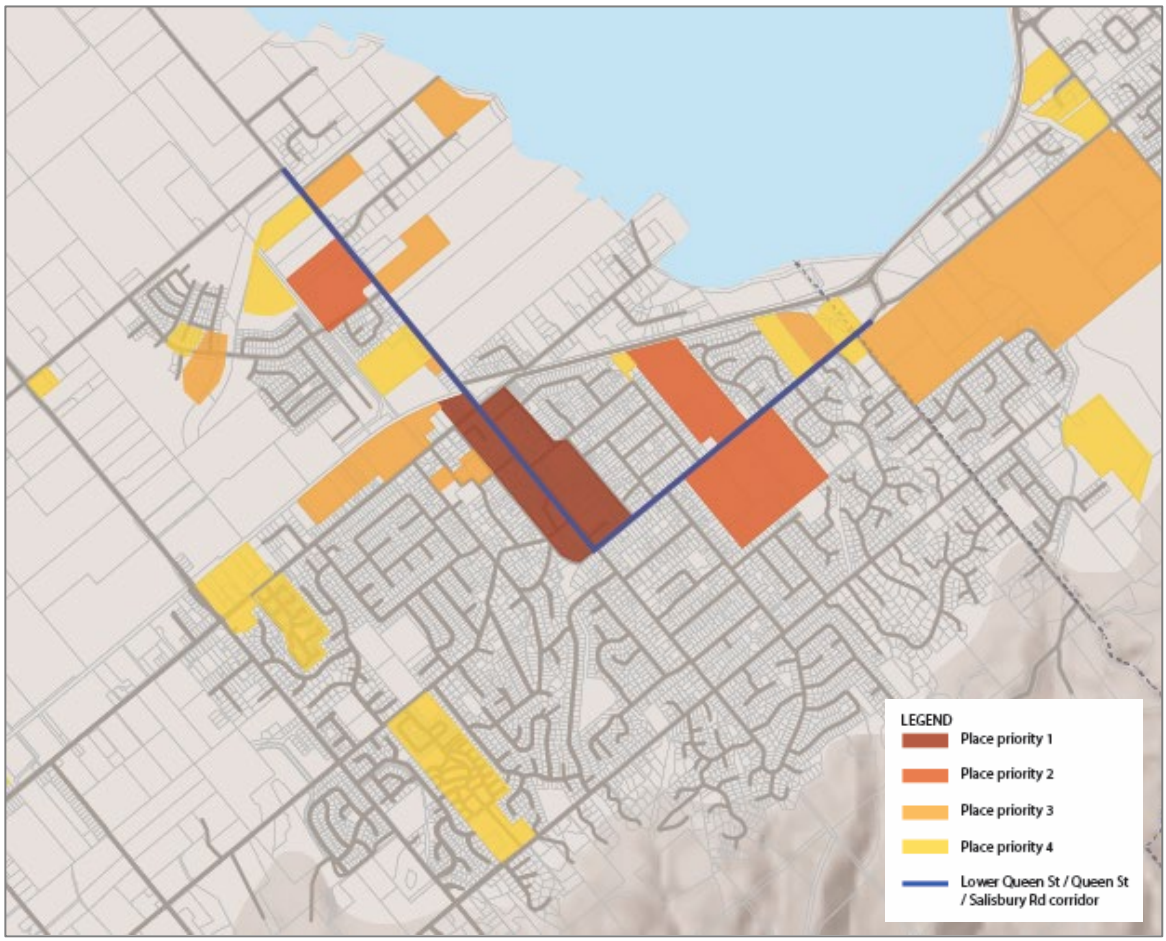


Figure 9: Priority places

4.1.4 Landscape setting

The settlement of Richmond lies between the Waimea river and estuarine system and the boundary with Nelson City near Saxon Field. The local area around Richmond is largely rural in character, with Richmond itself containing industrial activities and urban developments. Although it is near to the coast, access to the coastal margin is difficult both physically and visually[12]. The shoreline of the Waimea estuary has been modified through reclamation and industrial development[13]. Richmond is more modified and urban in character while at the same time more open and less spatially intimate compared to other coastal areas on the Tasman coast. Pastoral land use activities including grazing, horticulture and viticulture form a grid between the mountains and the coast. The Waimea Inlet, with its barrier islands, spits, beaches, and sand dunes are considered important local resources on the coast to be protected. It is also considered to be of national significance due to the presence of endangered bird species, namely white heron, threatened royal spoonbill, Australasian bittern and banded rail[14]. The Richmond Ranges to the south and east of the township are distinctive features, along with views to the Mt Arthur Range and Takaka Hills in the distance.

[12] Boffa Miskell Ltd. (2005). Tasman District coastal landscape character assessment background report - Tasman Bay regional coastal area. Boffa Miskell
[13] Kidson, L. (2007). Waimea Inlet Assessment. Kidson Landscape Consulting. Nelson
[14] Ibid

4.1.5 Open space

A number of reserves and parks intersperse the residential area of Richmond providing active and passive recreation opportunities, including linear open spaces following streams with some recent open spaces following man made drainage channels.

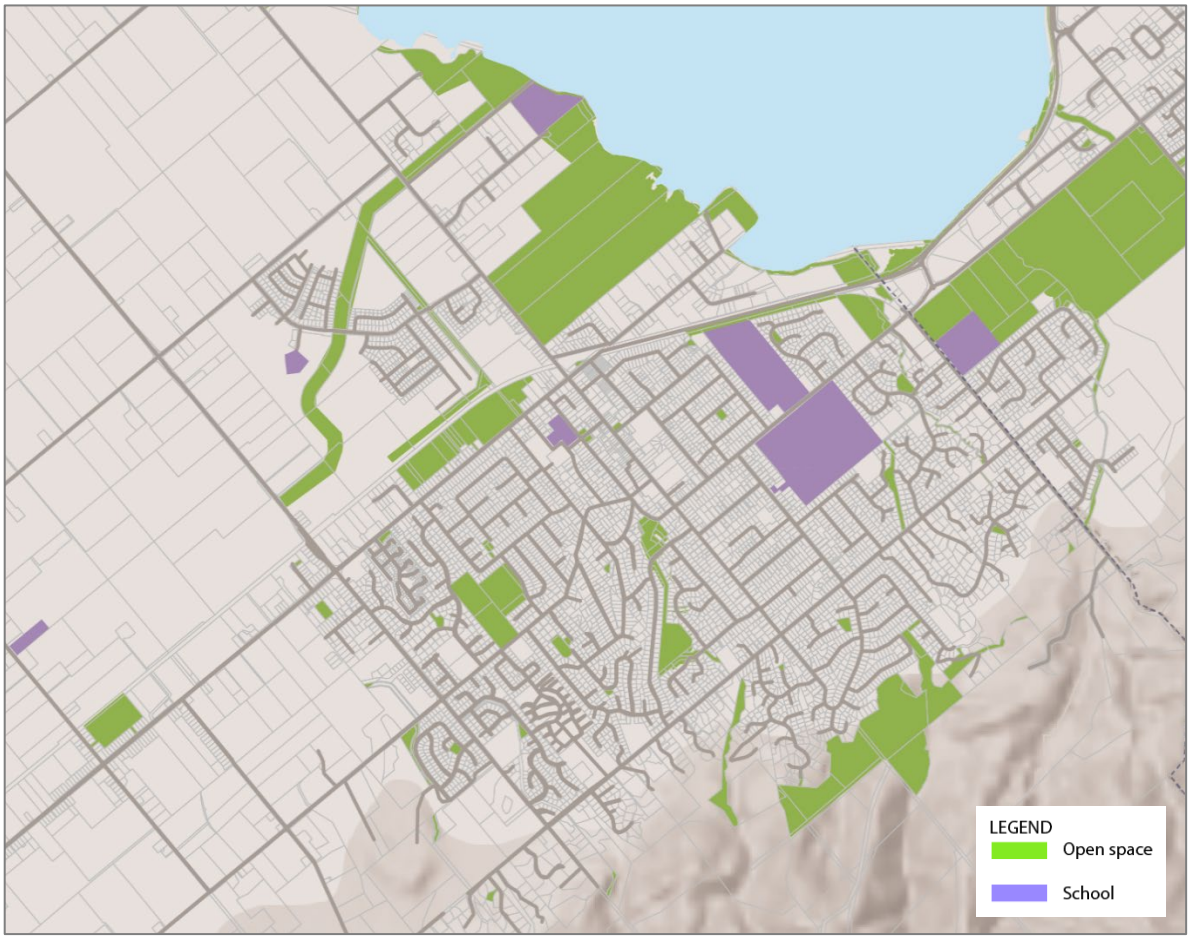


Figure 10: Richmond's open spaces

Greenspaces for organised sport can be found in the northern and eastern parts of Richmond, namely Richmond Park Racecourse on Lower Queen Street, Silvan Forest Mountain Bike Park on the boundary between Tasman and Nelson and Saxton Fields (within Nelson) containing an international cricket ground and a velodrome. Sundial Square is the primary town centre urban open space, immediately off Queen Street near the centre of town. Waimea College, Garin College and the Alexandra Hospital each have large areas of open space, in the east of Richmond.

While Richmond has a good supply of large open spaces, it has relatively few smaller spaces within the designated residential intensification areas.

4.2 KEY URBAN DESIGN ISSUES

The key urban design issues facing Richmond relevant for this PBC, as identified in the existing strategies identified in Section 1.9, the Strategic Business Case, the PBC workshops, and discussions with TDC staff, are:

1. **Severance** issues from high traffic volumes and limited pedestrian (or cycling crossings) on Gladstone Road and Salisbury Road.
2. Increasing vehicle numbers on local roads due to population increases and rat running to avoid congestion is leading to reduced **liveability, place quality and safety** concerns, including at key destinations.
3. Encouraging **mode shift to walking, cycling**. Surveys have shown that the community is keen to walk and cycle more[15] if the infrastructure was improved making it safer and easier to use, the networks were better connected, and there were fewer cars.
4. Encouraging **mode shift to PT**. Surveys conducted for both Nelson and Richmond have shown people are willing to take public transport, however they are mostly concerned about the timetables and routes[16]. It has been noted that current service levels vary considerably within and between routes, and that service levels reduce significantly on weekend days.
5. **Managing growth sustainably**: encouraging greater intensification in intensification areas; and managing expansion into greenfield productive land areas to achieve good urban form outcomes with medium densities, low carbon transport options and sustainable use of land.
6. **Street design** and function typically favours movement over place, and movement of private vehicles over other modes. The exception to this is Queen Street (CBD area) following the revitalisation project of a few years ago.
7. **Demographic change** – increasingly aging population will elevate access needs and desire for smaller, affordable and accessible accommodation.
8. Inconsistent adherence to the **TDC urban design guidelines** leading to a lesser quality outcome than desired.
9. Traffic congestion around SH6/Lower Queen St having negative **impacts on local businesses**, particularly freight movements, leading to a significant number of businesses identifying it as the main disadvantage of their current location in a recent survey.
10. Limited activation of the **town centre** in supporting the proposed residential and mixed-use intensification. Very limited evening economy due to a low number of pubs, leisure activities and hotels. Areas of inactive street frontage negatively impacting vibrancy and walkability, including commercial ground floor uses and at-grade car parking.

[15] TDC DRAFT Walking and Cycling Strategy 2017
[16] Nelson Tasman PT Study 2020.

5.0 A FUTURE VISION FOR RICHMOND

The future vision for Richmond can be described by bringing together the aspirations from the different existing strategies identified in Section 2.7. Their collective vision has been summarised below:

- An **urban future for Richmond** that is contained, equitable and dense, with housing, employment, retail and community facilities and services distributed in a way that supports more intensive living including active travel and public transport.
- **Intensification** that reduces sprawl and supports the best of urban living, with a diversity of housing, transport and activity choice, with easy access to daily needs and employment.
- A healthy and productive community that is enabled to choose **walking and cycling** as a primary form of travel to the places they need to go, through the provision of safe, well-function and connected infrastructure.
- A **public transport** network that is convenient, comfortable, easy to use and understand, so that people are enabled to choose public transport as their primary form of travel to the places they need to go.
- **Car parking** provision that makes the most efficient use of valuable land, providing a balanced approach to the needs of all modes of transport, while meeting the reasonable demands of residents, customers, visitors and workers in Richmond town centre.
- Streets that appropriately **balance movement and place** functions, especially at key destinations within Richmond, and that prioritise different modes of transport across the whole network to achieve an optimal, total transport system.
- A **town centre that is alive** with people both during the day and in the evening, with active streets and buildings at the ground floor, and high-quality public spaces, where people want to spend time.

A brief summary of the key points from each document is included in Appendix A.

This strategic vision can be compared with the vision that was developed with Richmond Councillors and the RTC in the PBC Workshop 1A in February 2021. At that workshop, participants were asked to reflect on what they love about Richmond and what they love about their favourite city. They were then asked to brainstorm a future for Richmond, using the starter “A Richmond that…”. The vision statements that were produced were brought together and summarised into the vision statement below as a ‘working vision’ for the project.

A Richmond that….

> *Is inspirational, affordable and place people want to live. A place that offers variety in housing, retail and entertainment – including night life. Schools and intensive development are connected by walking and cycling paths.*
>
> *Has connected communities (not severed by the state highway) and an accessible town centre, especially for walking and cycling. Has safe streets for all modes of travel with rat-running discouraged. Has efficient public transport and good provision of cycleways that connect green spaces together.*
>
> *Is green and biodiverse (not sterile), including community gardens and native bush. That utilises existing green space better, including the use of schools. Has pocket parks within new developments and outdoor dining pockets in town. Streets are green and enable ‘people activities’, like play and events.*

Figure 11: Introducing the Urban Design Strategy to stakeholders

6.0 KEY MOVES & ACTIONS

The following key moves and actions are proposed for achieving the vision, address the key issues identified in Section 5.1, and integrate some additional ideas generated within the stakeholder workshops. They include suggested programmes for developing or implementing the actions. Many of these relate to interventions and programmes within the PBC programmes. Others related to other existing or suggested programmes, including:

- Operationalisation of the Network Operating Framework (NOF)
- Walking and Cycling Strategy
- Regional Public Transport Plan
- Intensification Action Plan
- Tasman Resource Management Plan – Plan Review
- Open Spaces Strategy
- Richmond South Structure Plan
- Waka Kotahi Innovating Streets
- Town Centre Masterplan
- TDC Urban Design Guidelines.

Table 1 – Key moves and actions

Key Move **and** Actions	Programme(s)
Key move 1: Improve safety and reduce severance on Salisbury Road.	
• Action 1.1: Increase mode share in active modes and PT on Salisbury Rd and reallocate space within the street to accommodate these modes. • Action 1.2: Reduce the speed limit on Salisbury Rd to 30kph. • Action 1.3: Improve active mode crossings on Salisbury Rd, including raised zebra crossings and signalised crossings. • Action 1.4: Work with the schools located on Salisbury Rd to reduce the numbers of vehicles dropping off and picking up students.	- PBC - PBC - PBC - PBC
Key move 2: Improve safety and reduce severance on Gladstone Rd.	
• Action 2.1: Improve existing and provide new active mode crossings on Gladstone Rd that connect to through to Richmond West. • Action 2.2: Increase mode share in active modes and PT to relieve vehicle pressure on Gladstone Rd.	- PBC - PBC
Key move 3: Reduce volume and speeds of vehicles on local roads.	
• Action 3.1: Increase mode share in active modes and PT. • Action 3.2: Reduce speed limits to 30 kph at the key places of the school cluster on Salisbury Rd and within the town centre. • Action 3.3: Balance modal priority in streets across the network. • Action 3.4: Implement traffic calming measures and reclaiming streets for people, especially at key destinations.	- PBC & Walking and Cycling Strategy - PBC - PBC & NOF - PBC
Key move 4: Enable people to walk and/or cycle as a preferred way to get around Richmond and beyond.	
• Action 4.1: Promote walking and cycling in Richmond as an alternative to driving a private car. • Action 4.2: Provide quality infrastructure, including wayfinding, that enables people to walk and cycle more and feel safe doing so. • Action 4.3: Create an active travel network that connects key destinations across Richmond. • Action 4.4: Identify areas for implementing Low Traffic Neighbourhoods: changing street configurations to make vehicle-based transport less convenient, while still enabling walking and cycling.	- Walking and Cycling Strategy - PBC & Walking and Cycling Strategy - PBC & Walking and Cycling Strategy - PBC & Waka Kotahi Innovating Streets

Key Move **and** Actions	Programme(s)
Key move 5: Enable people to use the bus for their daily travel needs within Richmond and beyond.	
• Action 5.1: Improve PT infrastructure and level of service so that it is convenient for most people to use for getting to and from key destinations. • Action 5.2: Improve the branding and perception of PT so that it is an attractive mode of transport.	- Public Transport Study & RPTP - PBC & Nelson/Tasman Public Transport Study & RPTP
Key move 6: Encourage greater intensification in the RIDA.	
• Action 6.1: Continue to deliver on the actions in the IAP. • Action 6.2: Provide quality active mode connections between intensification areas and key destinations, such as schools, daily-needs-retail, and the town centre. • Action 6.3: Improve active mode crossings of the inner 'ring roads' of Talbot St, McGlashen Ave and Oxford St. • Action 6.4: Develop public transport network so that high frequency corridors connect to intensification areas. • Action 6.5: Locate public transport stops so that they provide easy access from intensification areas, ideally no greater than a 400m walk. Provide safe crossing opportunities to improve first & last mile at bus stops. • Action 6.6: Provide quality public realm including streets and open spaces. • Action 6.6: Implement traffic calming measures and reclaiming street for people in intensification areas (greenways and Low Traffic Neighbourhoods)	- Tasman IAP. - PBC & Walking and Cycling Strategy - PBC - PBC & Nelson/Tasman Public Transport Study & RPTP - PBC & Nelson/Tasman Public Transport Study & RPTP - TRMP plan review & Open Spaces Strategy - PBC & Waka Kotahi Innovating Streets
Key move 7: Sustainably manage growth into the expansion area of Richmond South.	
• Action 7.1: Extend primary public transport and active travel networks to Richmond South. Action 7.2: Develop a structure plan for the Richmond South expansion area, including a primary grid of streets, a local commercial centre, open space network, active mode networks and connections to the bus network. • Action 7.3: Develop public transport network so that high frequency corridors extend to Richmond South.	- PBC & Walking and Cycling Strategy - Richmond South Structure Plan - PBC & Nelson/Tasman Public Transport Study & RPTP
Key move 8: Balance movement and place functions and modal priority in streets.	
• Action 8.1: Determine place and movement values for all Richmond streets. • Action 8.2: Optimise street movement functions and modal priority based on a total transport network assessment. • Action 8.3: Upgrade existing streets to better support their place function, prioritising those areas adjacent to key destinations. • Action 8.4: Develop street typologies examples for each of the street types identified in the movement and place and modal priority street hierarchy.	- Richmond ONF - PBC & Richmond NOF - PBC & Town Centre Masterplan - Richmond ONF and NOF
Key move 9: Provide for safe, secure, and attractive urban mobility for all ages and abilities to support compact urban living.	
• Action 9.1: Promote universal design in all Council-led and developer-led projects. • Action 9.2: Upgrade footpath network to provide consistent high level of service and connecting to key destinations. • Action 9.3: Improve accessibility across the network through universal design, including drop kerbs, raised zebra crossings, tactile ground indicators and audio-tactile devices on crossings.	- TDC Policy & Urban Design Guidelines - PBC & Walking and Cycling Strategy - PBC & Walking and Cycling Strategy

Key Move **and** Actions	Programme(s)
• Action 9:4: Involve key user groups such as older adults and people with disabilities in the design of pedestrian facilities to ensure that universal access and design is informed through a user lens.	- PBC & TDC Policy & Walking and Cycling Strategy
Key move 10: Capitalise on redevelopment investment to deliver urban design best practice for Richmond.	
• Action 10.1: Review urban design guidelines and engineering standards to ensure best practice urban design is promoted and enabled. • Action 10.2: Review implementation of urban design guidelines and engineering standards to ensure best practice urban design is achieved.	- TRMP plan review & TDC Urban Design Guidelines - TRMP plan review & TDC Urban Design Guidelines
Key move 11: Support retention of local businesses through improving freight movement and access.	
• Action 11.1: Make improvements to the Lower Queen St / SH6 – Gladstone Rd intersection. • Action 11.2: Better manage conflicts between freight and other road users to provide greater travel time certainty.	- PBC - PBC
Key move 12: Plan for the next phase of the town centre to support growth and anticipated intensification.	
• Action 12.1: Develop a masterplan for the town centre to capture the vision for a Richmond's ongoing urban transformation. • Action 12.2: Carry out a walkability assessment to identify improvements to the town centre in terms of urban form, footpath network, desire lines etc. • Action 12.3: Carry out a public life survey to generate quantitative data for understanding how people use the streets and spaces in the town centre.	- Town Centre Masterplan - Walking and Cycling Strategy & Town Centre Masterplan - Town Centre Masterplan
Key move 13: Manage growth across commercial centres so that they are complementary, not conflicting.	
• Action 13.1: Develop a centres hierarchy to ensure that other emerging commercial centres complement the town centre and retains the town centre as the primary centre for Richmond. • Action 13.2 Enable local centres to be established in new medium density neighbourhoods to support local residents being able to access daily needs and services within a 5-10 minute walk.	- TRMP plan review - TRMP plan review

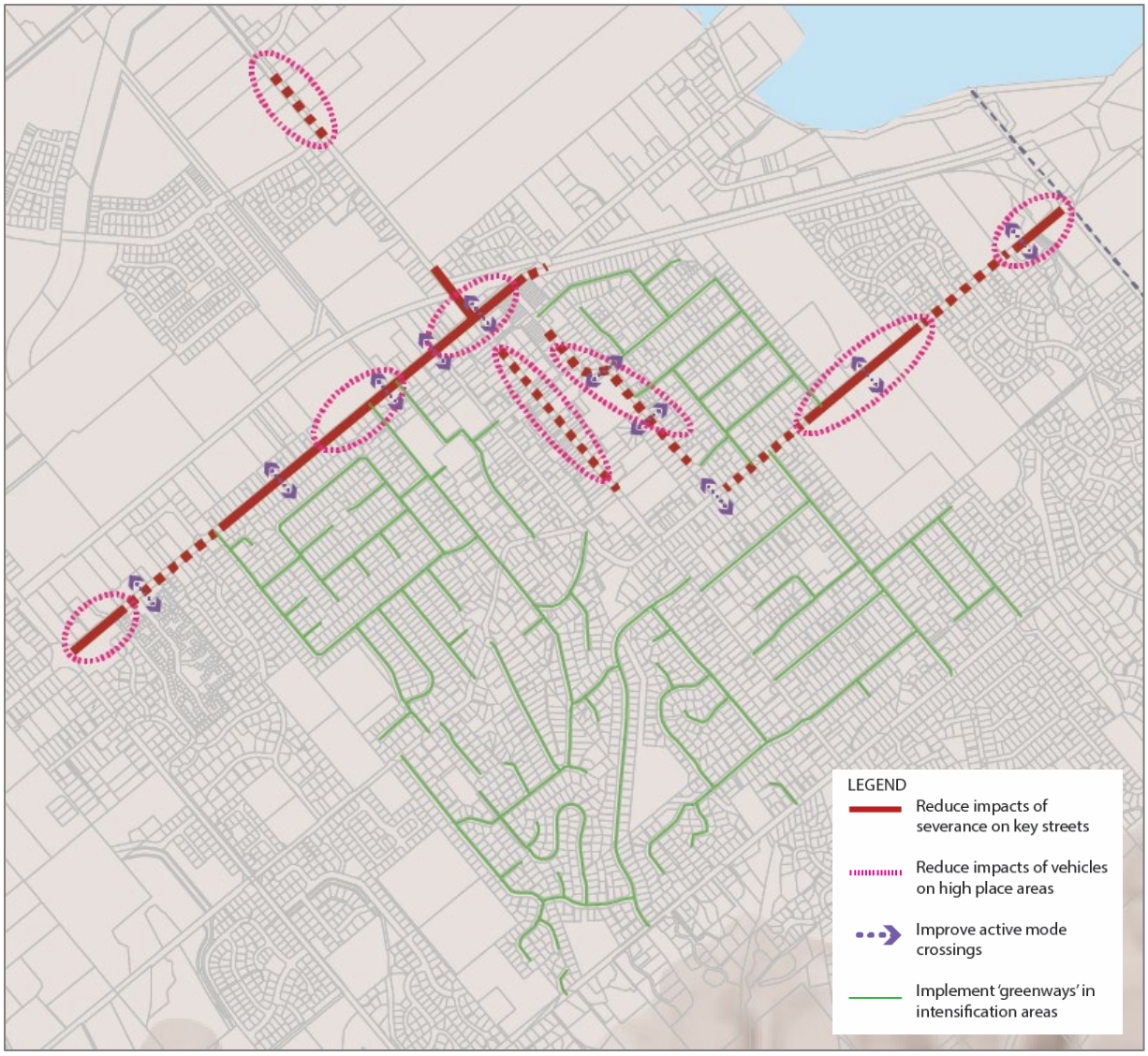


Figure 12: Improving streets and the reducing impacts of vehicles at critical locations

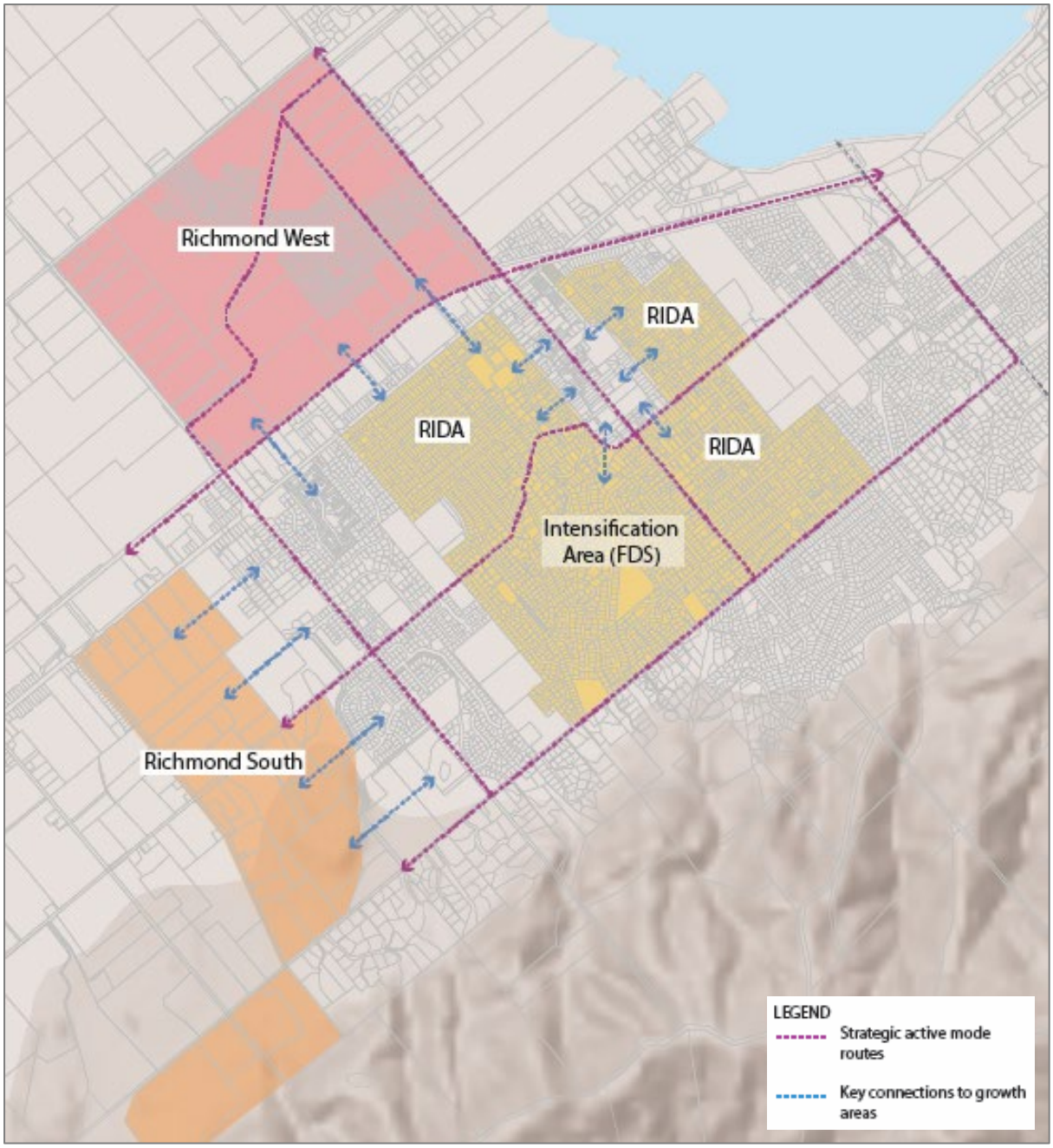


Figure 13: Key active mode connections to support sustainable growth

7.0 STREET TYPOLOGIES

To support the understanding of interventions proposed in the PBC, a series of indicative street typology illustrations were produced in the locations shown below. These illustrations provide a future view of how different streets across Richmond could look based on proposals in the PBC and TDC strategies. They include changes to the way road space is allocated alongside aspirations for future built form, to emphasise the importance of integrating the both the vision for land use and for transport, and to balance movement and place functions. The successful realisation of them relies upon each other.

Two examples are included on the following page. The full set of street typology information provided at the PBC workshop, including examples of existing streets from elsewhere, is included in Appendix D. It is recommended that street typologies examples are developed in the future for each of the street types identified in the street hierarchy for Richmond.

Figure 14: Locations of indicative street typology views

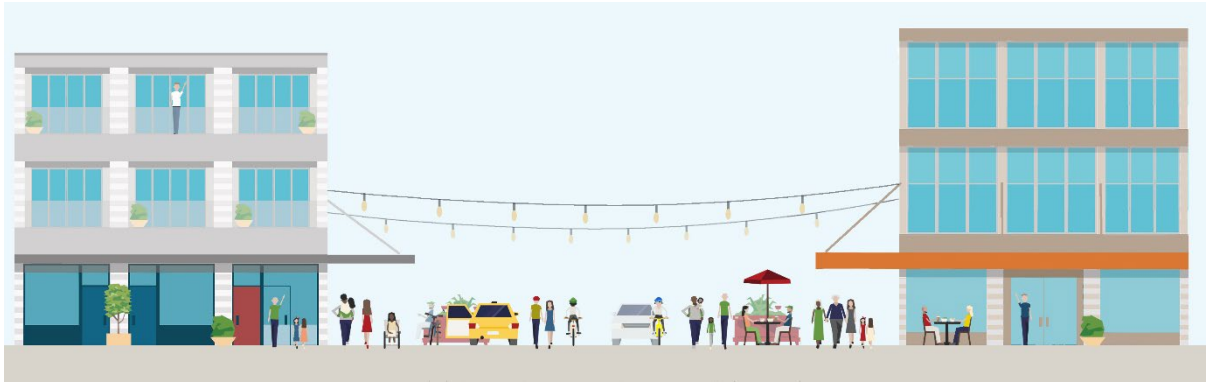


Figure 15: Indicative illustration of a future Queen Street in the town centre

Figure 16: Existing view of Queen Street

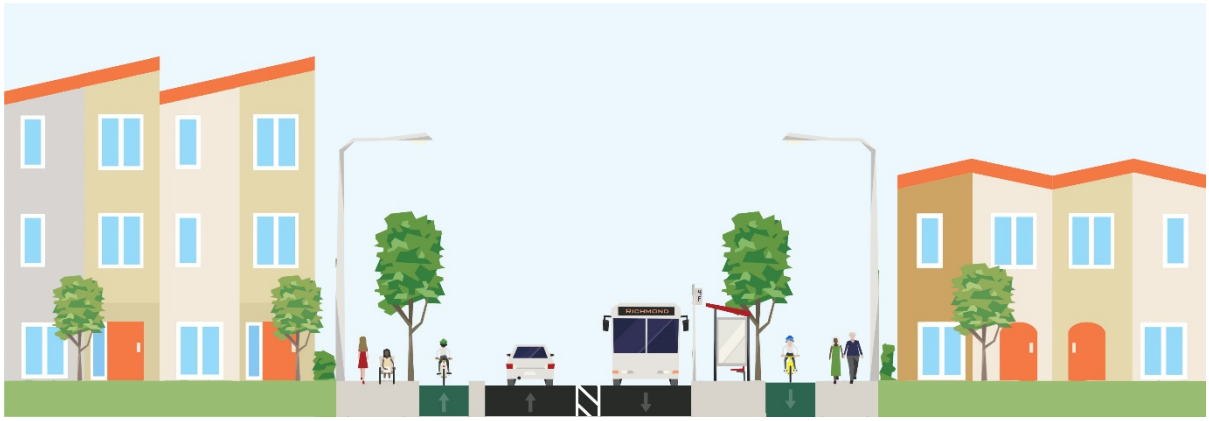


Figure 17: Indicative illustration of a future Salisbury Road

Figure 18: Existing view of Salisbury Road

Appendices

We design with community in mind

Appendix A TDC Strategies

A summary of the relevant components of existing TDC strategies and plans that have informed this urban design strategy are outlined below.

Future Urban Development Strategy 2019

The FDS is a high-level strategy and does not consider how development will occur but has been developed based on the following core principles. These principles were developed as a result of the analysis undertaken and public feedback. They describe an urban future for Richmond that is contained, equitable and dense, with housing, employment, retail and community facilities and services distributed in a way that supports more intensive living including active travel and public transport.

- Favour intensification of urban areas over expansion, and favour expansion over new settlements.
- Promote intensification close to facilities and services and in a way that supports public transport, walking and cycling.
- Expand in areas with good access to community services and infrastructure.
- Minimise expansion onto land of high productive value.
- Further development of areas prone to sea level rise in Nelson City is contingent upon an adaptation strategy being in place.
- Ensure the growth needs of all settlements are provided for.
- All development helps to revive and enhance the mauri of the natural world.

It notes the importance of intensification for the future of Richmond, and the importance of phasing to encourage that intensification. It identifies the importance of integrated land use and transport planning, helping support the development of passenger transport services, making shops, jobs and activities easily accessible and enabling different housing choices.

During the development of the FDS, the following top 5 considerations for urban settlement and growth for the Nelson-Tasman region were identified:

1. Preservation of natural landscapes
2. Preservation of flat productive land
3. Affordable housing (such as lowering land costs)
4. Climate change responsiveness and CO2 reduction
5. Diverse housing choices

Intensification Action Plan 2020

The key principles that underpin the IAP are:

- More efficient use of land
- Providing range of housing choices
- Reduced sprawl onto productive land
- Support for passenger transport services
- Bring people closer to shops, jobs and activities
- Provide some three-storey terrace housing, some low-rise apartments, some mixed use (commercial ground floor residential above)

Draft Walking and Cycling Strategy

The key objectives of the Walking and Cycling Strategy are:

- Improve and encourage walking and cycling in the district as an alternative to driving a private car
- Enable people to walk and cycle more and feel safe doing so
- Create a network that connects a hierarchy of key ‘places’
- Enable a healthier more productive community
- Improve the environment
- Create a nicer place to live
- Improve traffic flows
- Make transport cheaper
- Support the local economy

A healthy and productive community that is enabled to choose walking and cycling as a primary form of travel to the places they need to go, through the provision of safe, well-function and connected infrastructure.

Nelson Tasman PT Study

The fundamental recommendations from the PT study are:

- Current service levels vary considerably within and between routes.
- Service levels reduce significantly on weekend days.
- Public surveys highlighted issues with timetables and routes.
- Key moves in the urban area:
- Simplify and optimise the network.
- Standardising and then progressively enhancing service levels.
- Refresh the branding to highlight its importance and widen its appeal.

Accessible Nelson-Tasman: Regional Public Transport Plan 2021-31

The Regional Public Transport Plan (RPTP) details the investment programme required to enable public transport (PT) to play a key role in the delivery of a multimodal sustainable transport future for the Nelson Tasman region that will combine with other key strategies to contribute to achieving the carbon emission reduction targets set.

The aim is to achieve a continual increase in public transport patronage to provide an integrated approach to accommodating sustainable travel demand.

The RPTP proposes 3 step changes. Step change 1 focuses on improvements the infrastructure, branding, routes and fares, step changes 2 and 3 focus on increasing frequency and levels of service.

Step Change 1 - July 2023

- New urban routes 7am and 7pm, 7 days per week
- Hourly weekend service
- Stoke demand responsive service
- Single urban fare
- Low emission buses
- Community Transport services to Motueka, Golden Bay, Wakefield and Hira
- Morning and evening bus to Motueka and Wakefield
- Super stops at Richmond, Stoke, Tahunanui, Hospital and Nelson
- Bus stop improvements elsewhere
- Regional branding of the services

Step Change 2 - July 2026

- All urban buses run every 30 minutes
- Weekday service to Motueka (4 daily) and Wakefield (6 daily)
- Park and ride facility

Step Change 3 - July 2029

- Additional buses at peak times
- Weekend bus service to Motueka (4 daily) and Wakefield (6 daily)

Richmond Network Operating Framework and ONF

As part of the NOF, the One Network Framework was applied to Richmond. This included identifying key places in Richmond, which included the following destinations:

- Health Centres
- Industrial Areas
- Parks & Reserves
- Commercial and Retail Areas
- Retirement Villages
- Education Facilities

These key places were then filtered to determine the key attractors for the area, which were then prioritised as ‘Activity Areas’. ‘Activity Areas’ are places in which there is a high volume and frequency of movement as well as a high amenity value of the place. The ‘activity areas’ are assigned a four-level place priority with 1 being the highest priority with the most activity and 4 being the lowest.

The NOF identifies modal priorities for walking, cycling, PT and general traffic on different priority coridors at three time periods: morning peak, inter-peak and afternoon peak. On some corridors, the modal prioiry changes and therefore interventions have been suggested for encouraging or discouraging certain modes across the day.

2020 Town Centre Health Checks

The key recommendations from the 2020 Town Centre health checks for Richmond, are:

- Increase the amount of landscaping and pocket parks within the centre.
- Provide more shade in Sundial Square.
- Encourage café and retail use at ground floor level to support an active shop frontage.
- Encourage an evening economy, which in turn may lead to greater numbers of people living in and around the centre.
- Replicate some of the aesthetic features in Takaka centre such as murals to improve the vibrancy of the centre.

Appendix B Key Moves Identified in Workshop 1a

The following key moves are in rough order of priority, as agreed with the Richmond Councillors and RTC participants at the workshop.

1. Fix lower Queen Street / SH6.
2. Provide a bypass.
3. Better crossing provisions across SH6 / Gladstone.
4. Connect Queen Street with Lower Queen Street with a quality of urban form that supports walkability.
5. Improvements to place quality of streets – as identified in the NOF.
6. Deliver pedestrian and cycle friendly streets with increased safety and connectivity, including to and across the SHs, without severance of community focal points, such as Queen Street and Salisbury Rd.
7. Primary cycleways improvements / implement the active travel strategy.
8. Public transport improvements: Frequent, cost-effective, reliable accessible PT services that also access residential areas with bus schedules that provide confidence and meet users' needs.
9. PT & freight efficiency improvements (e.g. priority lanes).

The remaining two were considered as high an importance as no.3 above, but would need to happen at a later stage or would take longer to action (i.e. less urgent):

10. Update / review urban design strategy and engineering standards for property developers – to ensure best practice urban design was achieved.
11. Urban form needs to support housing choice and accessible intensification, including affordability, close to the Richmond centre. Could be done through e.g. waiver of DCs to CHPs.

Appendix C Urban design priorities

The following urban design priorities were identified early to support the development of the Programmes and for scoring them in the MCA process.

Priority 1: Improving safety and supporting social cohesion by reducing severance effects.

Outcomes sought:

- Reduced volume and speed of vehicles on key internal streets.
- Improved connectivity between residential areas and communities.
- Improved place quality at key destinations

Priority 2: Improving 'place function' & 'place quality' of street. Locations include priority "places" as identified in the ONF and residential intensification (covered in Priority 1).

Outcomes sought:

- Reduced traffic volumes and/or speeds.
- Streets more supportive of adjacent land use and activity (street parameters and design).
- Sufficient provision for people walking and cycling, including safety, amenity, physical infrastructure.

Priority 3: Improving accessibility by active modes and PT to key destinations, reducing severance and connecting people to places they want to go. Efforts focused within walking, cycling and PT catchments.

Outcomes sought:

- Improved walking network including footpath improvements, crossings, plugging the gaps in walking network, reducing conflicts with road users.
- Improved cycling network including separated cycleways and cycle lanes, cycle crossings, plugging the gaps in cycling network, reducing conflicts with road users.
- Improved PT network including coverage of service, bus stop locations, frequency, legibility and reliability.

Priority 4: Supporting intensification (residential and commercial) in and around the centre as proposed in the FDS and IAP.

Outcomes sought:

- more walkable environment – width and quality of pavements, street amenity, traffic volumes.
- functionality of street for 'public life' – use by people, e.g. pocket parks, street dining, street spaces, street trees and planting, street furniture etc.
- minimising severance / prioritising people walking within the key walkable catchment

Priority 5: Supporting the sustainable expansion into Richmond South as proposed in the FDS, and Richmond West as already underway.

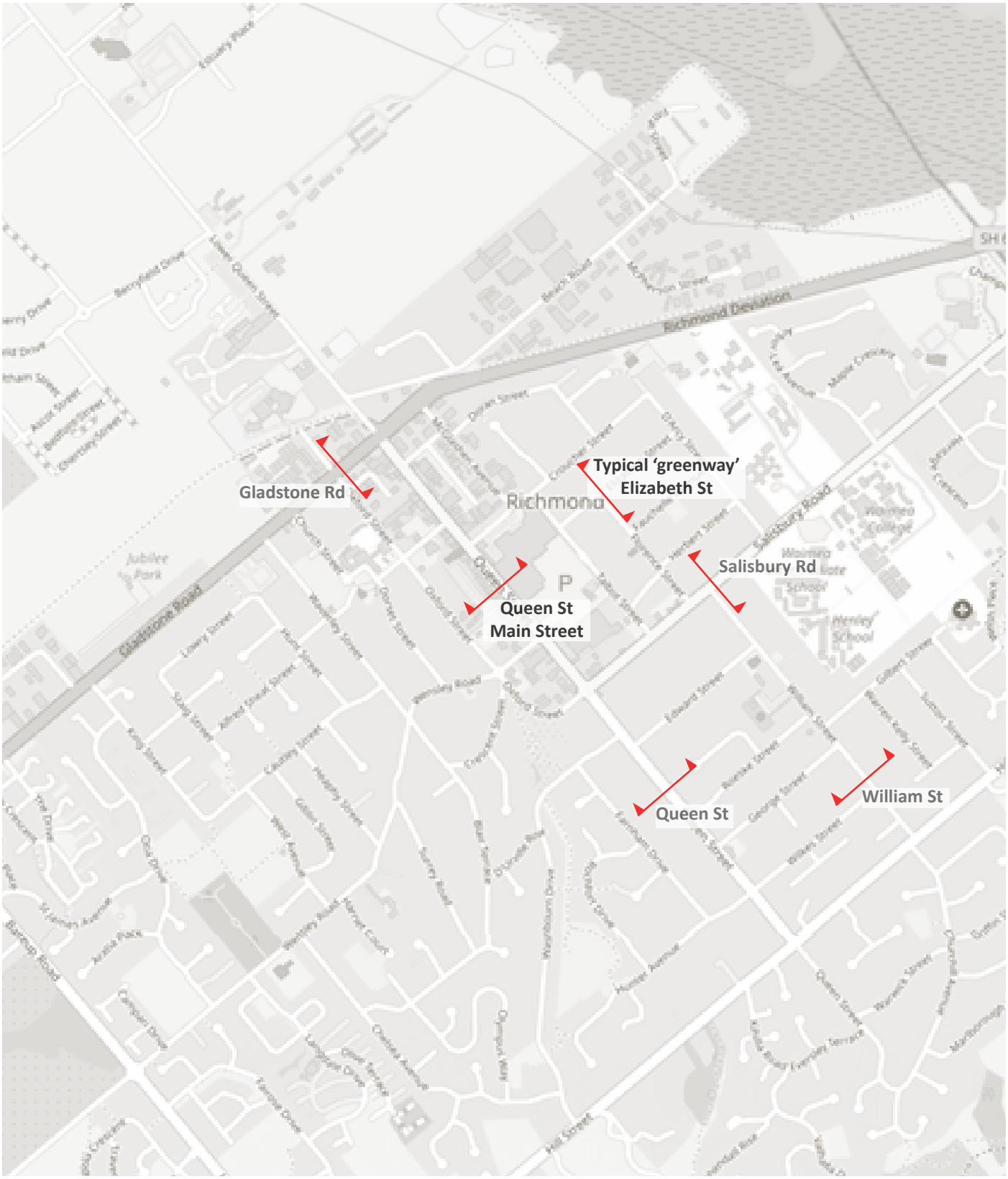
Outcomes sought:

- Street network permeability with adjacent streets.
- Strong PT provision.
- Active travel connectivity.
- Higher (medium) density development.
- Walking access to daily needs, open spaces and social infrastructure.

Appendix D Illustrative street typologies for Workshop

Richmond PBC Workshop 2
31st March 2021

Locations of indicative street typology views



Gladstone Road - with bypass (or with significant mode shift)

Existing photograph

Indicative future view

Key features:

- Likely to remain as 4 lanes in this location (and two further south) - but could reduce to 2 lanes with outer lanes re-purposed for cycle lanes, wider footpaths or trees.
- If remaining as 4 lanes, potential for outer lanes to become priority lanes.
- Traffic volumes reduce leading to higher place quality.
- Increased pedestrian crossing provision.
- Increased street amenity and provision for people walking.
- Possible development of more retail and commercial along the road.

Programmes this relates to:

- Accessibility
- Liveability including the Hope Bypass
- Do maximum

Gladstone Road - without bypass (or without significant mode shift)

Existing photograph

Indicative future view

Key features:

- Remains as 4 lanes in this location (and two further south)
- Traffic volumes increase or stay the same.
- Place quality remains low.
- Potential for priority lanes in outer lanes.
- Development likely to remain constrained / low intensity with car based access.

Programmes this relates to:

- Do minimum
- Addressing immediate issues
- Accessibility
- Liveability excluding the Hope Bypass

Typical ‘greenway’ street in intensification area: Elizabeth Street

Existing photograph

Indicative future view

Key features:

- Traffic calming in street, including chicanes and planted kerb build outs**.**
- Slow speed environment so vehicles and cycles can share the street.
- More opportunity for ‘people activities’ in the streets.

Programmes this relates to:

- Liveability
- Do maximum
- Increased road capacity.

Richmond PBC Workshop 2 - Indicative street typology views
31st March 2021

Salisbury Road (and Wensley Street)

Existing photograph

Indicative future view

Key features:

- Improved bus service and facilities.
- Separated cycle lanes both sides.
- 30 kph speed in the ‘Schools’ area.
- New pedestrian crossings.

Programmes this relates to:

- Addressing immediate issues
- Accessibility
- Liveability - all
- Increased road capacity
- Do maximum

William Street

Existing photograph

Indicative future view

Key features:

- Separated cycle lanes on both sides
- Greening of the street
- Some on-street parking retained

Programmes this relates to:

- Accessibility

Queen Street (Salisbury Rd to Hill St)

Existing photograph

Indicative future view

Key features:

- Separated cycle lanes on both sides
- On-street parking removed

Programmes this relates to:

- Accessibility
- Liveability 1, 2 & 3
- Increased road capacity
- Do maximum

Queen Street (Main Street)

Existing photograph

Indicative future view

Key features:

- Greater pedestrian function to the street.
- Parking space converted to parklets, outdoor dining, cycle parking and taxi/ride share pick up/drop off.
- Slow speed environment enables use of the street for 'people activities' and events.
- Higher pedestrian numbers attract mixed-use redevelopment, including residential.

Programmes this relates to:

- More road capacity
- Do maximum

Example Streets - Separated / Protected Cycleway

Concrete kerb separator:

‘Copenhagen Kerb’ (half height kerb) separator:

Example Streets - Separated / Protected Cycleway

Concrete kerb separator with planting:

Concrete kerb separator - bi-directional cycleway:

Example Streets - Greenways

Cycle lanes and pedestrian priority at intersection:

Chicanes on street to reduce vehicle speeds:

Richmond PBC Workshop 2 - Indicative street typology - examples
31st March 2021

Example Streets - Greenways

Planted pinch-point with parking:

Chicane with tree planting in centre of road:

Example Streets - Shared Space / Main Street

Urban shared street environment with pedestrian priority and street dining:

Catenary lighting over street:

Example Streets - Overbridge / Flyover

Moorhouse Avenue overbridge - within urban setting:

Overbridges can pose significant challenges to integrating with the urban environment, such as the uses beneath and creating a people friendly environment on the street:

Example Streets - Overbridge / Flyover

SH1 Christchurch overbridge - view taken from approximately the same distance as from the Queen St and Gladstone Rd intersection to a potential overbridge at Richmond:

Waterview flyover - public open space and walking and cycling connections have been integrated beneath flyovers:

Example Streets - At grade bypass

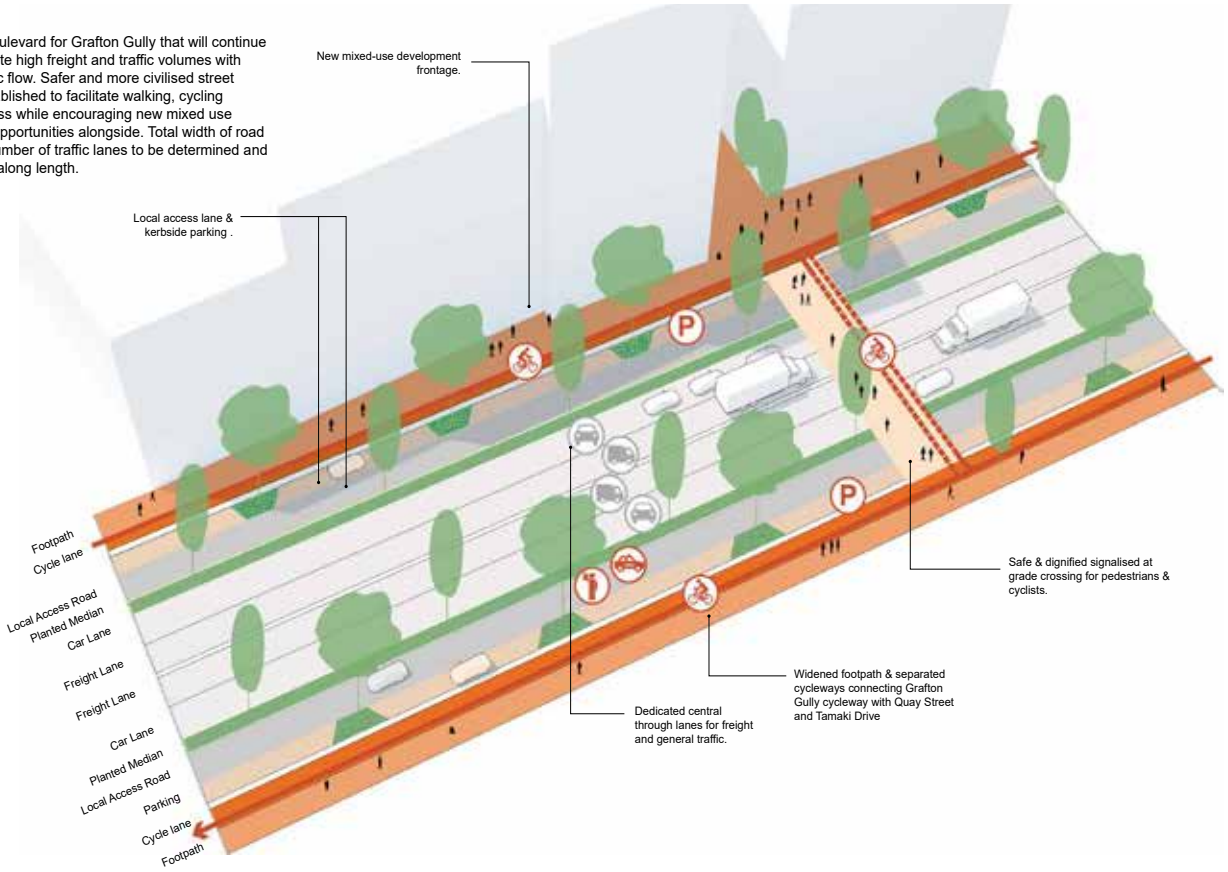
Octavia Boulevard, San Fransisco - central lanes allow through movements, while lanes on the sides allow slower speed, local access. A high quality environment provides a positive experience for people walking and cycling and encourages adjacent urban development:

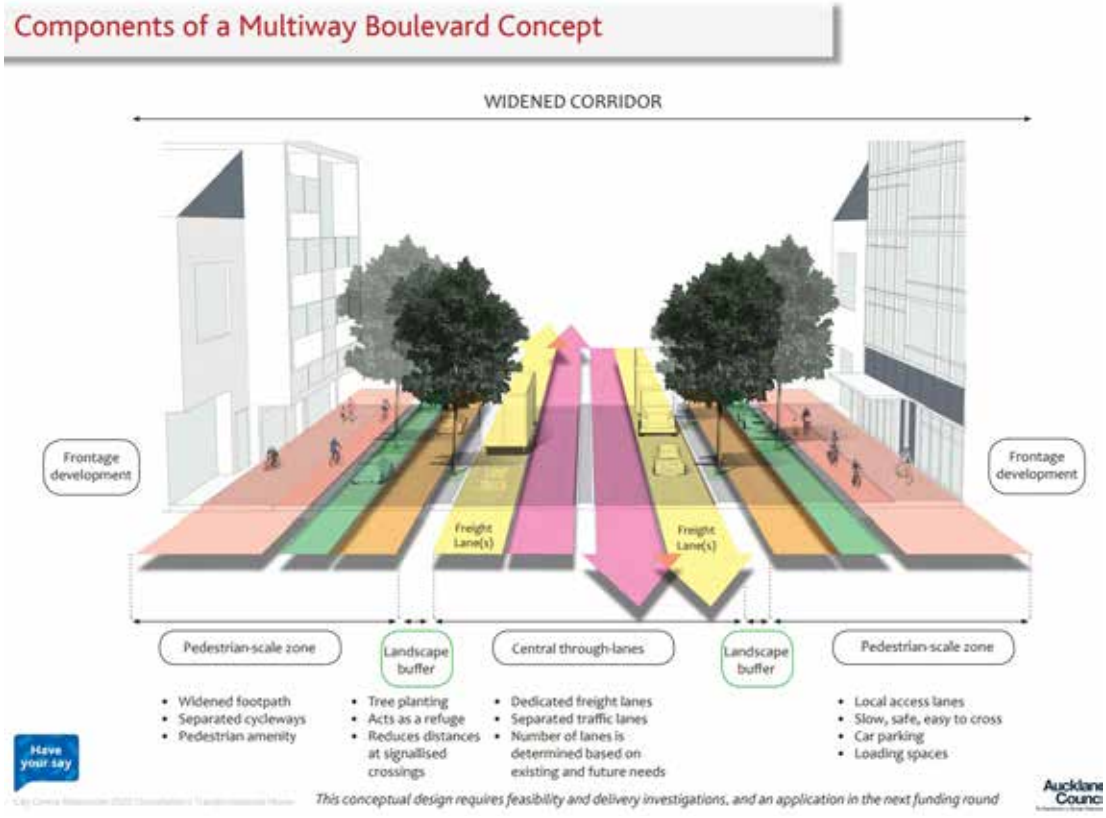
This tree lined through route with separated cycle lanes creating a high quality environment and positive street edge:

Example Streets - At grade bypass

Auckland's City Centre Masterplan proposes a multi-way boulevard for Grafton Gully, similar to Octavia Boulevard in San Fransisco. The images below demonstrate how this could work. Note that this requires further feasibility studies to confirm how it would work. Image sources: Auckland Council website, CCMP 2020.

A multi-way boulevard for Grafton Gully that will continue to accommodate high freight and traffic volumes with improved traffic flow. Safer and more civilised street edges are established to facilitate walking, cycling and local access while encouraging new mixed use development opportunities alongside. Total width of road reserve and number of traffic lanes to be determined and will likely vary along length.





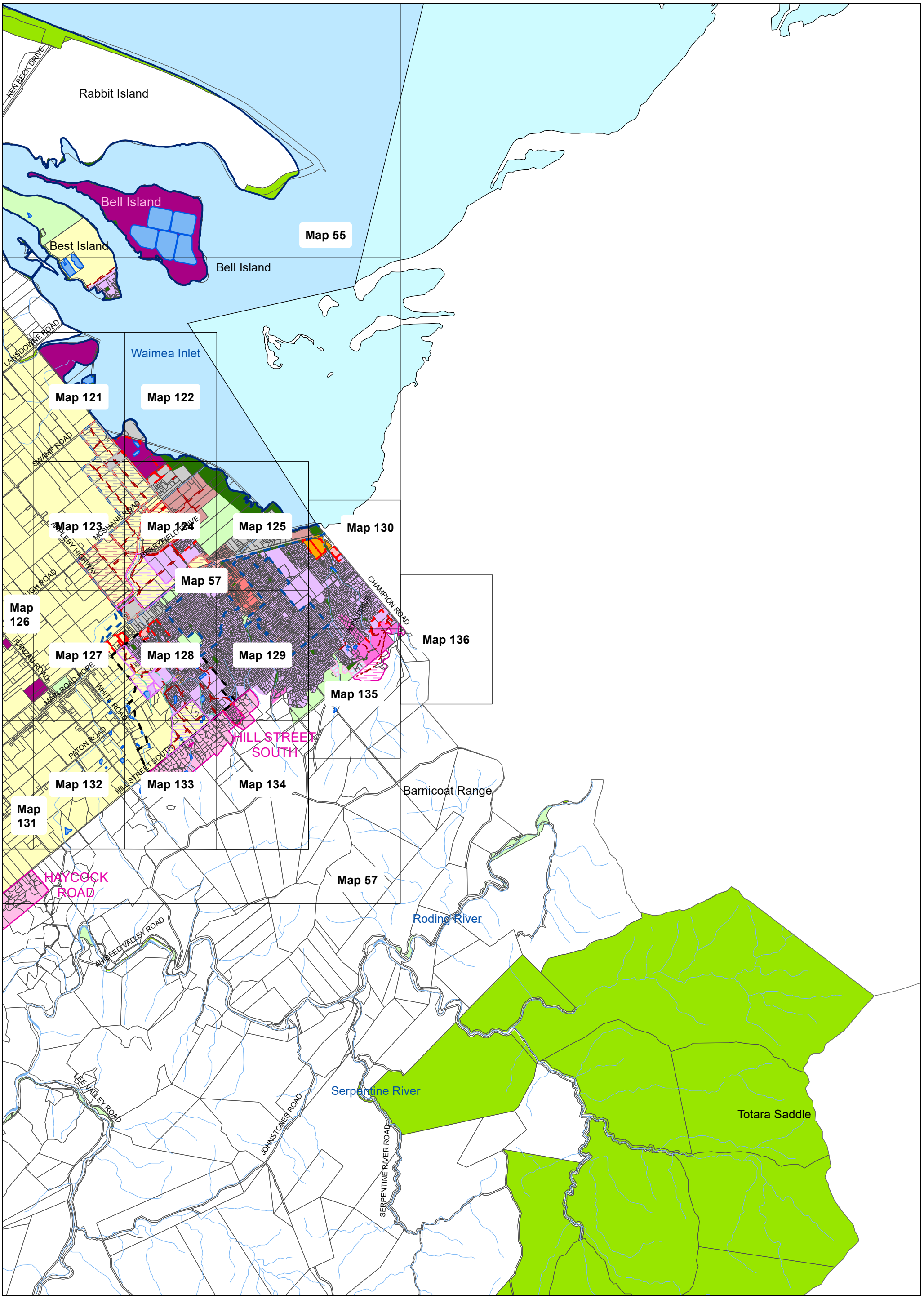
CREATING COMMUNITIES

Communities are fundamental. Whether around the corner or across the globe, they provide a foundation, a sense of belonging. That's why at Stantec, we always **design with community in mind**.

We care about the communities we serve—because they're our communities too. We're designers, engineers, scientists, and project managers, innovating together at the intersection of community, creativity, and client relationships. Balancing these priorities results in projects that advance the quality of life in communities across the globe.

New Zealand offices:
Alexandra, Auckland, Balclutha, Christchurch, Dunedin, Gisborne, Greymouth, Hamilton, Hastings, Napier, Nelson, Palmerston North, Queenstown, Tauranga, Wellington, Whangārei

Appendix C Richmond Zoning Map



tasman district council

TASMAN RESOURCE MANAGEMENT PLAN

15 June 2019

Operative

N

0 1 2 3 4 km

Scale 1:50,000

19 22 23 28 29

ZONES

Map 23

RICHMOND

Appendix D Workshop Minutes

Meeting Notes

Long List Workshop

Richmond Programme Business Case

Date/Time:	February 22, 2021 / 13:30 – 16:10
Place:	Saxton Oval, Stoke
Next Meeting:	31st March 2021 (Preferred Programme Workshop)
Attendees	**Facilitation / Presenting** Matt Soper, Andrew Maughan, Daniel Chapman (Stantec) **Participants** Tim King, Mayor of Tasman District Council Brian McGurk, Judene Edgar, Sue McAuley (Nelson City Council) Allan Kneale (Automobile Association) Jane Murray (Nelson Marlborough District Health Board) Tim Cummings (Nelson Suburban Bus Co Ltd) Karen Wilson, Roy Myers (Blind Low Vision NZ) Ellie Salcin-Watts (Salisbury School) Grant Andrews (NZ Police) Charlotte Bidlake (Richmond Unlimited) Chris Campbell (Road Transport Association NZ) John Harwood (Hearing Association) Craig Piner (Fire and Emergency New Zealand) Peter Pattullo (Nelson Tasman Chamber of Commerce) George Newman, Pam Coltman (Nelson Grey Power) Gillian Wratt (Nelson Tasman Cycle Trails Trust) Glenna Armstrong (Richmond Primary) Peter Olorenshaw (Nelson-Tasman Climate Forum) Kate Malcolm (Nelson Tasman Community Transport Trust) Malcom Saunders (Neighbourhood Support) Megan Leslie (St Paul's School) **Tasman District Council:** Anne Turley, Barry Dowler, Celia Butler, Kit Maling, Mark Greening, Stuart Bryant, Dana Wensley, Clare Scott, Jeremy Butler, Drew Bryant, Dwayne Fletcher, Jacqui Deans, Jamie McPherson **Waka Kotahi NZ Transport Agency**: Andrew James, Clare Fraser, Melissa Feather, Tresca Forrester, Steve Higgs, (Waka Kotahi) **Stantec:** James Newton, Daniel Pouwels, Susan Lilley (Stantec) **Apologies** Graeme Smith (Waimea College) Pim Borren (Bus and Coach Association) Members of the Waimea Youth Council Robyn Varricchio, Richard Popenhagen (Automobile Association) Leanne Kyle (Henley School) Chris Choat (Tasman District Council) Scott Haines (Waimea College) Don McLean (Top of the South Principals group – Primary) Rebecca Glenn (Bicycle Nelson Bays) John Bond (Road Transport Association NZ) Donna Smith (Accessibility for All) Liz Harvey (St Johns Ambulance) Justine McDonald (Waimea Intermediate) Derek Nees (Road Transport Association NZ) Chris Allison (Walk Nelson Tasman / Health Action Trust)
Distribution:	As above

Meeting Notes

Item

Workshop purpose

- Confirming the 'Case for Change' (the problems that need addressing)
- Presenting the draft 'Vision' for Richmond
- Identifying a long list of options
- Understanding your priorities for investment

Background

A presentation was given to attendees (provided as **Appendix A** and as a hard copy to attendees). The presentation outlined:

- The scope of the PBC, and where we are in the process.
- 'Project area' and the wider 'area of influence'
- Feedback from the 'Richmond Vision' workshop and urban design considerations for the long-list exercise
- Review of the strategic case – the key drivers for change, problem themes and evidence base
- The following questions were raised:
  - **Question: can the words of the problem statements be revised?**
  - Answer: Yes, we are happy to receive feedback from stakeholders on the wording, please provide this feedback directly to the project team for them to consider.
  - **Question: has the traffic modelling used current data. The data looks out of date compared to what stakeholders are seeing now?**
  - Answer: 2018 data has been used for the model in the slides. It is acknowledged that growth since this time has happened at a quicker rate than previously expected. The project will be informed by modelling that considers the latest future land use forecasts.
  - **Question: how are options for visually impaired and people with other disabilities considered in the solutions?**
  - Answer: we are considering people of different abilities in solutions and are welcoming feedback from those representing these groups in the group work activities from stakeholders later in the workshop.

Interactive Session No.1 – Long Listing

Workshop attendees were split into four groups and invited to circulate between 'problem stations' and suggest ideas that would help address the three key problem areas – safety, travel choice and route efficiency. The fourth station was for 'urban design', which focused on options that would help support the 'Richmond Vision'.

The long list of ideas were recorded on white boards. **Appendix B** below lists the various options discussed according to problem themes.

Interactive Session No.2 – Priorities

During the break, the 'problem station' facilitators collated the long lists. The groups were then invited to revisit each problem station and discuss which of the interventions they saw as being of the highest priority. This feedback was also recorded on the white boards (refer to **Appendix B**).

The identified priorities for each problem theme were:

Route Efficiency

1. Hope Bypass
2. Public transport priority (e.g. bus or transit lanes)
3. More cycleways
4. Improved public transport network.

Safety

1. Measures to reduce rat-running
2. Safety improvements for Gladstone/Lower Queen St
3. Improved pedestrian crossings along Salisbury Street near the schools
4. Improve the quality (inc. width) of footpaths.

Travel choice

1. Traffic calming / slower speed roads
2. Improved public transport network (inc. park and ride, reduced fares, priority lanes)
3. Reduce the availability of car parking and/or increase price of parking
4. Work and business travel plans

Form, function and feel (not specifically ranked)

- Safe travel choices for journeys to school inc. cycleways
- More safe crossing points
- More attractive walking/cycling connections between the centre and areas with high 'place' value

Meeting Notes

Item
• More trees on streets • Build a car parking building to free up town centre space for development

Next Steps
• Issue workshop notes for feedback.
• Develop the Urban Design Strategy.
• Develop and evaluate potential programmes of interventions using the outputs from this workshop as part of the development of these programmes.
• Workshop No.2 – identify a preferred programme.
  – Scheduled for 31 March 2021.
  – Invites to be sent shortly.

If you wish to submit any feedback in relation to the problems or options discussed during the workshop, please feel free to contact us via the project email address: richmondPBC@nzta.govt.nz

Attachment A: Workshop Presentation Slides attached separately.

The meeting adjourned at 16:10.

The foregoing is considered to be a true and accurate record of all items discussed. If any discrepancies or inconsistencies are noted, please contact the writer immediately.

Appendix B – Long List

Theme	Option
Route Efficiency	Estuary Bypass
	Improve public transport network
	Four lane SH6 between Lower Queen and Nelson
	Bus priority lanes
	Encourage work from home
	ITS
	Roll out of new PT network
	Park and ride
	Freight / T2 / T3
	PT "B" phases @ signals
	Car sharing incentives
	Close some connections onto Gladstone Road (SH6)
	Hope bypass
	Log barging from Rabbit Island to Nelson
	Congestion charging
	Mixed land use
	Wider regional public transport
	Underpass to get walkers/cyclists to/from town
	Pedestrian improvements on Gladstone
	Suffolk connection
	Active mode solutions
	Bus bays indented opposite Salisbury Schools
	Travel planning
	Cycleways
	Divert Beach Road industrial traffic away from Lower Queen Street lights
Safety	Gladstone Road / Queen Street improvements
	Gladstone Road / Oxford Street improvements
	Salisbury Road pedestrian crossing improvements
	Footpath maintenance
	Footpath use
	Gladstone Road pedestrian crossing(s)
	Widen Wensley Road
	Widen Paton Road
	State Highway 6 crossing improvement(s) for Ranzau School
	Increase parking - especially by schools
	Lower Queen Street Roundabout
	Lower Queen Street widen for turning traffic
	Cycle lane on Hart Road
	More cycle facilities in urban residential streets
	Concentrate on bikes to schools
	Widen provisions for cyclists on Dorset Street
	Take out curbing from footpaths
	Address issue of recycling bins being on footpaths

Meeting Notes

Theme	Option
	Address various footpath use issues - cyclists and mobility scooters on them, cars coming out of driveways, and the speed people use the footpath, + it is not always clear if they are shared
	Address issue of people not being able to get out of driveways on Lower Queen Street
	Address issue of road traffic cutting off bike path - Wensley Road (narrow footpath)
	Address issue of narrow streets for FENZ (maybe consider installation of red flashing signals - like ones beside Dunedin Central station? JF)
	Address issue of pedestrians running out in front of cars beside the mall
	Add pedestrian crossing facility on the southern side of the Salisbury / Talbot Street intersection
	Install more pedestrian facilities on Gladstone Road
	Address issue of right turners exiting Medical Centre?
	Address issue of driver travelling up Church Street the wrong way
	Address Salisbury Raised Platform issue?
Travel Choice	Subsidies for workplaces for showers and bike parking
	Public showers
	Retrofit roads to make safer for cycling
	Improve existing cycle routes wider, especially those that were originally intended for walking
	Ensure cycleways are included in new developments
	Better utilise stormwater corridors for walking and cycling
	Give public transport some priority
	Make public transport cheaper
	Public transport for getting kids to school within Richmond
	Ride sharing incentives
	Transit lanes
	Make car commuting the least attractive travel option
	Traffic calming measures in many schools
	Regular transit loop around Richmond
	Gladstone Road underpass or overpass
	Individual school travel planning
	Bus routes in and out to Wakefield
	Improve footpaths to make it easier to walk, mobility scooters and other mobility
	Separate walking and cycling paths (from each other)
	Using paving to delineate what you can do there
	Linear park, pathways within green corridors that have services off it
	Less car parking in CBD
	Charge for parking
	Tax for entering townships
	Encourage kids to bike to school
	Walk with schools to implement walking busses
	Implementing more manned crossings
	Eliminate kerb drops
	Make crossing points obvious, like signalised crossing with vibrating buttons
	Charging to use the road
	Park and ride services
	Cost of public transport
	Extended hours of operation for operation of bus services

Meeting Notes

Theme	Option
	Urban street lighting improved for safety
	Consider speed of e-modes on AT paths
	Incentivize businesses to provide showers at work
	Ride sharing scheme
	Flexibility of work timings to allow for mode choice
	Fast bus lanes
	Walking school bus
	Make biking 'cool' for kids to use as a form of transport
	Better between residential areas and schools
	Work with school families to find the locations that people feel unsafe
	Ride sharing
	Workplace and school incentives for AT
	School travel plans
	Better cycle lanes
	PT priority / Transit lanes
	PT to regional centres
	Traffic calming - slow zones
	Safer crossings - connectivity
	Car parking availability and charging
	Improve existing walking and cycling infrastructure for vulnerable users
Form, function, feel	Divert traffic from key places
	Address problem of parking on tight streets
	Lighten load on key places by providing an alternate route around Richmond
	Keep traffic away from the town centre
	Families get children to school in other ways than by car
	Address issue of senior students driving adding to congestion
	Bypass to free up Gladstone Road
	More retail on Gladstone Road
	More zebra crossings
	Better pedestrian facilities
	Slow traffic
	Cycleways for kids to get to school and elderly
	Bike paths over parking
	Park and ride
	Connection between development areas and Richmond Centre
	Keep cycling on the trail
	Better connections across Gladstone Road
	Bypass Richmond West
	More green spaces in the heart of Richmond
	Grow the CBD to support the population
	Need to balance centres at R.W with R.C
	Build a car park building to free up parking for development
	Build up in the centre
	Retain the industry for jobs

Theme	Option
	More granny flats and small units for aging population
	Connect the growth areas together - pathways
	More pocket parks
	Trade car parks for 'people' space
	Address issue of people not wanting to walk more than 200m
	Work with businesses to manage staff parking and access
	Park at cemetery and pick-up loop bus
	Nice, attractive walking route between Showgrounds and Centre
	Provide for 'e' modes - scooters etc.
	Include freight access
	Include high quality walking infrastructure with any bypass
	Trees on every street

Additional long-list interventions received following the submission of draft minutes to attendees:

- Measures to divert state highway traffic travelling south from Nelson away from the Gladstone Road/Lower Queen Street lights.
  - Traffic could then be diverted not only to the Hope Bypass via Beach Road, but this could also take those travelling west to Appleby, Mapua/Motueka away from the Gladstone Road lights.
- Restrict parking on both sides of Gladstone Road to make it safer for outgoing/ingoing traffic.

Meeting Notes

Richmond Urban Vision – Workshop

Richmond Programme Business Case

Date/Time:	February 22, 2021 / 09:30 – 12:00
Place:	Saxton Oval, Nelson
Attendees:	Tim King, His Worship the Mayor Stuart Bryant, Deputy Mayor and Tasman RTC Chair Brian McGurk, Nelson RTC Chair Judene Edgar, Nelson RTC Deputy Chair Jane Murray, Tasman RTC Kit Maling, Richmond Ward Councillor Anne Turley, Tasman RTC Barry Dowler, Tasman RTC Celia Butler, Tasman RTC **Tasman District Council**: Drew Bryant, Jamie McPherson, Jacqui Downs, Dwayne Fletcher, Clare Scott, Jeremy Butler (note: not all present for entire duration of workshop) **Waka Kotahi NZ Transport Agency**: Melissa Feather, Steve Higgs, Andrew James, Clare Fraser, Tresca Forrester, Sam Breen **Stantec**: Andrew Maughan, Matt Soper, Daniel Chapman, James Newton
Distribution:	As above

Item
Overview • To support the Programme Business Case (PBC), a high-level Urban Design Strategy (UDS) for Richmond is being developed. The purpose is to ensure that the solutions being proposed in the PBC are supportive of Richmond's future as a vibrant metropolitan centre in the Nelson-Tasman region. • The UDS will bring together the vision for the integration of transport, land use, environment, and urban design within the business case process, bringing together the existing planning and strategy documentation in to one place. • The draft Strategic Case presented the problems and issues. There was an agreed case for change, and now we are looking to establish what the strategic response (covering urban design and transport) is. **Workshop Purpose** • The purpose of the workshop was to look to establish the 'Vision' and aspirations for Richmond. Insights were provided by the Richmond councilors and regional transport committee to help develop the vision – the project team helped facilitate conversations. When we review and assess potential options, as well as looking at how well the programme solves the problems, we will look to see how well each aligns with (and would support) the 'Richmond Vision'.
To start the thought process around what aspirations the group had for Richmond, two questions were posed. The following captures the main themes: **What do you like about Richmond?** • Walkways, a dynamic small township, the physical setting amongst the hills, sunshine. **What do you like about your favourite city?** Walkable, homely, easy to get around, great public transport, less cars.
Stantec presented to the group an overview of: • Key contextual drivers – climate change, demographic change • Urban design best practice • Council's strategic objectives for Urban Design The presentation is provided as **Attachment A**. **Key points**

Meeting Notes

Item

- Transport is one of the key target areas (nationally) when it comes to reducing carbon emissions. Addressing climate change is also a key priority for TDC, as per several recent strategies.
- Significant growth is already happening and will continue to happen over the short-medium term.
- Demographic changes (to an aging population) is expected, and this is something we should be planning for now (i.e. considering the housing preferences, accessibility and other needs for those with restricted vision, hearing or mobility).
- Best practice – fundamentally, what we do needs to support *healthy*, *equitable* and *sustainable* lifestyles.
- Example urban design approaches to delivering best practice include reclaiming streets for people, low traffic neighbourhoods, building middle-density housing and equitably distributed multifunctional open spaces.

Group Exercise No.1 – "What does success look like to you?"

The workshop broke into three groups and were invited to consider what successful urban design would look like for Richmond, using the framing statement starter "A Richmond that…". Groups were asked to consider this question in the context of three themes:

- Movement and access
- Green space and public realm
- Urban form and function

A summary of the feedback received is presented in the table below.

Movement and access	Green space / public realm	Urban form and function
• Hope Bypass and grade separation (inc. for active modes). • Reduce severance, particularly on SH6 Gladstone Road. • Reduce rat-running on local streets and on Gladstone Road. Take commuting and regional traffic around, not through, Richmond. • Keep freight and commuter traffic on the state highway. • Quick and efficient movement of freight to the port. • Quick and efficient public transport, with direct buses to Nelson. • Better access to green spaces • Link park/open spaces into/with bike parks on the hillside • Schools and sports grounds are well connected to walking and cycling networks. • Easy access to Richmond Town Centre from western developments, particularly for active modes. Multiple access points. • Retain the Great Taste Trail cycle way. • Improve cycle connection and links to Richmond West.	• More pocket reserves. • Utilising existing open spaces better (e.g. the A&P Showgrounds). • Outside dining and nightlife integration of the roading space. • Fewer sterile parks and need more biodiversity. • Utilise school facilities on weekends. • Nightlife integration of the roading space. • Better use of land areas on the hillside (native bush). • Community gardens • Utilising waterways for walkways/parks. • Pocket parks in new developments. • Places for meeting and activities. • More trees along streets. • More trees in open spaces. • Paddling pools. • Green spaces in new development areas with plenty of trees • Greater biodiversity on cycle routes • Designed with future in mind – sea level rise • Equitable access to green space.	• Reallocation of road space for active modes. • Intensification of retail/commercial activity in the town centre. • A place where people do not use our streets to avoid the State Highway. • Clean air, plenty of shade & shelter, and places to stop and rest. • A variety of entertainment and good quality establishments • High quality public and active transport options when (and where) people need it. • Public transport is cheap, accessible, and frequent. • Higher density housing in the town centre. • Less on-street parking. • Wider footpaths, particularly in and around schools. • …is people friendly • Richmond that is inspirational – to everybody, residents, visitors. • Schools are well connected to walking / cycling networks • Richmond is more people friendly (rather than car friendly) • Richmond is a place where kids can play on the street.

Meeting Notes

Item

• Richmond is a place where it is easy to access activities like sportsgrounds. • Welcoming to walkers, cyclists rather than daunting. • Richmond is a place that is easy to get into and out of at any time of the day, walking and cycling, safely. • Salisbury Road – allow space for walkers and cyclists.	• Pocket outdoor dining – not just in the centre. • Integrate & link parks/open spaces into/with bike parks on hillsides • Uses schools and parks to provide the needs of residents. • Outside side dining • Maximise use of existing green space • Pest reduction (ants, wasps, roach) • Use roads which have been over-engineered for people friendly activities by modifying the design and removing straight lines.	• Kids can safely bike on the streets • Richmond is a place that people want to live. • Richmond is a place that is affordable to live in. • People aren't dominated by cars. • Intensification is in walking distance to retail / activity centre • Richmond has more activity after 4pm into the evening. • Heritage lessons from old cities.

Group Exercise No.2 – "So, how do we get there?"

In the second interactive exercise, the three groups were asked to think about what was needed to achieve the visions of success they had identified in exercise no.1:

- What opportunities/actions are needed?
- What challenges/issues need to be overcome?

Over 50 ideas were identified (provided as **Attachment B**). The top 11 are outlined under exercise 3 below.

Group Exercise No.3 – Importance and priority

In the third interactive exercise, as one group, the relative importance and priority of the top 3-5 opportunities/challenges from each group were explored.

It was noted that all are important and some of these actions have interdependencies that were not unpicked within the session. However, a general sense of importance and priority was identified. Some items partially repeat due to each group identifying them as priorities. A summary of the feedback received is presented below:

In rough order in terms of importance and urgency:

1. Fix lower Queen Street / SH6.
2. Provide a bypass.
3. Better crossing provisions across SH6 / Gladstone.
4. Connect Queen Street with Lower Queen Street with a quality of urban form that supports walkability.
5. Improvements to place quality of streets – as identified in the NOF.
6. Deliver pedestrian and cycle friendly streets with increased safety and connectivity, including to and across the SHs, without severance of community focal points, such as Queen Street and Salisbury Rd.
7. Primary cycleways improvements / implement the active travel strategy.
8. Public transport improvements: Frequent, cost-effective, reliable accessible PT services that also access residential areas with bus schedules that provide confidence and meet users' needs.
9. PT & freight efficiency improvements (e.g. priority lanes).

The remaining two were considered as high an importance as no.3 above, but would need to happen at a later stage or would take longer to action (i.e. less urgent):

10. Update / review urban design strategy and engineering standards for property developers – to ensure best practice urban design was achieved.
11. Urban form needs to support housing choice and accessible intensification, including affordability, close to the Richmond centre. Could be done through e.g. waiver of DCs to CHPs.

Wrap up

The session was wrapped up with a reflection of the key vision of success statements from exercise 1, combined into an emerging vision statement:

Meeting Notes

Item
A Richmond that…. • Is inspirational, affordable and place people want to live. A place that offers variety in housing, retail and entertainment – including night life. Schools and intensive development are connected by walking and cycling paths. • Has connected communities (not severed by the state highway) and an accessible town centre, especially for walking and cycling. Has safe streets for all modes of travel with rat-running discouraged. Has efficient public transport and good provision of cycleways that connect green spaces together. • Is green and biodiverse (not sterile), including community gardens and native bush. That utilises existing green space better, including the use of schools. Has pocket parks within new developments and outdoor dining pockets in town. Streets are green and enable 'people activities', like play and events.

The meeting adjourned at 12:00.

The foregoing is considered to be a true and accurate record of all items discussed. If any discrepancies or inconsistencies are noted, please contact the writer immediately.

Attachments

A) Urban design ideas

B) Presentation -(attached separately)

Appendix A – Urban Design Ideas

Group 1	Group 2	Group 3
No.1 priority = Fix Gladstone / Queen St intersection • FIX THIS – Gladstone / Queen Street intersection. • Hope bypass. • Active mode grade separation. • Primary cycleways improvements • FREEDOM – cars still important; electric; hydrogen. • Cars = Freedom? Do they? What if parking is expensive? What if you have to park on the periphery? What if it took longer to drive? • Keep in mind the interconnection of all the strategies in terms of reducing / dealing with delays – PT/AT/targeted priority/ parking • We need FRESH visualisation of what 'fixing' and 'improving' the intersection [looks like]. Should we still use a 2012 template? • Extra capacity from Regional HUBS does not need to be for private vehicles. Bus/T3 priority? • Grade separation at intersection. • Active transport connections. • Rat running to/from Nelson + Brightwater. • Consideration of bus / freight priority. • Neighbourhood-level treatments (modal filters, greenspace, safe people-friendly environment). • Issue – rat running • PT priority during peak times. • Express bus route to Nelson. • Pedestrian crossing improvements on Gladstone (inc. Hope) • Issue – freight transportation • Issue – outside Richmond transportation • Implement active travel strategy – ref draft LTP.	No.1 priority = better active travel streets and connections (incl. across SH) Group 2 self-organised their ideas into 3 themes. Theme 1: PT • PT services residential areas better e.g. Richmond West • Publicised bus schedule: clear and easy; suits work schedule i.e. arrive 10 mins before half hour. • Bus schedule that public can have confidence (and make sense / meet user needs) • Urban Design that enables, at least, small buses • Frequent, accessible, public transport (cost-effective). • Longer hours 6am – 8am • More bikes on buses. • Pedestrian and cycle friendly streets (relates to all themes) Theme 2: Accessibility, safety, connectivity & mode choice. • Richmond has a 'main street' connection between Richmond West and Queen Street. • Better connections to SH1 network. • Ease of access into and out of Richmond onto SH network. • Lower Queen Street and SH6 intersection. • Salisbury and Gladstone – impossible to cross. • Pedestrian and cycle friendly streets (relates to all themes) Theme 3: Urban form, intensification, housing choice and affordability. • Accessible intensification in Richmond centre. • Waive DCs for CHPs (to enable accessible housing) and to support intensification. • Urban form needs to support the 85% of 65+ that can't afford / need retirement villages.	No.1 priority = Hope Bypass, improving Beach Rd industry access. • Don't want everything to look the same – urban design. • Turn some of the wider streets more liveable. • Developers need to make money but this is short term, needs to fit long term vision. • Plan more pocket parks, paddling pools, people friendly streets, community gardens. • Best practice urban design incorporating and protecting old with new. • Improve the through routes for traffic. • Joined up along Queen St & Lower Queen St – carry form down to Lower Queen St. • Beach Rd industrial area: growing demand; improve access for primary industry but not into residential area. • Flyover walking bridges (SH6) • Hope bypass: Flyover so don't just shift problem. • More roundabouts. • Stop rat runs. • Implement NOF: more streets as active places for people. • Make highway [the] through route / highway. • Engineering [and design] requirements for developers + TDC more people friendly. • Provide good access from East Richmond to West to access new entertainment activities. • More accommodation in the centre. • Reduce incentives for people to use alternative routes [rat running] • Implement good PT strategy, services to suit Urban Design Strategy and urban form. • In central area bounded by Waverly St, Talbot St, Salisbury Rd and Gladstone: more activity, longer hours [to] get

Meeting Notes

Group 1	Group 2	Group 3
• Implement parking strategy. • More frequent buses to Nelson and satellite towns. • Walking and cycling access across Gladstone Road. • Improve Lower Queen / Gladstone / Queen intersection for all modes. • Walking and cycling connections across Lower Queen Street • Less car focused in northern intensification area • Better access for school kids along Oxford St & Salisbury Rd • Keep roundabout at Salisbury Rd – Champion Rd but improve for walking / cycling. • Cycleways across Hart Rd.	• Urban form needs to support housing choice and affordability. • More incentives for universally designed medium density / higher density houses. • Know the true cost of free parking. • Pedestrian and cycle friendly streets (relates to all themes). • Retain cycle route (Great Taste Trail). • Walking and cycling connections across Gladstone and Lower Queen Street • Better connections between Queen Street and Lower Queen Street. • Improve Lower Qn – Gladstone intersection for all modes. • Walking / cycling focus at Richmond Primary School and surrounds; Salisbury Rd; Florence St and Linden Ct; William St and Gilbert St; Otia Drive to Richmond Primary via Ben Cooper Park. • Create a gateway to Richmond near Salisbury Rd – Champion Rd. • Roundabout at Templemore Dr – Salisbury to clow traffic. • Safer connection into Washbourn Gardens.	food, do activity, later hours, evening, movies, entertainment. • More people friendly mall and big box retail carpark / people friendly uses of the carpark. • More intensification in area between Talbot Rd and Darcy St. • More pocket parks in existing urban area. • More cycleways in southern Richmond.

Appendix B - Presentation

Richmond's Transport Programme Business Case

Urban Design Strategy Workshop

WAKA KOTAHI NZ TRANSPORT AGENCY

Monday, 22nd February 2021 at Saxton Oval Pavilion, Stoke

tasman district council
Te Kaunihera o te tai o Aorere

Workshop Agenda

A vision for Richmond's growth and urban transformation

- **Welcome and introductions**
- **Project overview & context for change**
- **What does success look like?**
  - Urban design best practice
  - TDC strategic objectives
- **Group work 1: "A Richmond that…" (30 mins)**
- ***10 minute break** (10.50am)*
- **Group work 2: "How do we get there?" (30 mins)**
- ***10 minute break** (11.30am)*
- **Group work 3: Key moves and priorities (15 mins)**
- **Wrap up and next steps**

WAKA KOTAHI
NZ TRANSPORT AGENCY

tasman
district council
Te Kaunihera o
te tai o Aorere

Purpose of the workshop

The vision for Richmond's growth and urban transformation

1. **Capture the visions and aspirations for Richmond's growth and urban transformation**
2. **Explore opportunities or key moves to achieve the vision.**

Considering:

- Urban design best practice
- Aspirations already captured in existing strategies for Richmond

Outcomes from this workshop will be vital inputs into the Urban Design Strategy:

- Capturing the aspirations for Richmond's future
- Identify opportunities to achieve the aspirations
- Prioritise opportunities into key moves
- Work towards a vision for success

Introductions

Understanding who we are and what we value

Introduce yourself…name and role

One thing you love about Richmond?

One thing you love about your favourite city?

Project context

Richmond Transport Programme Business Case Overview

WAKA KOTAHI NZ TRANSPORT AGENCY

tasman district council
Te Kaunihera o te tai o Aorere

The PBC Urban Design Strategy

What it is and what it's purpose is

- A high-level Urban Design Strategy that brings together the aspirations for Richmond, from existing planning and strategy documentation and inputs from engagement through PBC
- Brings together the vision for the integration of transport, land use, environment and urban design.
- Provides an overarching urban design context for developing the options for solving the transport problems.
- A tool for considering whether the options are supportive of Richmond's future as a vibrant metropolitan centre.
- Identifies key moves for achieving good urban design outcomes
- Presents visual representations of street typologies

Recent climate change context

The Climate Change Commission Report 31 Jan 2021

- The Climate Change Commission released their draft package of advice to Government on the steps Aotearoa must take to drastically reduce greenhouse gas emissions and address climate change.
- Transport will be one of the most important targets for change, “crucial to meeting our emissions budgets and reaching net zero by 2050…”.
- Envisions: "near complete decarbonisation of … energy use in buildings and land transport”
- Vehicle travel should be rapidly electrified – including freight trucks
- Access to walking, cycling and public transport should be upgraded.

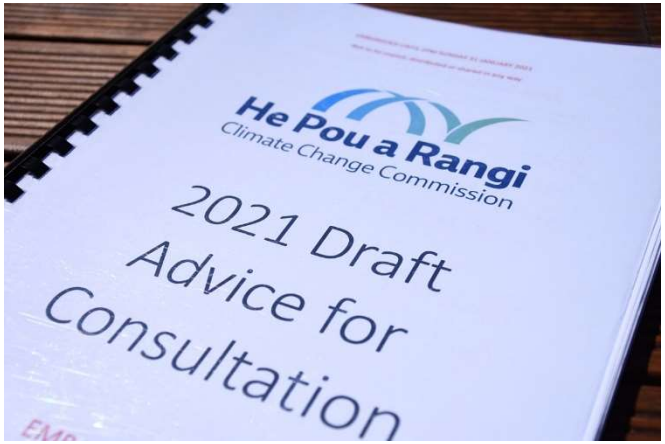
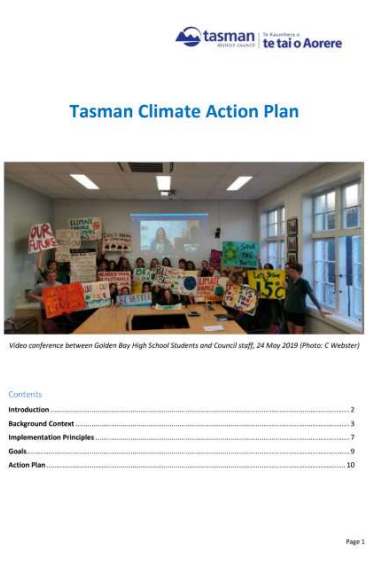


Image Source: https://www.newsroom.co.nz/climate-commission-report-what-you-need-to-know

Climate change context

Waka Kotahi and Tasman District Council

- **Toitū te Taiao Our Sustainability Action Plan**
- **Tasman Climate Action Plan**
- Plan for reducing greenhouse gas emissions achieving a low carbon transport system
- Emphasis on a multi-modal land transport system where public transport, active or shared modes are the first choice for most daily transport needs.
- Resource efficiency in infrastructure and development


tasman | te tai o Aorere

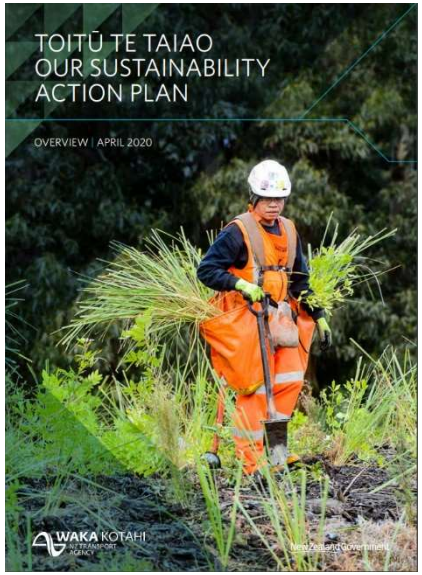
Tasman Climate Action Plan

Video conference between Golden Bay High School Students and Council staff, 24 May 2019 (Photo: C Webster)

Contents

Introduction 2
Background Context 3
Implementation Principles 7
Goals 9
Action Plan 10

Page 1



WAKA KOTAHI NZ TRANSPORT AGENCY

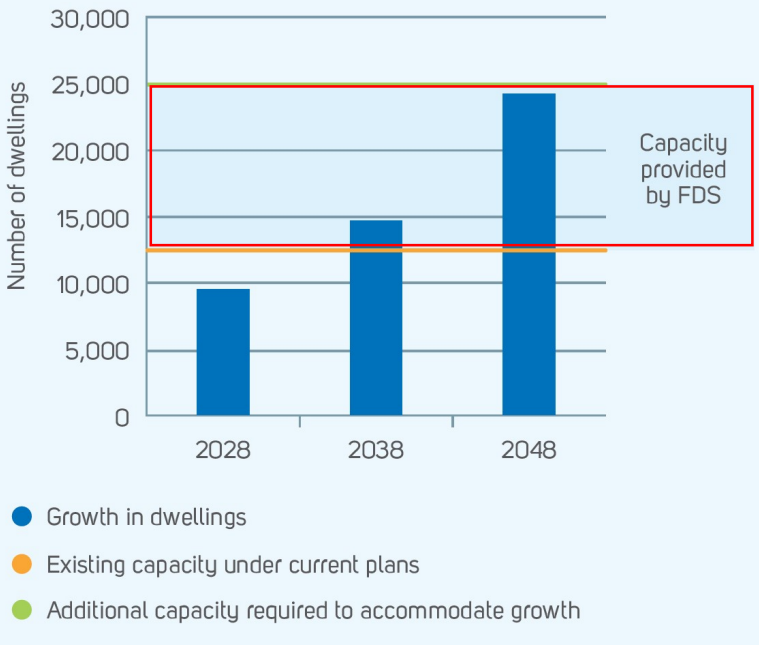
tasman district council
Te Kaunihera o te tai o Aorere

Growth context

Richmond Transport Programme Business Case Overview

- The Tasman region is growing fast – faster than predicted year on year
- May need space for up to 40,000 extra people and 24,000 extra homes across Nelson and Tasman in the next 30 years
- In the recent district plan, 32ha of residential development was brought forward and 52ha rezoned from commercial to residential. An additional 12ha is being developed under the normal consent process.
- The Future Development Strategy 2018 identifies areas for expansion and areas for intensification.

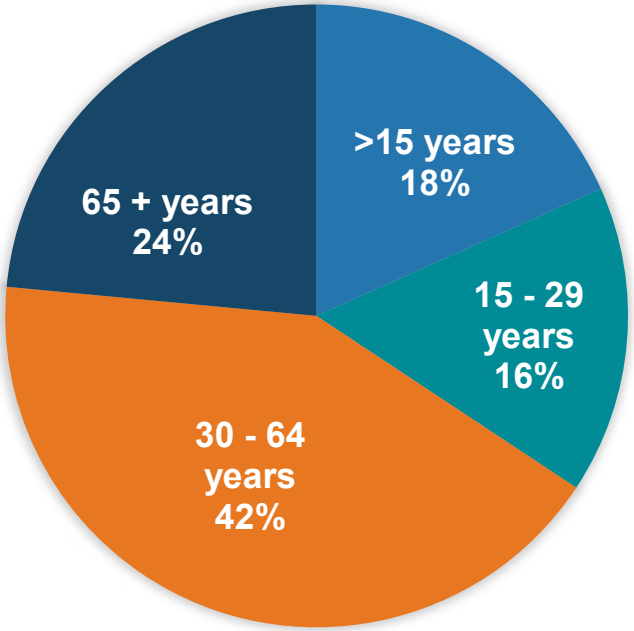
Figure 2. Growth dwellings and extra capacity needed – high growth



Richmond demographics

Who are we doing this for now?

- 2018 New Zealand Census:
  - 7,341 males and 7,944 females
  - 93.0% European/Pākehā
  - 6.8% Māori
  - 1.2% Pacific peoples
  - 3.5% Asian
  - 1.8% other ethnicities



Demographic change

Who are we doing this for in the future?

- Demographic change is a key driver for shaping the urban form and the transport.
- Majority of population growth to 2043 is in residents aged 65 and over – think access and mobility needs.
- By 2043 the over 65s will form 34% of the population in Tasman district – an increase of 10% from 2018. According to a recent Council survey, residents aged 65 and over are more likely to prefer smaller dwellings, with 40% preferring a small house, unit or townhouse in town.
- Boomers and millennials are more alike than we think! Preference for walkable, amenity rich, diverse places
- Many new residents to Richmond coming from elsewhere

	Change (%) 2018-2053
0-14	61.8
15-24	57.3
25-54	47.1
55-64	34.9
65-74	68.1
75+	325.8

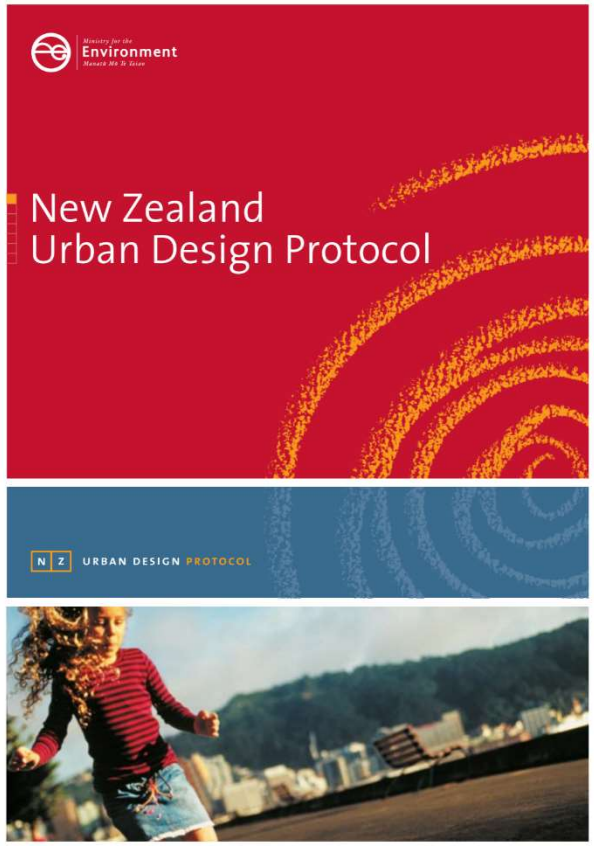
High Growth Scenario % change by age group 2018-2053

Source: Tasman District Council and Wards – Population, Household and Dwelling Projections 2018-2053, Jackson, N. 2019

Urban design best practice

Urban Design Protocol 2005 – the 7 Cs

- **Context** – the relationship between buildings, spaces and networks;
- **Character** – distinctive character, heritage and identity
- **Choice** – ensuring diversity in lifestyle and transport options;
- **Connections** – ensuring accessibility;
- **Creativity** – expressions of creativity, innovation and imagination;
- **Custodianship** – sustainable design solutions that will endure;
- **Collaboration** – communicating and sharing knowledge



WAKA KOTAHI NZ TRANSPORT AGENCY

tasman district council
Te Kaunihera o te tai o Aorere

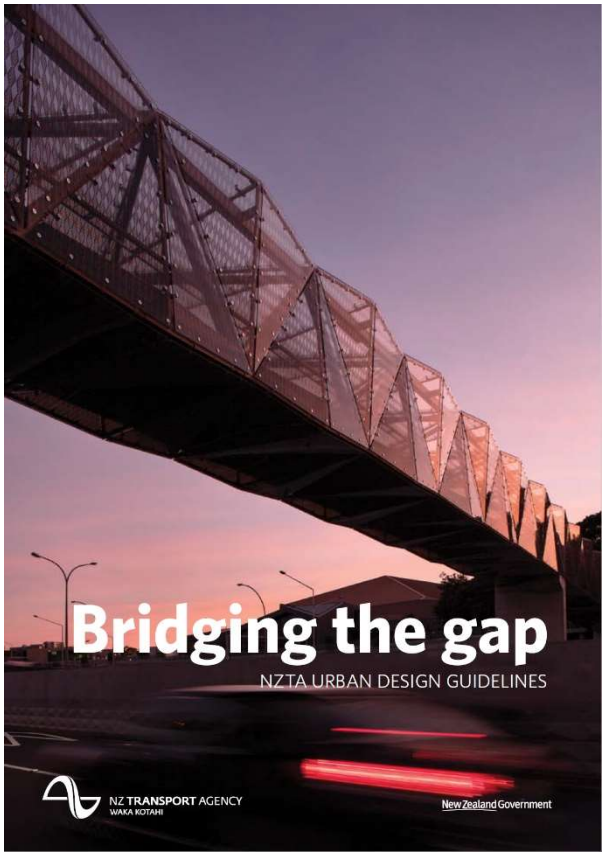
Urban design at Waka Kotahi…

Waka Kotahi's commitment to good urban design and best practice through:

- Arataki Our Plan for the Land Transport System
- **Bridging the Gap**

  10 urban design principles:

  1. Designing for the context
  2. Integrating transport and land use
  3. Contributing to good urban form
  4. Integrating all modes of movement
  5. Supporting community cohesion
  6. Maintaining local connectivity
  7. Respecting cultural heritage values
  8. Designing with nature
  9. Creating a positive road user's experience
  10. Achieving a low maintenance design



WAKA KOTAHI NZ TRANSPORT AGENCY

tasman district council
Te Kaunihera o te tai o Aorere

Urban design at TDC

TDC's commitment to good urban design and best practice through:

- Urban Design Action Plan 2008 – developed as a signatory to the NZ Urban Design Protocol
- Urban Design Guidelines – to inform private development
- Tasman Resource Management Plan – Chapter 6 – Urban Environment Effects
- Rules for intensive subdivision or building construction (RIDA)
- Urban Design Panel – independent

Urban Design

ACTION PLAN 2008

The aim of the Tasman District urban design action plan is to improve awareness of and ensure the implementation of sound urban design throughout the District. A quality built environment will complement the unique natural environment of the District.

Urban design is concerned with the design of buildings, places, spaces and networks that make up our towns, and the way people use them. It ranges in scale from the townscape to the street, public space or even a single building. Urban design is concerned not just with appearances and built form but with the environmental, economic, social and cultural consequences of design.

The Council plan aims to draw together different sections of the Council and designers and will affect both the decision-making process and design outcomes.

As a signatory to the New Zealand Urban Design Protocol, the Council has developed this Action Plan which focuses on:

- Strategy and Policy Initiatives
- Decision Making
- Delivery of Capital Works
- Promotion and Awareness
- Building Capacity

The New Zealand Urban Design Protocol identifies seven essential design qualities that create quality urban design that the Council will be endeavouring to foster through its Urban Design Action Plan:

- Context – acknowledging the relationship between buildings, spaces and networks
- Character – reflecting and enhancing the distinctive character, heritage and identity of our urban environments
- Choice – ensuring diversity in lifestyle and transport options
- Connections – ensuring accessibility
- Creativity – allowing for expressions of creativity and encouraging innovative and imaginative solutions
- Custodianship – creating sustainable design solutions that will endure
- Collaboration – communicating and sharing knowledge across sectors, professions and with communities

tasman district council

WAKA KOTAHI NZ TRANSPORT AGENCY

tasman district council
Te Kaunihera o te tai o Aorere

Urban design at TDC

TDC's commitment to good urban design and best practice through:

- Plan Change 66 - Richmond Housing Choice:
  - provide "for a **diversity** and **choice** of housing **density** and **form** to cater for a growing population, a changing demographic profile and a range of living options."
  - "Intensive residential development is promoted and encouraged within walking distance or close to town centres and urban facilities, as it increases lifestyle and housing choices and uses urban land and services, including public transport, efficiently and effectively."

Urban Design

ACTION PLAN 2008

The aim of the Tasman District urban design action plan is to improve awareness of and ensure the implementation of sound urban design throughout the District. A quality built environment will complement the unique natural environment of the District.

Urban design is concerned with the design of buildings, places, spaces and networks that make up our towns, and the way people use them. It ranges in scale from the townscape to the street, public space or even a single building. Urban design is concerned not just with appearances and built form but with the environmental, economic, social and cultural consequences of design.

The Council plan aims to draw together different sections of the Council and designers and will affect both the decision-making process and design outcomes.

As a signatory to the New Zealand Urban Design Protocol, the Council has developed this Action Plan which focuses on:

- Strategy and Policy Initiatives
- Decision Making
- Delivery of Capital Works
- Promotion and Awareness
- Building Capacity

The New Zealand Urban Design Protocol identifies seven essential design qualities that create quality urban design that the Council will be endeavouring to foster through its Urban Design Action Plan:

- Context – acknowledging the relationship between buildings, spaces and networks
- Character – reflecting and enhancing the distinctive character, heritage and identity of our urban environments
- Choice – ensuring diversity in lifestyle and transport options
- Connections – ensuring accessibility
- Creativity – allowing for expressions of creativity and encouraging innovative and imaginative solutions
- Custodianship – creating sustainable design solutions that will endure
- Collaboration – communicating and sharing knowledge across sectors, professions and with communities

tasman district council

WAKA KOTAHI NZ TRANSPORT AGENCY

tasman district council
Te Kaunihera o
te tai o Aorere

Urban design fundamentals

A selection of best practice objectives relevant for this project

- Healthy - supports the health and wellbeing of citizens
- Equitable – ensures urban environments provide opportunities for all, especially the disadvantaged
- Sustainable (or better regenerative) – supporting ecosystems, biodiversity and responding to climate change through mitigation and adaptation

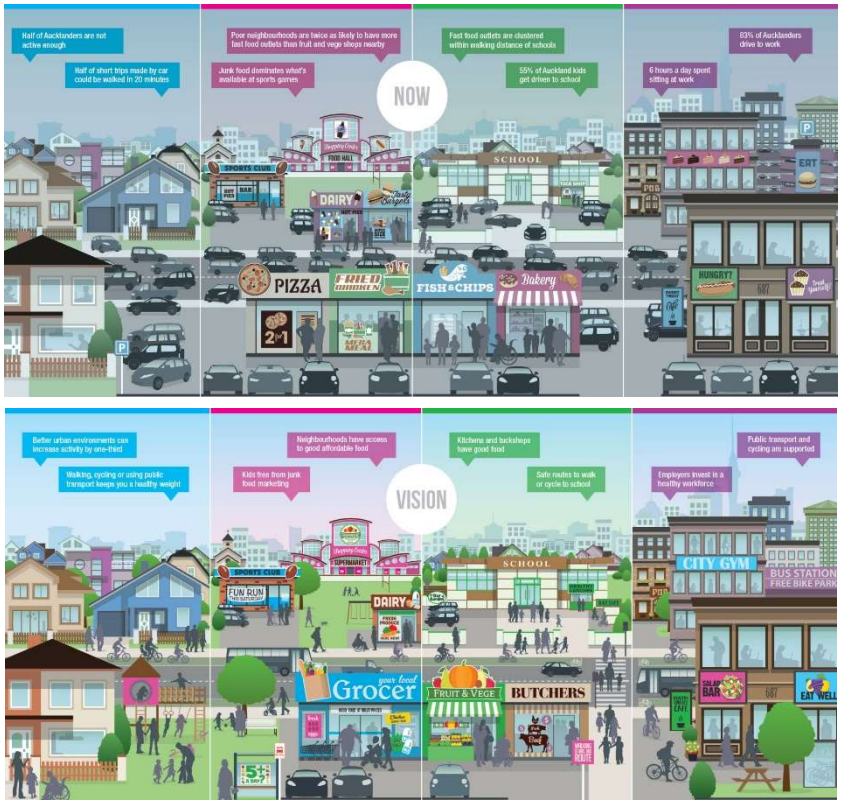


Image Source: Healthy Auckland Together
https://www.healthyaucklandtogether.org.nz/take-action/

Urban design best practice

A selection of best practice objectives relevant for this project

- Urban form and land-use that reduces the need to travel – compact, dense, mixed-use.
- Highly connected, permeable movement networks – urban ‘grid’, that prioritise active and shared modes of travel
- Which enables shared and active travel to be the preferred choice for most daily travel needs
- Connecting (not severing) communities to each other and to a hierarchy of centres, community facilities, places and public spaces

Urban design best practice

A selection of best practice objectives relevant for this project

- Variety of housing (size and tenure) and employment to meet the needs of a diverse population, including papakāinga and multi-gen housing
- Equitably distributed, multifunctional open spaces that support recreation, biodiversity, water quality and ecosystem services.
- Recognition of the street as a vital ‘public space’
- Balancing the movement functions with the ‘place’ functions – how that street functions for people at the human scale
- Universal design - for all ages, stages and abilities

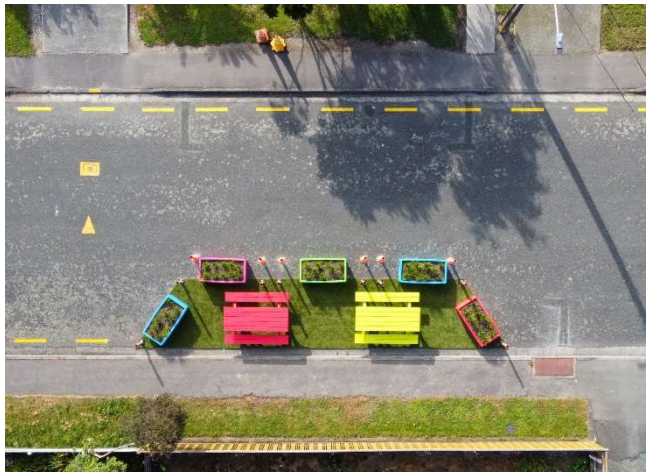
WAKA KOTAHI NZ TRANSPORT AGENCY

tasman district council
Te Kaunihera o te tai o Aorere

Urban design approaches

Themes from cities around the world

- Reclaiming streets for people – healthy streets, complete streets, M&P
- Low traffic neighbourhoods
- Building the ‘missing middle’ housing – transect from low to high density
- Creating dense, walkable, amenity rich centres
- Rise of the local centre (+ COVID)
- Transit oriented development
- Green and blue infrastructure frameworks



Nelson South - Innovating Streets

Image source: Opticos

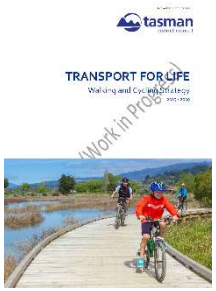
WAKA KOTAHI NZ TRANSPORT AGENCY

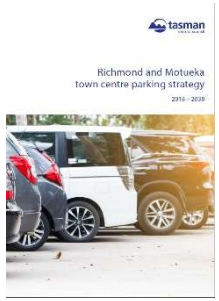
tasman district council
Te Kaunihera o te tai o Aorere

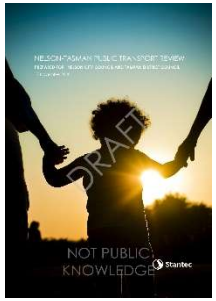
Current strategies and docs at TDC

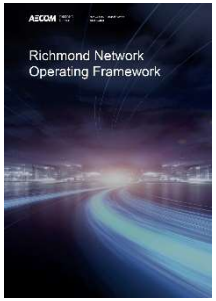
Relevant Urban Design Objectives

- Future Urban Development Strategy 2018
- Intensification Action Plan 2020
- Draft Walking and Cycling Strategy
- Richmond and Motueka Town Centre Parking Strategy
- Nelson/Tasman Public Transport Study
- Richmond Network Optimisation Framework
- Nelson Future Access
- 2020 Town Centre health checks









WAKA KOTAHI NZ TRANSPORT AGENCY

tasman district council
Te Kaunihera o te tai o Aorere

What does success look like for Richmond?

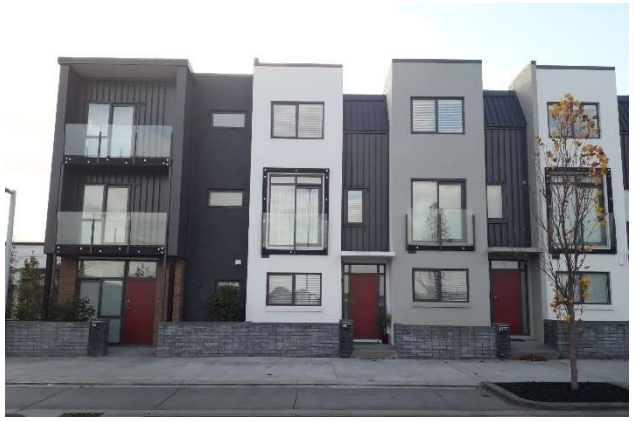
Urban design objectives from current TDC strategies

- Transformation from a rural service town to a small metropolitan centre that residents live, work, play and trade within.
- Development that occurs in areas that are close to employment, shops and open spaces and in a way that promotes social wellbeing.
- Areas of intensification that offer a diversity of housing options at a higher density.
- Supported by high quality streets, walking and cycling network and open spaces and a more frequent and efficient public service.
- Streets that are reclaimed for people, such as through creating Greenways and Low Traffic Neighbourhoods.

What does success look like?

Urban design objectives from current TDC strategies

- Sprawl is avoided and productive land is preserved.
- Limited expansion offers a range of housing typologies from medium density (under 300m²) to larger lot (up to 1000m²).
- Supported by it's own local centre so that local needs can be accessed easily.
- Connected to existing Richmond by active travel networks and frequent public transport service.



What does success look like?

Urban design objectives from current TDC strategies

- A place where people are encouraged and feel safe to walk and cycle as an alternative to driving a private car.
- Public transport coverage and service levels to support mode shift and sustainable growth
- A road network that prioritises different users and modes on routes at particular times of the day which helps to manage congestion, promote safety and resolve competing demands for road space.
- Parking options that meet the reasonable demands of those that need to drive, while making most efficient use of valuable land.
- A ‘park once’ approach
- A better evening economy / activities outside of ‘business hours’.
- A connected network of open spaces of different types and scales

What does success look like to you?

Group exercise 1 – 30 minutes

A Richmond that…

Movement and access

- different modes
- origins and destinations
- connections between people/communities and places
- networks
- permeability
- ease of access

Green space and public realm

- type (square, plaza, park, reserve etc)
- functions and activities
- hierarchy
- accessibility
- proximity to housing and centres
- biodiversity
- green infrastructure and ecosystem services

Urban form and functions

- housing, activity centres, retail, employment
- density and distribution
- demographics
- variety and diversity
- activities
- hours of the day for different functions

Maps in front of you

Group exercise 1 – 30 minutes

- Aerial photograph
- Aerial with key destinations / places of interest (attractors), walking routes and future development areas (expansion and intensification)
- A smaller map showing the draft future cycling network

10 minute refreshment break

So, how do we get there?

Group exercise 2 – 30 minutes

What are some of the opportunities/actions we can take to achieve success?

What are some of the issues/challenges we need to overcome?

Movement and access

Green space and public realm

Urban form and functions

Top 3-5?

WAKA KOTAHI NZ TRANSPORT AGENCY

tasman district council
Te Kaunihera o te tai o Aorere

10 minute refreshment break

Opportunity importance and priorities = key moves

Group exercise 3 – 20 minutes

What opportunities/actions are most important?

What opportunities/actions are most urgent?

Wrap up

Recap and reflections on the session

Rough vision based on “A Richmond that…”

Review of key moves and priority opportunities

Next Steps

- Give the afternoon workshop a debrief on vision and key moves identified in this workshop to help inform the development of options
- Outcomes from today will inform the draft urban design strategy and the assessment of options
- Develop some streetscape typologies based on preferred options and the draft UDS
- We will present these back at the workshop on 31st March for feedback from stakeholders and to help inform selection of a preferred programme
- Finalise UDS as part of the final programme business case

Thank you for your time, your patience and your participation!

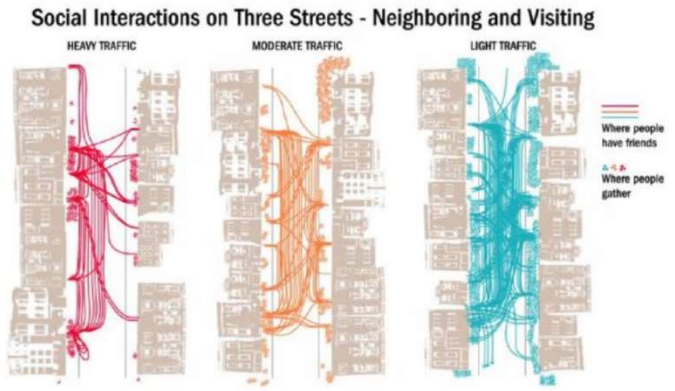
WAKA KOTAHI NZ TRANSPORT AGENCY

tasman district council
Te Kaunihera o te tai o Aorere

Urban Design Considerations

To inform thinking about transport solutions

- Tensions between movement function and place function
  - Typically our roads have been designed for most efficient movement of cars and trucks (wide lanes, wide turning radii etc)
  - Their function as places for people has tended to be neglected
- Streets with high volumes of cars, travelling at speed, can
  - Make a street feel unsafe for people walking and cycling
  - Sever people from each other and the places they want to go
  - Detract from the experiential quality of a place by noise, pollution, narrow footpaths, cycling on shoulders etc.
  - Ultimately impacting on the value of the places (place value)



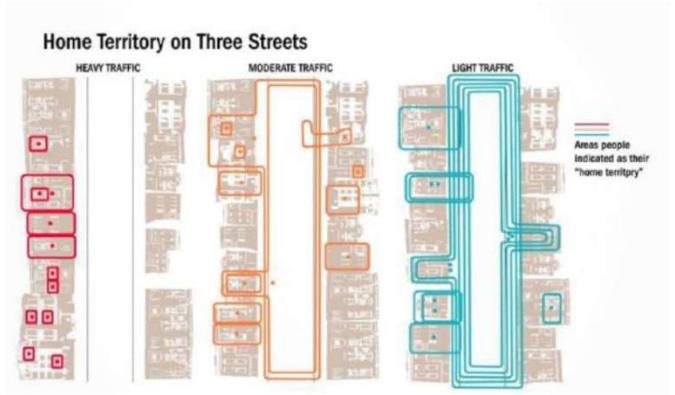


Image source: Liveable Streets - Donald Appleyard

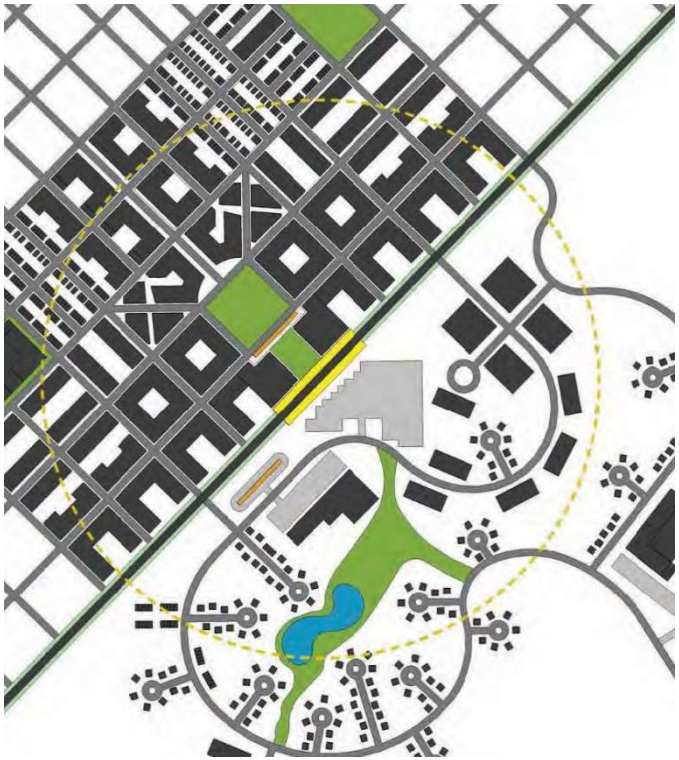
WAKA KOTAHI NZ TRANSPORT AGENCY

tasman district council
Te Kaunihera o te tai o Aorere

Urban Design Considerations

To inform thinking about transport solutions

- Walking is the most equitable form of travel – active travel is the healthiest way to get around.
- Convoluted transport networks can inhibit people from walking and cycling and wind up putting more cars on streets e.g. cul de sac's.
    - A permeable grid of streets is the best for enabling people the greatest choice for getting around
    - It provides the biggest 'catchment' for walking and cycling, supporting public transport
- Locating homes far from jobs, destinations or daily needs, result in people commuting long distances, often in the car.
    - Local shops, GPs and schools close to where people live mean more people can walk or cycle to them



Urban Design Considerations

To inform thinking about transport solutions

- New development with limited connections to existing areas can result in isolation, exclusivity, and inhibit community development
    - Important to create many connections between new development and existing areas, especially to town centres, parks and community facilities.
- Cars don’t spend money, people do, and people attract people
    - Places designed for walking = more people walking
    - More people walking = lively town centres, strong local economy
    - Density near the centres of activity = more people
    - Parking on the periphery = more space for people in the centre

Meeting Notes

Emerging Preferred Programme Workshop

Richmond Programme Business Case

Date/Time: March 31, 2021 / 10:00 – 13:00

Place: Saxton Oval, Stoke

Attendee **Facilitation**

Andrew Maughan, (Stantec)

Participants

Jane Murray, Peter Burton, Grace George, Aaryn Barlow (Nelson Marlborough District Health Board)
Karen Wilson, Roy Myers (Blind Citizens NZ Nelson)
Caroline Shirtliff (Salisbury School)
Charlotte Bidlake (Richmond Unlimited)
Chris Campbell (Road Transport Association NZ)
John Harwood, Malcom Saunders (A4A)
George Truman, (Nelson Grey Power)
Glenna Armstrong (Richmond Primary)
Peter Olorenshaw (Nelson-Tasman Climate Forum)
Kate Malcolm (Nelson Tasman Community Transport Trust)
Maureen Phillips (St Paul's School)
Bob Dickinson, Graeme Sutton (Rotary Club of Richmond)
Joanna Santa Barbara, Yuki Fukuda (Zero Carbon)
Bevan Woodward (Bicycle Nelson Bays)
Alison Locke (Ministry of Education)
Craig Vercoe, Rochelle Steer, (Nelson Tasman Kindergartens)
Murray Cameron (Unknown)
Nelson City Council: Cr Brian McGurk, Sue McAuley, Alec Louverdis,
Tasman District Council: Mayor Tim King
Cr Trevor Tuffnell, Cr Anne Turley, Cr Barry Dowler, Cr Kit Maling,
Richard Kirby, Jamie McPherson, Mike van Enter, Jeremy Butler, Drew Bryant, Dwayne Fletcher
Waka Kotahi NZ Transport Agency: Clare Fraser, Emma Speight, Melissa Feather
Stantec: Ross McPhie, Susan Lilley, Matt Soper, Daniel Chapman

---

Item
Introduction and purpose The purpose of the workshop was to review a range of options and help identify an emerging preferred programme of work to include in the business case. Potential programmes presented during the workshop were: • Do minimum • Addressing immediate issues • Accessibility • Liveability • More road capacity • Do maximum A presentation (provided as **Attachment A**) to attendees outlined the scope of the project, where we are in the process and a refresh of the key problems and urban design vision ("we want a Richmond that…"). An overview of each programme was provided to the wider group ahead of the interactive group sessions.

Meeting Notes

Item

Street typologies and example images from elsewhere were provided as additional information on a side table that attendees could view at any time (provided as **Attachment B**).

Activity preparation

Workshop attendees were split into three groups. Each group was given a colour (**blue**, **green** or **yellow**). Each group were given the long list of interventions in a matrix showing which programme each was in, maps of each programme, the draft MCA, and indicative high level costs.

Activity 1

The purpose of Activity 1 was to discuss and review all programme options and identify:

- Any aspect of any programme that wasn't clear.
- If the differences between each of the programmes was clear.
- If anything seemed to be missing from any of the programmes, given the programme definitions and the long list of interventions.
- Is there was more information that the project team could refer to for any of the MCA criteria assessments.

Each discussion phase and the notes recorded by each group are set out below:

At the end of Activity 1, each group presented their notes back to the wider workshop group.

Blue Group

Discussion Phase	Feedback
General questions / comments	• Have we modelled carbon emissions of the programmes? • Is Hope Bypass really feasible? • Can we solve the severance issue? • Do we have occupancy data for commuting vehicles? • "Traffic evaporation" only happens when driving is a less attractive option. • Can we model car use reduction with increased public transport, walking, cycling?
Immediate Issues	• Limited capacity on bridges across Appleby/Wairoa River. • Existing issue of unsafe right turns out from property accesses onto SH60.
Accessibility	• Improve the ease of turning right out of busy accesses onto Lower Queen Street. • Include the William Street shared path in this programme.
Liveability	• Grade separated crossing of Gladstone Road is important. • Suffolk Road connection? • The Great Taste Trail – how would this be incorporated/re-routed with Hope Bypass? Would it be attractive? • What are safety benefits of Bypass option? • Support priority lanes for buses. • Add incentives for car pooling?
Do Maximum	• Request to show improved cycle route along Gladstone Road. • Complete cycle network i.e. do max missing cycle network links.

Green Group

Discussion Phase	Feedback
Do Minimum:	• More info required around the H2W speed review – what speeds and where? • Does the median barrier being investigated for the Richmond deviation affect priority lanes?

Meeting Notes

<table>
<tr><th colspan="2">Item</th></tr>
<tr><td>Immediate Issues:</td><td>

The programme only shows improvements to one crossing refuge at Talbot/McGlashen. It should also show improvements to the zebra crossing outside Pak n Save.
There is also another refuge going in near Kmart end. Going in very soon.
Is the crossing at Pak n Save being improved? There are a lot of houses and pedestrians in the area. The current crossing is dangerous. (Primary school kids using it).
Really need more focus and pedestrian solutions at McGlashen and Talbot. Seems to be a lot of unsafe crossings.
What about speed limits reduction on Talbot and McGlashen? Solution to avoid severance and safety.
There are two overlapping school zones for schools on opposite sides of the town centre: Richmond Primary School zone and Henley Primary School zone. This means there are a lot of children walking to these different schools from either side of the town centre, crossing the ‘ring roads’ and walking through the town centre.
There are a lot of renting tenants and lots of children living near this area of McGlashen/Talbot and Oxford.
Salisbury Road pedestrian crossing near St Pauls School: vehicle speeds are currently reduced due to trial speed humps and temporary roundabout. This is making it easier to get the barrier sign out as slower speeds. But the traffic is at a constant flow and congestion is up significantly.
With the added density of development, there could be even more cars using the corridor. The congestion could get so bad and could lead to drivers not being able to get out of side streets onto Salisbury Rd due to there being no break in through traffic.
The underpass is not included in the Immediate Issues Programme, but it may be needed due to above problems.
Signal phasing at SH6-Lower Queen Street intersection has been looked at before and all possible changes made. So, what would short term improvements look like at this intersection? Is there much that can be meaningfully achieved by tweaking signals? Seems not to be an effective solution.
Issues on Salisbury Road – not a lot of kids cycling and walking to school so need to get safer facilities (cycling lanes) for them to use to reduce car use.

Notes from mark ups on the Programme Map:
<table>
<tr><th>Area</th><th>Feedback</th></tr>
<tr><td>Ring Roads (Oxford, McGlashen, Talbot)</td><td>• Improve pedestrian crossings and safety on all ring roads – not just in the locations shown.</td></tr>
<tr><td>Talbot/McGlashen crossing improvement</td><td>• We need both this and improvements to existing zebra outside Pak n Save.</td></tr>
</table>
</td></tr>
<tr><td>Accessibility</td><td>

Given the proposals for William Street, how will people walking and cycling connect to it from Hill Street and in particular the southern side of Hill Street? The programme doesn’t currently show any improvements there.
There’s no mention of a cycleway at 3 Brothers Corner cycleway. How do people / children get to the cycleway from the Ranzau School / Richmond School zone? Need additional improvements to connect to the residential areas in the school zone.
Why not include a crossing point opposite Hope Hall? There is not enough crossing points along SH6.
Need to include safe speeds whenever there are cycling lanes – i.e. Champion Road, Hill Street, Hart Road, Queen Street.
Ensure no carparking near cycle lanes to avoid car doors opening onto cyclists.

</td></tr>
</table>

Item	
	• Are we proposing to close the road or dead end at Church Street? It is not clear from the item on the map. • Is there enough crossings on SH6 near new growth areas in Richmond South (Whites Road area)? Could show more. • What does the priority of buses on Salisbury Road mean, how will this function? • If we improve car journeys and make capacity improvements, this may work against achieving mode shift. We need to focus on achieving mode shift first. • Notes from mark ups on the Programme Map:

• Area	• Feedback
• Main Rd Hope (between Ranzau Rd & Appleby Hwy/SH60)	• We could consider more crossings here.
• Appleby Hwy / Gladstone Rd / Bateup Rd	• Cycle connections missing between the Great Taste Trail and Wensley Rd and future development in Richmond South.

Liveability excl Hope Bypass	• Connect Richmond West into CBD: this programme needs to include the cycle path shown in the Accessibility Programme. • Need to show a better network for cycle lanes – the proposed lanes do not link up to create a network. • The programme lacks an express bus service on SH6. Bus passengers should have the quickest route. • Full bus proposal should include express service along the Richmond Deviation. • What happens to the walking/cycling/ great taste trail with the Bypass? High quality lanes on the side of the road won't replace the trail experience.

Yellow Group

Discussion Phase	Feedback
General questions / comments	• Unclear what "upgrades" and "capacity" interventions are. • SH to protect local roads. • Can the Lower Queens/SH6 intersection really be further optimised? • What is strategy/outcome trying to achieve?
Immediate Issues	• Ensure to include (Wensley) narrow section / "pinch point".

Accessibility	• Salisbury Rd – is there the ability to upgrade/create priority? Seems narrow, already sections of no parking.
	• If upgrade McShane, will it become a freight attractor?
	  o Traffic signals at Berryfields intersection may reduce this.
	• Will Gladstone "upgrade"/priority lanes be an issue for business?
	  o Already low occupancy parking / not 'comfortable' space for pedestrians.
	• Lower Queen mix of uses - business activity & residential & school & retirement village
	  o Upgrade needs to cater for all modes/occupants/uses.
	• There are "back door" entrances to schools providing good access from north - Gilberts/William/via other schools/Reservoir Creek.
	• Why do all the cycle improvements focus on north/north-east?
	  o Seem to be missing some connections to NCC routes.

Liveability	• Unclear why the focus on north/north east (intensification) zone – not necessarily where the issues are. • For Park and Ride to work, must have priority bus lanes. • Note that cost increase/trigger is addition of Hope Bypass

Item	
	○ Cost of intersection v overbridge 'negligible' – large intersection. • Could Lower Queen Street go over Gladstone/SH6? ○ More challenging, harder to make local trips, would cut off businesses.
Capacity	• Consider renaming programme to "Increased capacity" – addresses growth areas, had a land and movement. • Example discussed - recent Cool Store delivery to Port, 48 hour timeframe/urgent ○ Freight pressure only going to get worse.
Do Maximum	• Programme is looking at a 30 year plan so why not 'do maximum' ○ Not like going to do all at once. • Important to know triggers/when to invest. • 10km is very slow in CBD / 30km seems right.

Activity 2

The purpose of activity 2 was for each group to decide which of the programmes was their preferred programme. Each group were asked to use the resources provided to mark up a map or write down the group's preferred option, including why this was their preferred option. Groups were asked to identify any items that they could not agree on and why.

The preferred option discussion and notes recorded by each group are set out below:

At the end of Activity 2, each group presented their notes back to the wider workshop group.

Blue Group

Diverse opinion generally split around the potential Hope Bypass (whether to include it, or if it is included, how it might function) with approximately 50% of the representatives at the table not agreeing that there was a need for the Hope Bypass Designation. Much of that groups focus was on investing further in active and public transport modes, and increasing liveability and safety.

- Strong support for mode shift and breaking the chain of car dependency.
- There is a need for short term inventions and a staged approach.
- Cycleways should link up and form a complete network without gaps.
- Strong support for priority lanes on Gladstone Road for freight and buses.
- Worried about loss of bike lanes/Great Taste Trail – loss of amenity on Great Taste Trail.
- Concern of legal challenge, similar to the Mill Road (Drury) project, if we are not meeting climate obligations.
- For the trucking industry, the bypass with the overbridge is seen as vital.
- Extra trucks are being put on by companies to get the required freight shifted. Time is being lost waiting in growing traffic jams.
- Large cost to transport business, cost to other businesses that need their freight carted, making Nelson products more expensive on local and world markets.
- By having a bypass and keeping traffic moving, save fuel, keeps the heavy traffic away from residential areas, makes life safer for cyclists and walkers, good for everyone's mental health.
- We need to accept if we are going to have more people living in Richmond then we need infrastructure to match. This infrastructure could be expensive.

Green Group

Overall group preference is for a 'Liveability' approach, starting with Liveability Programme interventions to assist with getting safer routes for people walking and cycling, better PT provision and to achieve mode shift. Then deliver further interventions in the Do Max. Retain the Hope Bypass designation so that it can be used if required, potentially using it for freight and/or bus.

Phase 1

Start with liveability approach; build active mode & PT use; support 'place', improve safety

Then, consider if bypass needed – see Do Max below.

Item

Phase 2 (Do Maximum)

Start with liveability but include retention of the bypass designation for Phase 2.

Need for the bypass is a bit 'chicken and egg':

- Build bypass to enable less traffic on local roads and safer and more attractive streets.
- But, it provides more road capacity, therefore more cars.

Hope Bypass Sequencing:

- Wait until really needed.
- Understand outcomes of other interventions before committing to building the bypass:
    - PT
    - Active modes
    - Connections to and between main attractions (in the future).

These other interventions will establish behaviour change and determine how much vehicle capacity is needed.

- Consider bus and freight only to start, include cars later if required.
- Phasing could support businesses to manage/respond to change i.e. adapting to less cars coming through the town centre.
- Ensure cycle lanes are complete (without gaps).
- Include cycle provision with Hope Bypass.
- Public Transport: Important to get the service improvements to achieve the mode shift to PT – not just providing the infrastructure.

Area	Specific Feedback
Bateup Rd	Connect the cycle network between Wensley and Gladstone
Oxford St	Need to include crossing provision on Oxford St too.
Hill St	Combine speed restrictions with cycleways.
Talbot/McGlashen	Consider improvements to all crossings. Strong connections required connecting residents and schools.
Salisbury Rd	Include all schools crossing improvements. Prioritise pedestrian underpass in early phases.
Church St	Cycle connection to Richmond West needs to connect to another cycleway.

Increased Road Capacity Programme discarded due to more traffic generated (chasing tail), has wide ranging implications – local roads through to Nelson.

Yellow Group

Basis of Preferred Programme was Do Maximum, with the following additions/deletions:

- Only 30 kph speed limit around Ring Road (or somehow a variable speed zone)
- Only 30 kph speed limit on CDB side streets (between Ring Road and Queen Street)
- Slower design speed on Queen Street
- Cycle separation:
    - Wensley / Salisbury (along spine)
    - Don't' need cycle separation on Hill/Champion
    - Consider Edward/George – cycle separation for schools
    - South, not on Paton – future cycle corridor to go through development.
- Include Residential Greenways – four central Richmond 'quarters'
- Consider Park and Rides further out:
    - Ensure express bus on express routes (Richmond to Nelson).
- Include Parking Building (example from Blenheim – three levels):
    - Consider parking building will be used by rural community for shopping
    - Public transport/Park and Ride used by urban community/commuters
    - Consider opportunities for public/private partnership, triggers for when to develop.
- Include Hope Bypass Overbridge:

Meeting Notes

Item
○ At grade intersection will just recreate the current issues. • Include Whakatau Drive and Beach Road overbride: ○ Potential to cut off Salisbury and reduce rat-running issues when main route congested. • Include PT max . ○ Make sure priority routes and infrastructure in place to support use. • Add Gladstone Road priority lanes immediately: ○ As a staged approach to development of Hope Bypass.
There was insufficient time for Activity Three (see reference in Attachment A) fully. The purpose of Activity Three was to determine if there was a clear preferred programme emerging across all workshop attendees. The initial high level messages deduced from the workshop were reflected back to the workshop attendees as: • **There remains a strong need to retain the Hope Bypass Designation** • **Staging will be key to delivering transformational change for Richmond** • **Planning must consider all modes with a focus on safety** • **Planning must also consider both Richmond's current urban area as well as the future growth areas.**
Next Steps • Issue workshop notes for feedback. • Complete the Urban Design Strategy. • Prepare LTP submission. • Commence community engagement. • Finalise PBC and submit for endorsement.

If you wish to submit any feedback in relation to the problems or options discussed during the workshop, please feel free to contact us via the project email address: richmondPBC@nzta.govt.nz

Attachment A: Workshop Presentation Slides attached separately.

Attachment B: Street typologies associated with options

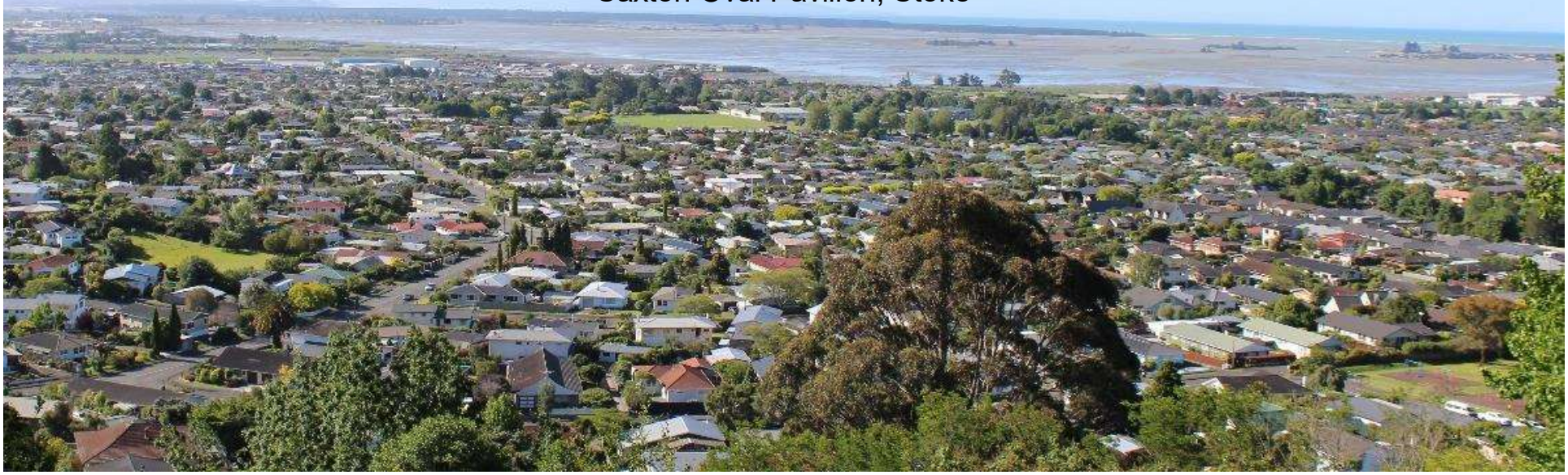
The meeting adjourned at 13.00.

Attachment A Workshop Presentation Slides

RICHMOND TRANSPORT PROGRAMME BUSINESS CASE

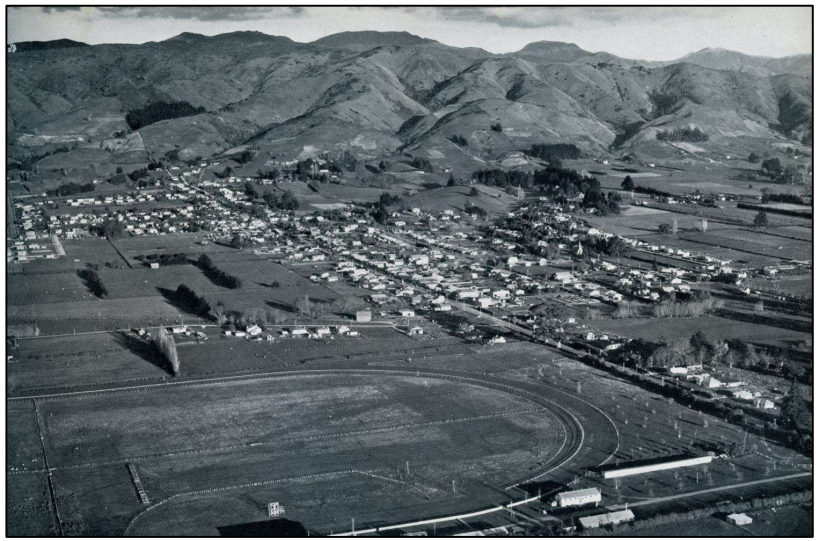
Identify a preferred programme

Wednesday, 31st March 2021
Saxton Oval Pavilion, Stoke

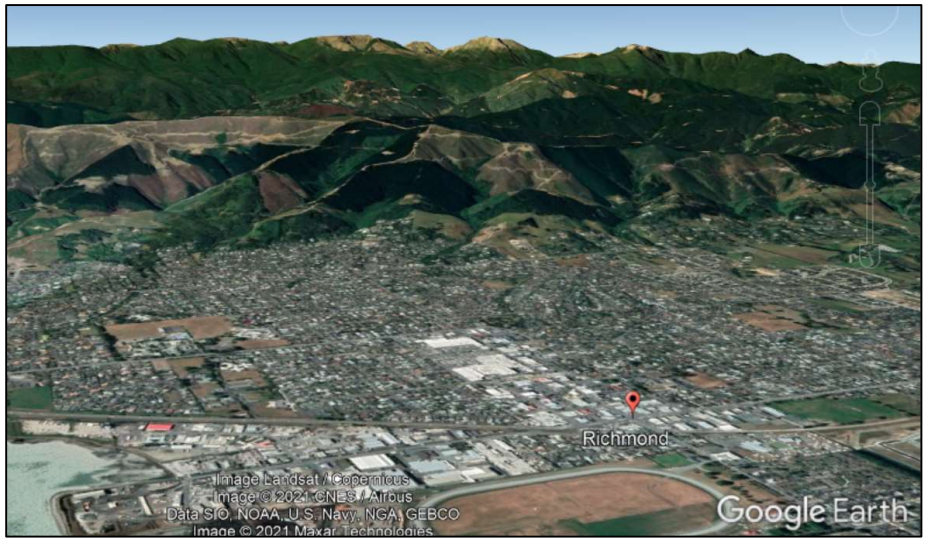


Project context and outcome from today

Identify a preferred package of transport associated projects (programme) for future Richmond



Circa 1950



Circa 2020

Circa 2050?

WAKA KOTAHI NZ TRANSPORT AGENCY

tasman district council
Te Kaunihera o te tai o Aorere

Who was invited today

- Accessibility for All
- Automobile Association
- Bicycle Nelson Bays
- Blind Low Vision NZ
- Borlase Transport
- Bus and Coach Association
- Enviroschools
- Fire and Emergency New Zealand
- Grey Power
- Hearing Association
- Henley School
- Ministry of Education
- Multicultural New Zealand
- Neighbourhood Support
- Nelson Grey Power
- Nelson Marlborough District Health Board
- Nelson Mums (and Mums to be) Support Group
- Nelson Suburban Bus Co Limited / Bus and Coach Association
- Nelson Tasman Chamber Of Commerce
- Nelson Tasman Climate Forum
- Nelson Tasman Community Transport Trust
- Nelson Tasman Cycle Trails Trust
- Nelson Tasman Kindergartens
- Nelson Women's and Children's Refuge Services Inc
- Nelson-Tasman Climate Forum
- NZ Police
- Richmond Primary
- Richmond Unlimited
- Road Transport Association NZ
- Rotary Club of Richmond
- Salisbury School
- St Johns Ambulance
- St Paul's School
- Tasman Nelson Kindergarten Association
- Te Kura Kaupapa O Tuia Te Matangi
- Top of the South Principals group – Primary
- Waimea College
- Waimea Intermediate
- Waimea Youth Council
- Walk Nelson Tasman / Health Action Trust
- Zero Carbon

Workshop Agenda

- **Short Presentation**
- **Group Activity No.1**
  - Review programme options
- **Break** (short refreshment break)
- **Group Activity No.2**
  - Tell us your preferences
- **Break** (lunch)
- **Group Activity No.3**
  - Identify attendees preferred programme
- **Wrap up and next steps**

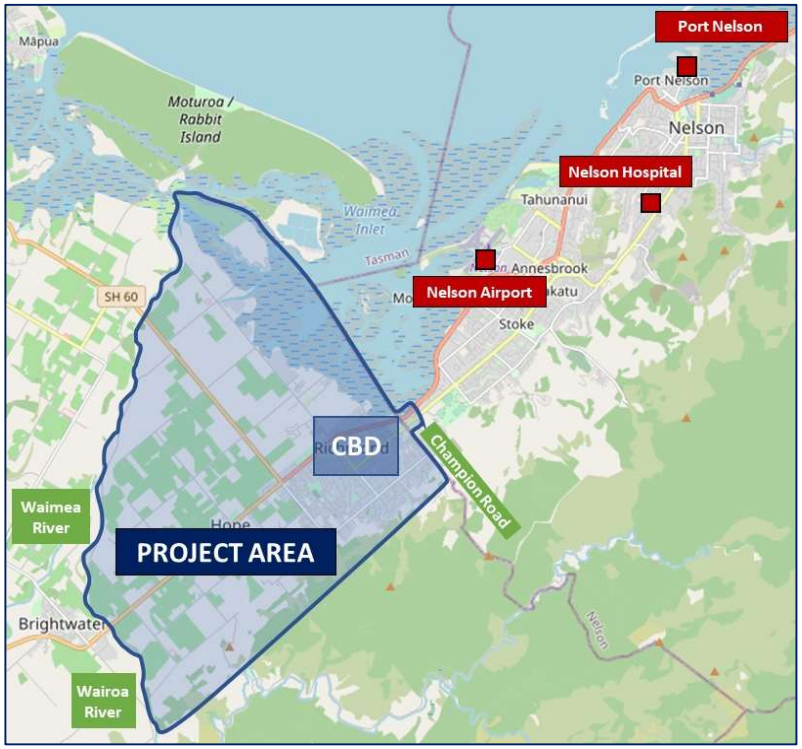
WAKA KOTAHI NZ TRANSPORT AGENCY

tasman district council
Te Kaunihera o te tai o Aorere

Programme Business Case scope

Scope for the PBC

Project Area

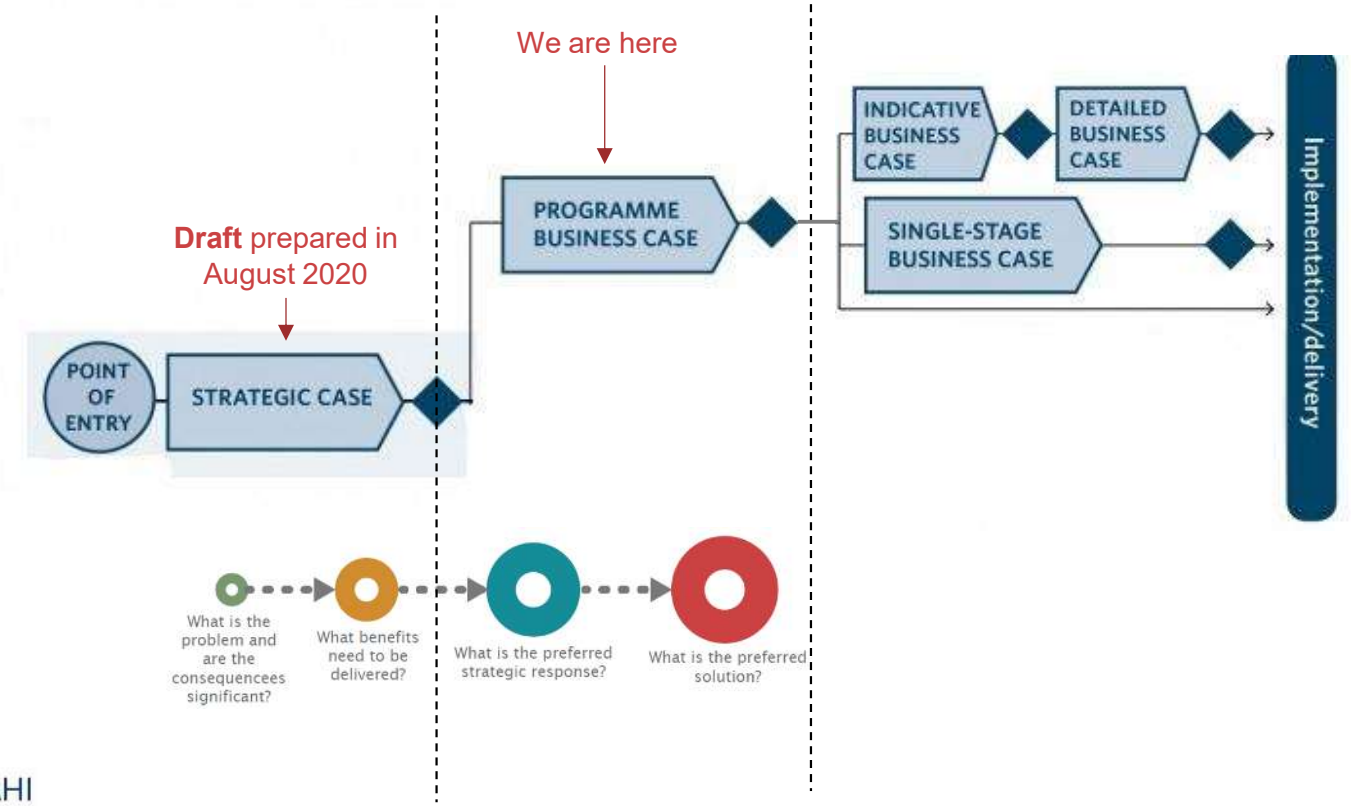


Area of Influence

WAKA KOTAHI NZ TRANSPORT AGENCY

tasman district council
Te Kaunihera o te tai o Aorere

Programme Business Case



WAKA KOTAHI NZ TRANSPORT AGENCY

tasman district council
Te Kaunihera o te tai o Aorere

Problem Themes

Problem 1: Safety and Place

Increasing traffic volumes as a result of growth creates severance and rat running, leading to reduced place value and increased safety risk

Problem 2: Route Efficiency

Traffic congestion through Richmond causes delays to people and goods reducing travel time reliability and access to key destinations and economic opportunities

Problem 3: Travel Choice

Reliance on private cars for short journeys as a result of car-oriented development leads to low utilisation of public and active transport modes and conflict between modes

What we want Richmond to be

A Richmond that….

- Is inspirational, affordable and place people want to live
  - Variety in housing, retail and entertainment – including night life.
  - Schools and intensive development are connected by walking and cycling paths.

- Has connected communities (not severed by the state highway) and an accessible town centre, especially for walking and cycling
  - Safe streets for all modes of travel with rat-running discouraged.
  - Efficient public transport and good provision of cycleways that connect green spaces together.

- Is green and biodiverse (not sterile), including community gardens and native bush:
  - Uses existing green space better, including the use of schools.
  - Pocket parks within new developments and outdoor dining pockets in town.
  - Streets are green and enable ‘people activities’, like play and events.

Questions answered

From pre-reading

Programmes

Long list of programmes

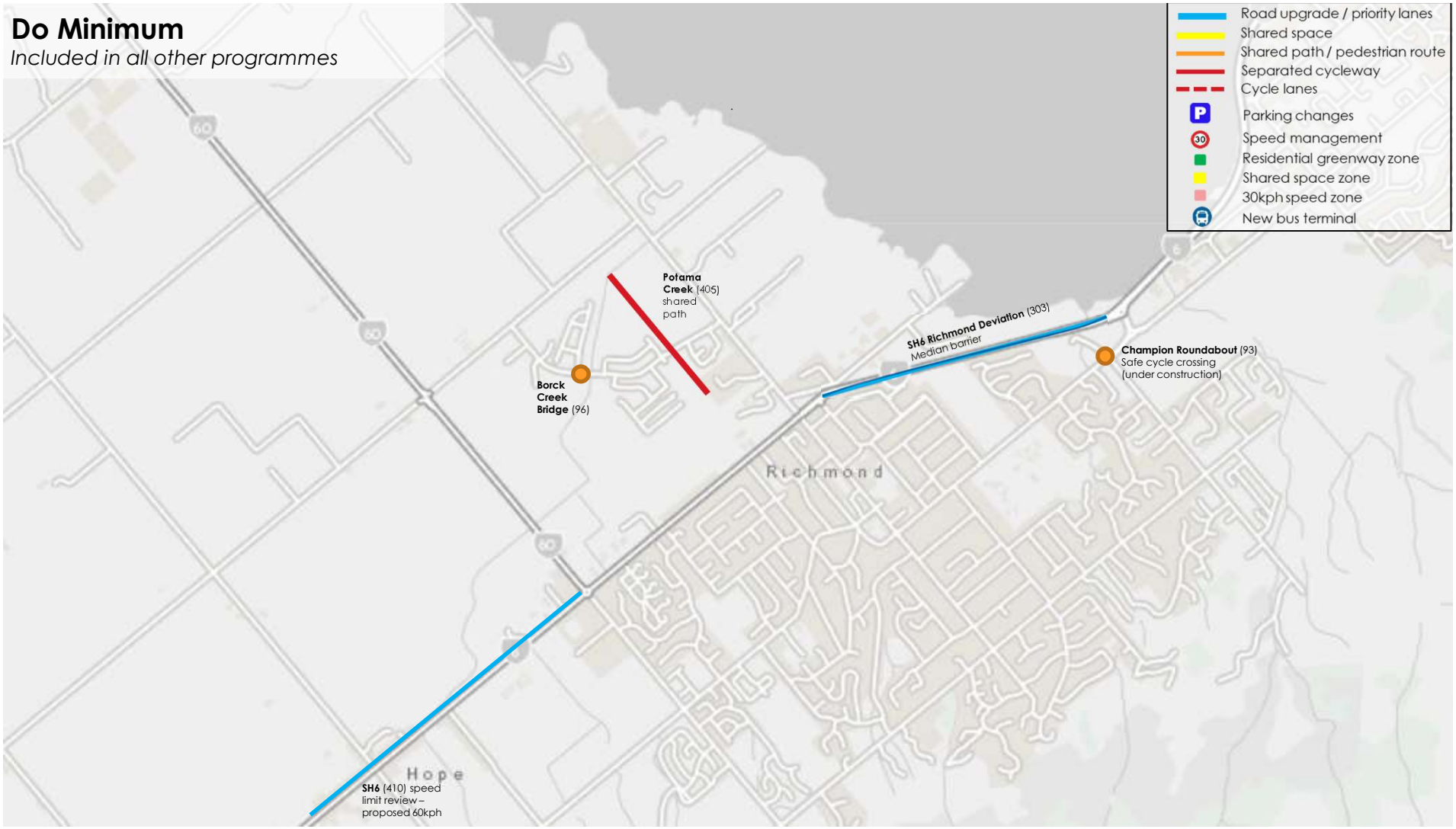
- At the last workshop a long list of interventions were identified.
- These were grouped into themes and we developed programmes of work around these themes.
- Programmes include:
  - Do minimum
  - Addressing immediate issues
  - Accessibility
  - Liveability
  - More road capacity
  - Do maximum

WAKA KOTAHI NZ TRANSPORT AGENCY

tasman district council
Te Kaunihera o te tai o Aorere

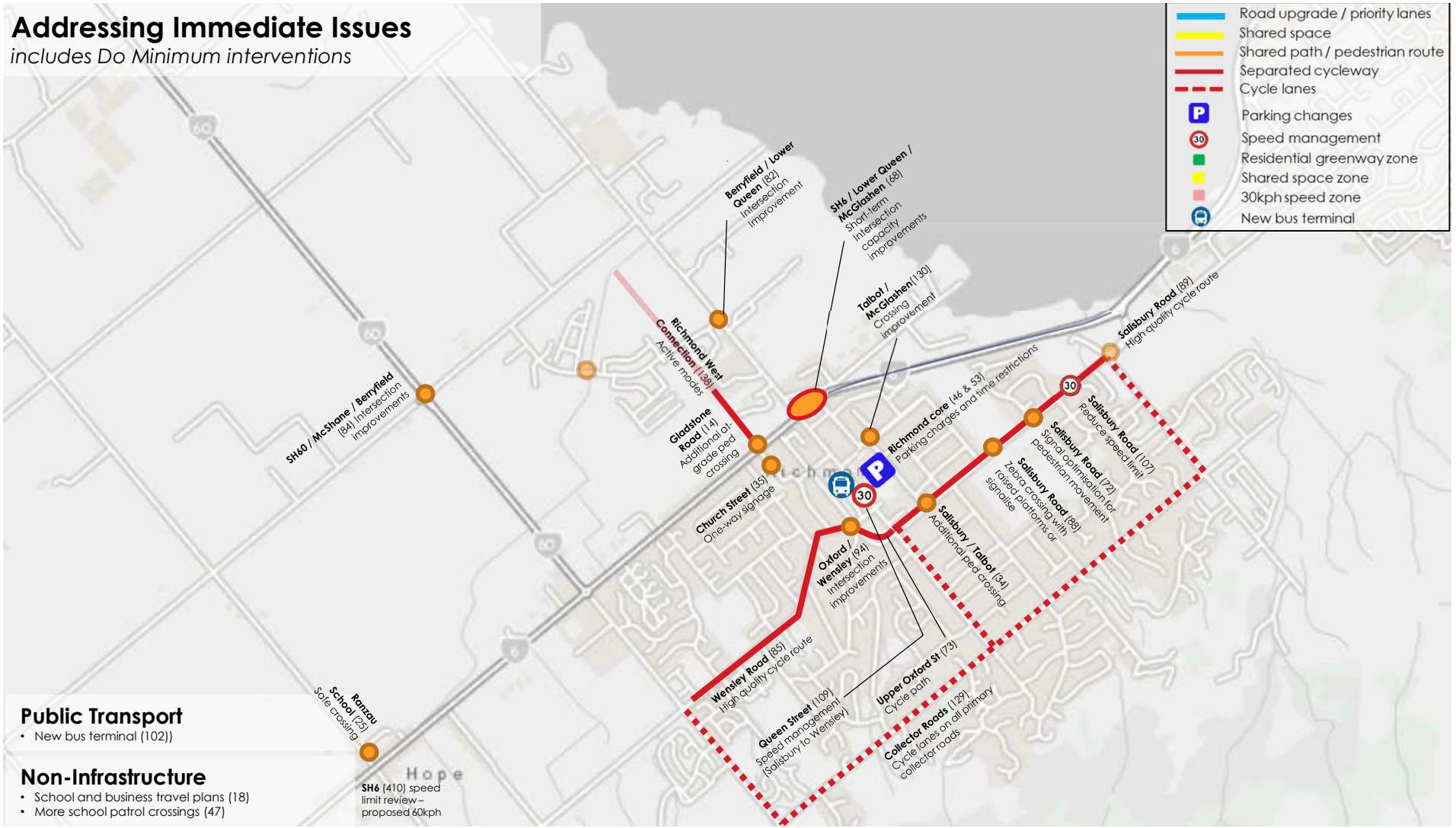
Do Minimum

Included in all other programmes



Addressing Immediate Issues

includes Do Minimum interventions



Public Transport

- New bus terminal (102))

Non-Infrastructure

- School and business travel plans (18)
- More school patrol crossings (47)

Accessibility

includes Do Minimum interventions

Non-Infrastructure

- School and business travel plans (18)
- More school patrol crossings (47)

Public Transport

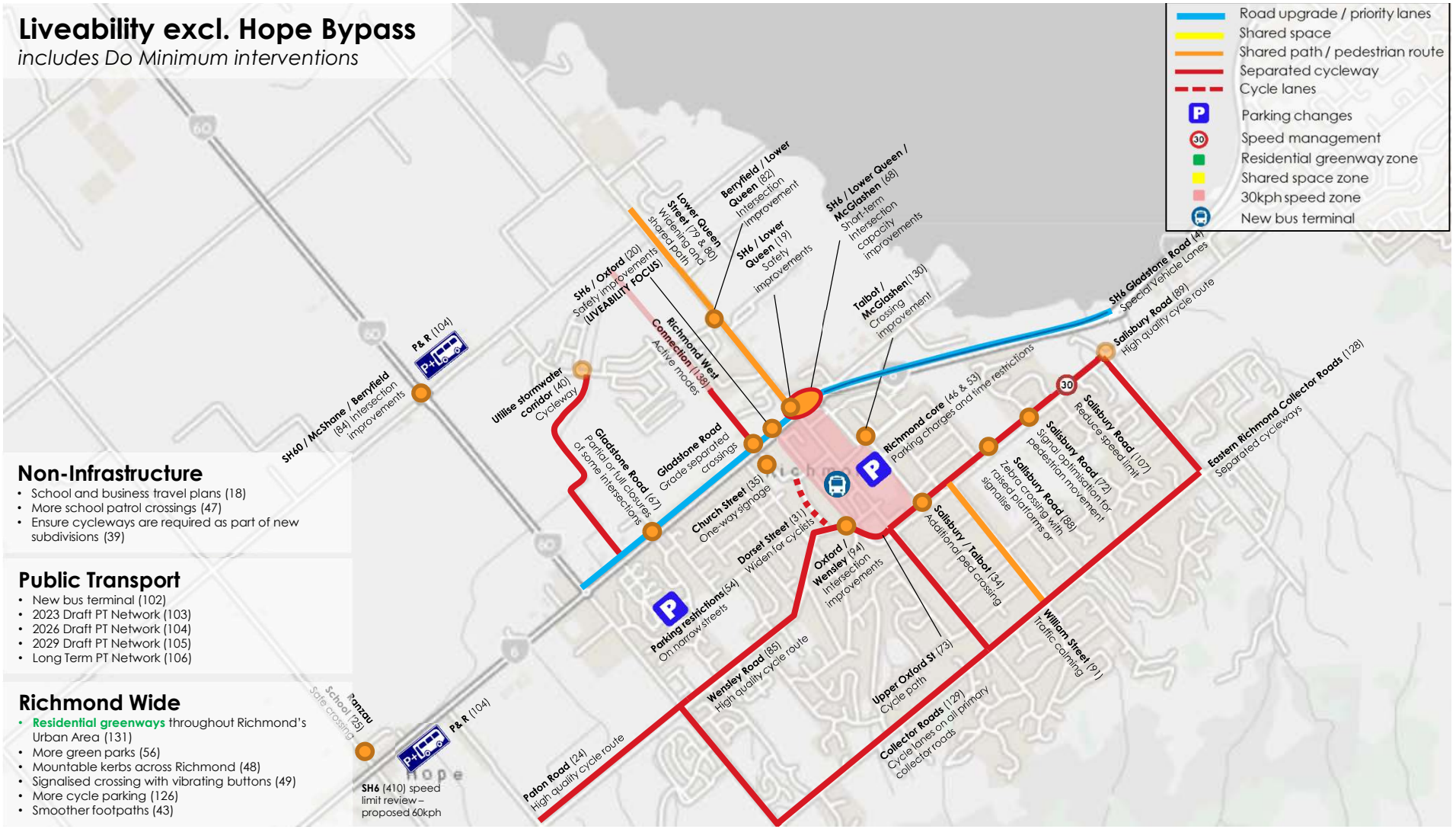
- New bus terminal (102)
- 2023 Draft PT Network (103)
- Long Term PT Network (106)

Richmond Wide

- Mountable kerbs across Richmond (48)
- Signalised crossing with vibrating buttons (49)
- More cycle parking (126)
- Smoother footpaths (43)

Liveability excl. Hope Bypass

includes Do Minimum interventions



Non-Infrastructure

- School and business travel plans (18)
- More school patrol crossings (47)
- Ensure cycleways are required as part of new subdivisions (39)

Public Transport

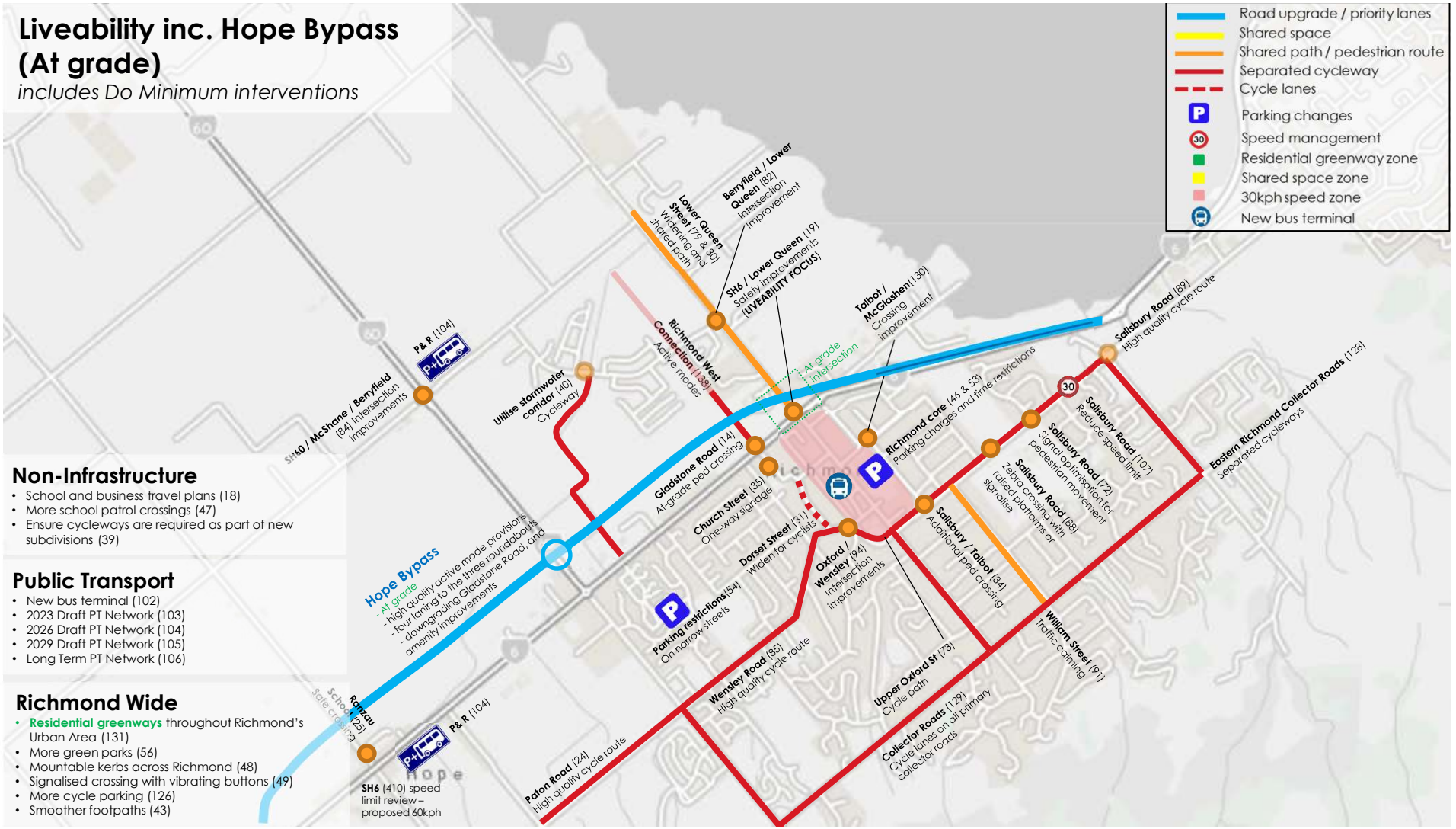
- New bus terminal (102)
- 2023 Draft PT Network (103)
- 2026 Draft PT Network (104)
- 2029 Draft PT Network (105)
- Long Term PT Network (106)

Richmond Wide

- **Residential greenways** throughout Richmond's Urban Area (131)
- More green parks (56)
- Mountable kerbs across Richmond (48)
- Signalised crossing with vibrating buttons (49)
- More cycle parking (126)
- Smoother footpaths (43)

Liveability inc. Hope Bypass (At grade)

includes Do Minimum interventions



Non-Infrastructure

- School and business travel plans (18)
- More school patrol crossings (47)
- Ensure cycleways are required as part of new subdivisions (39)

Public Transport

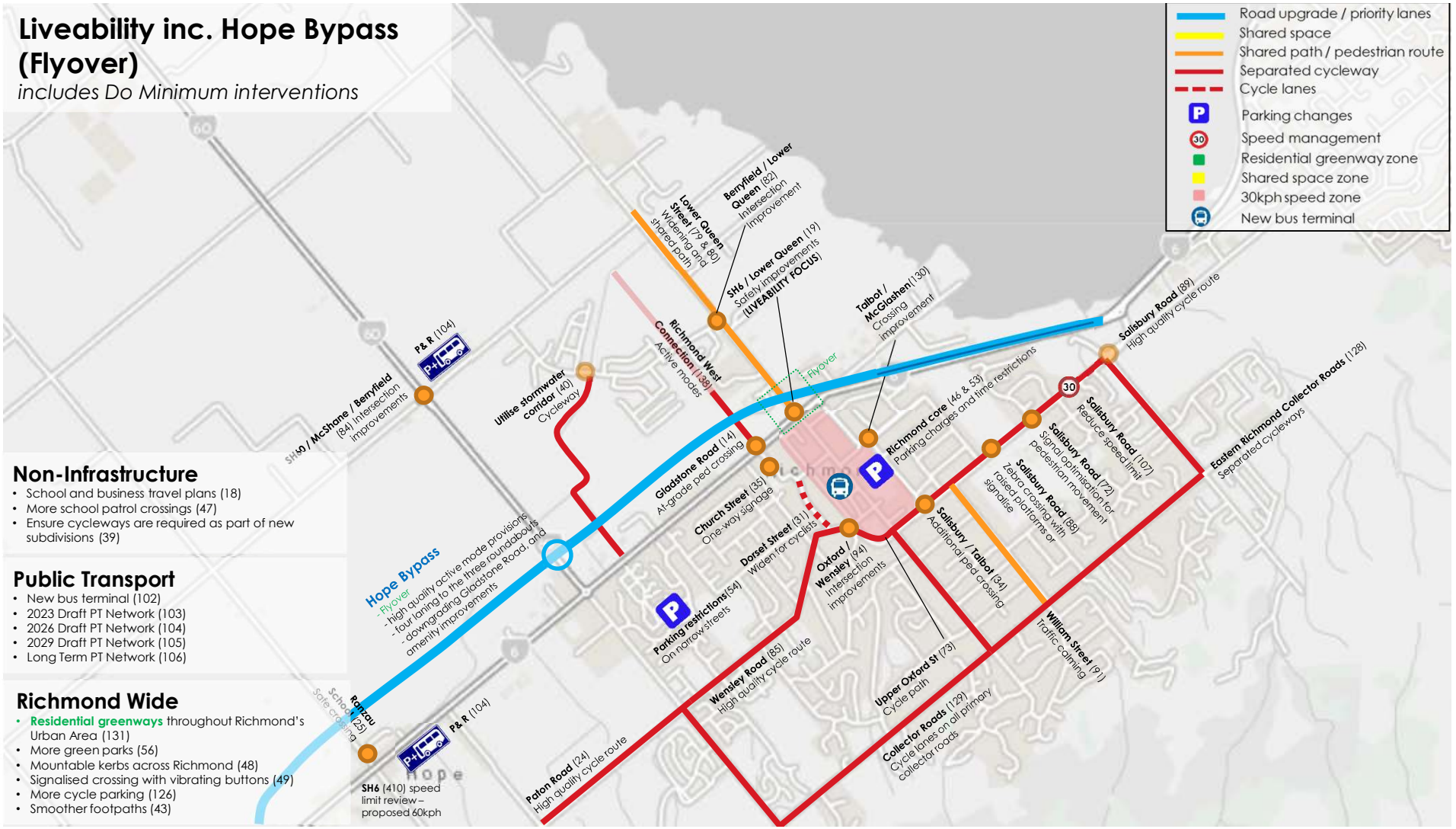
- New bus terminal (102)
- 2023 Draft PT Network (103)
- 2026 Draft PT Network (104)
- 2029 Draft PT Network (105)
- Long Term PT Network (106)

Richmond Wide

- **Residential greenways** throughout Richmond's Urban Area (131)
- More green parks (56)
- Mountable kerbs across Richmond (48)
- Signalised crossing with vibrating buttons (49)
- More cycle parking (126)
- Smoother footpaths (43)

Liveability inc. Hope Bypass (Flyover)

includes Do Minimum interventions



Non-Infrastructure

- School and business travel plans (18)
- More school patrol crossings (47)
- Ensure cycleways are required as part of new subdivisions (39)

Public Transport

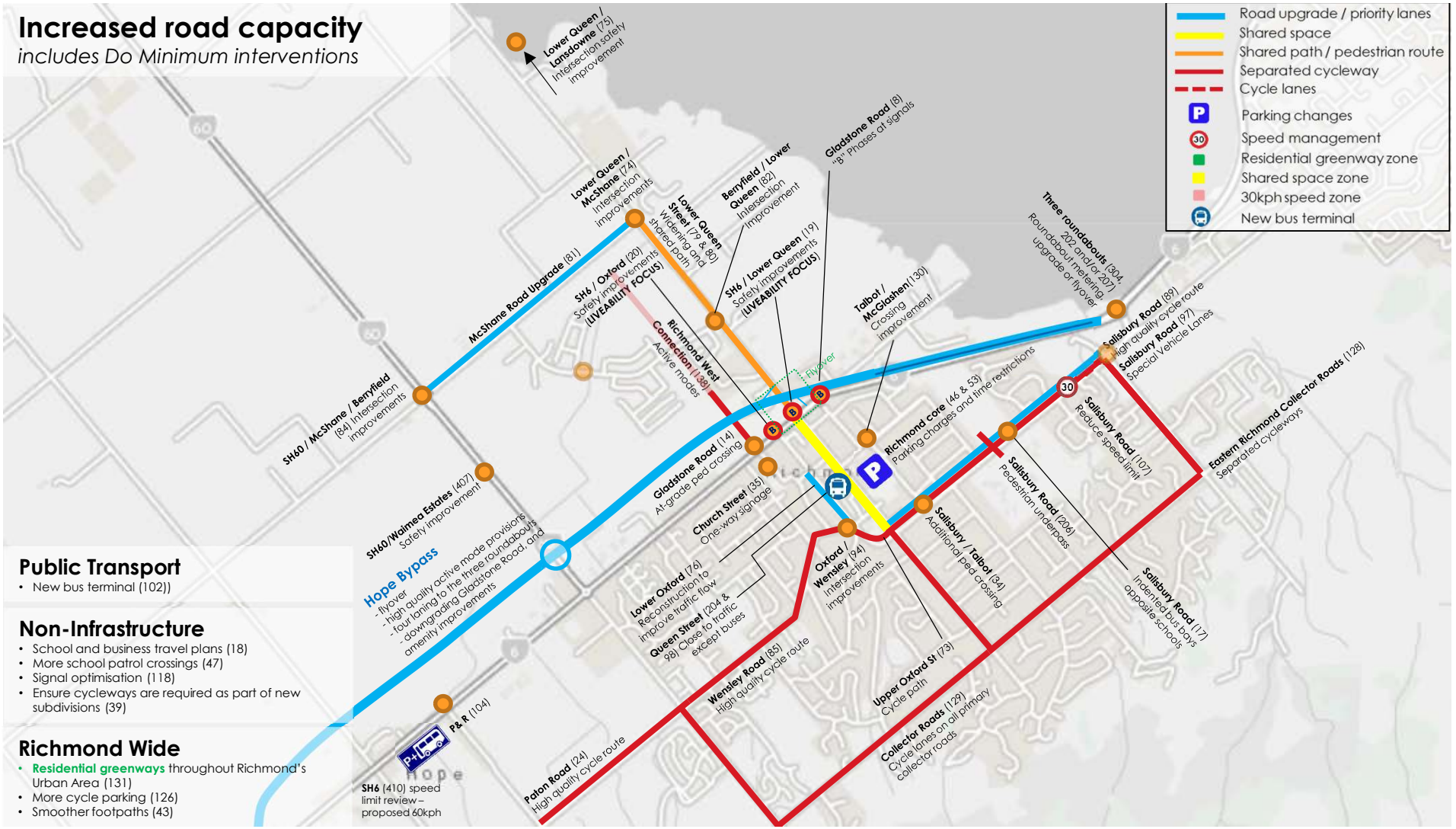
- New bus terminal (102)
- 2023 Draft PT Network (103)
- 2026 Draft PT Network (104)
- 2029 Draft PT Network (105)
- Long Term PT Network (106)

Richmond Wide

- **Residential greenways** throughout Richmond's Urban Area (131)
- More green parks (56)
- Mountable kerbs across Richmond (48)
- Signalised crossing with vibrating buttons (49)
- More cycle parking (126)
- Smoother footpaths (43)

Increased road capacity

includes Do Minimum interventions



Public Transport

- New bus terminal (102))

Non-Infrastructure

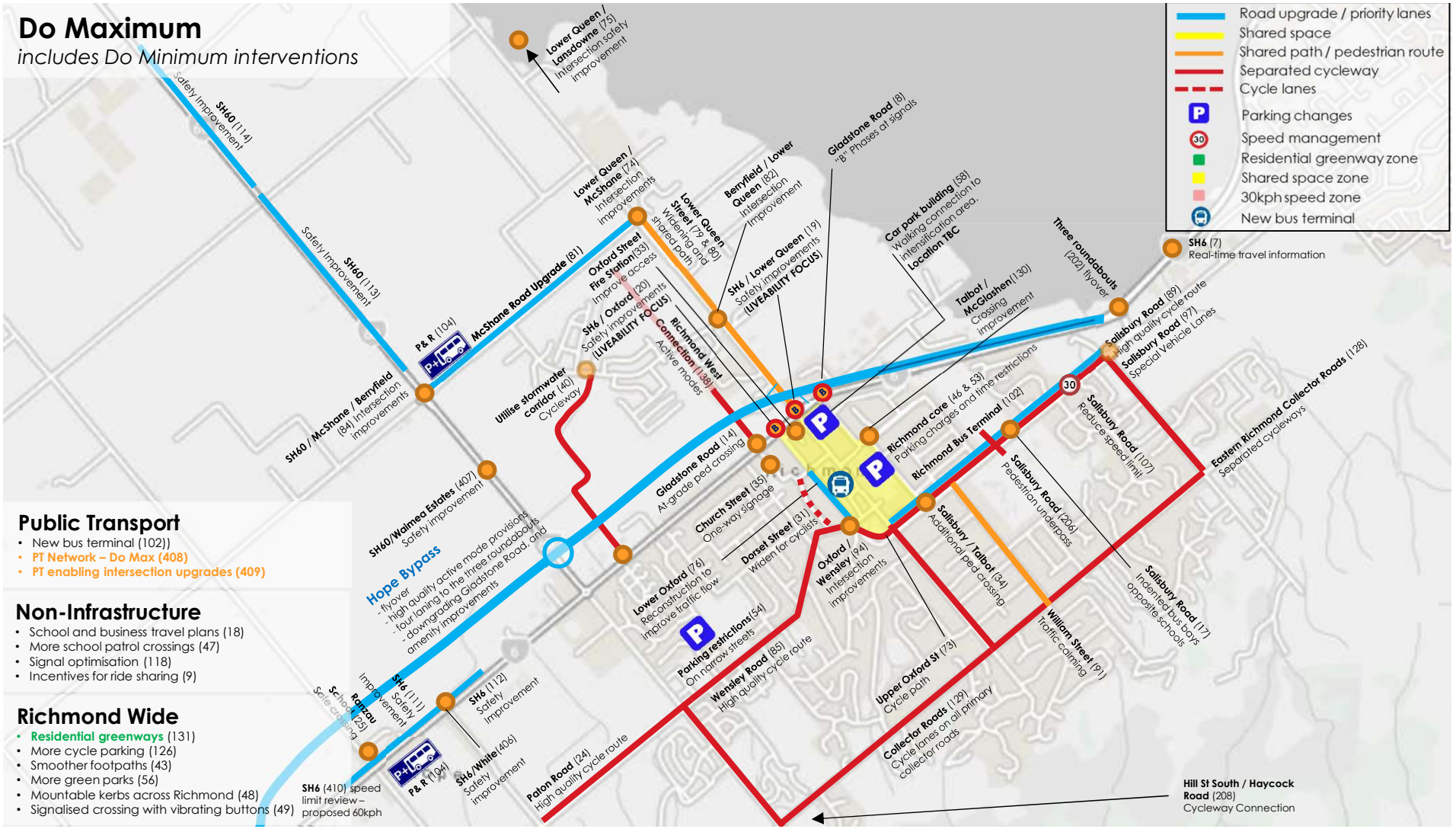
- School and business travel plans (18)
- More school patrol crossings (47)
- Signal optimisation (118)
- Ensure cycleways are required as part of new subdivisions (39)

Richmond Wide

- **Residential greenways** throughout Richmond's Urban Area (131)
- More cycle parking (126)
- Smoother footpaths (43)

Do Maximum

includes Do Minimum interventions



Public Transport

- New bus terminal (102))
- **PT Network – Do Max (408)**
- **PT enabling intersection upgrades (409)**

Non-Infrastructure

- School and business travel plans (18)
- More school patrol crossings (47)
- Signal optimisation (118)
- Incentives for ride sharing (9)

Richmond Wide

- **Residential greenways** (131)
- More cycle parking (126)
- Smoother footpaths (43)
- More green parks (56)
- Mountable kerbs across Richmond (48)
- Signalised crossing with vibrating buttons (49)

Evaluation process

1. Identified assessment criteria
2. Developed programmes
3. Assessed programmes

Criteria	Sub criteria
Investment Objectives	Place Quality Accessibility Safety Efficiency Travel Choice
Critical Success Factors	Potential Achievability Potential Affordability Potential Value for Money
Opportunities and Impacts	Climate change adaption Cumulative Impacts Property Te Ao Maori (consulting separately) Climate change mitigation

Technical assessment

1	Do Min	8
2	Addressing Immediate Issues	7
3	Accessibility	**4**
4	Liveability (excl Hope)	6
5	Liveability (incl Hope - at grade)	**3**
6	Liveability (incl Hope - flyover)	**2**
7	Increased road capacity	5
8	Do Maximum	1

Group activity 1
Understanding the programmes

Understanding the programmes

- In this activity **we ARE** asking you …
  - Any programmes you don't understand?
  - Does anything seem to be missing from any of these programmes given the programme definitions and the long list of interventions?
  - Do you understand the difference between each of the programmes, is anything not clear?
  - Is there more information you could refer us to for any of the MCA criteria that you think we should be aware of?
- In this activity **we are NOT** ..
  - Re-scoring the options
  - Identifying a preferred programme

Group activity 2
What are the preferences for you?

What is your preferred programme?

- The group is to …
  - Nominate a spokesperson
  - Mark up a map or write down the group's preferred option
  - Tell us why this is the preferred option
  - This may include identifying items that the group could not agree on and why
  - Present this back to the wider workshop

Activity 3
Preferred programme

Workshop preferences

- Facilitated wider group discussion, is there a clear preferred programme from workshop attendees, OR
- What are the key features that are common inclusions and exclusions in all of the groups' preferred programmes

Next Steps

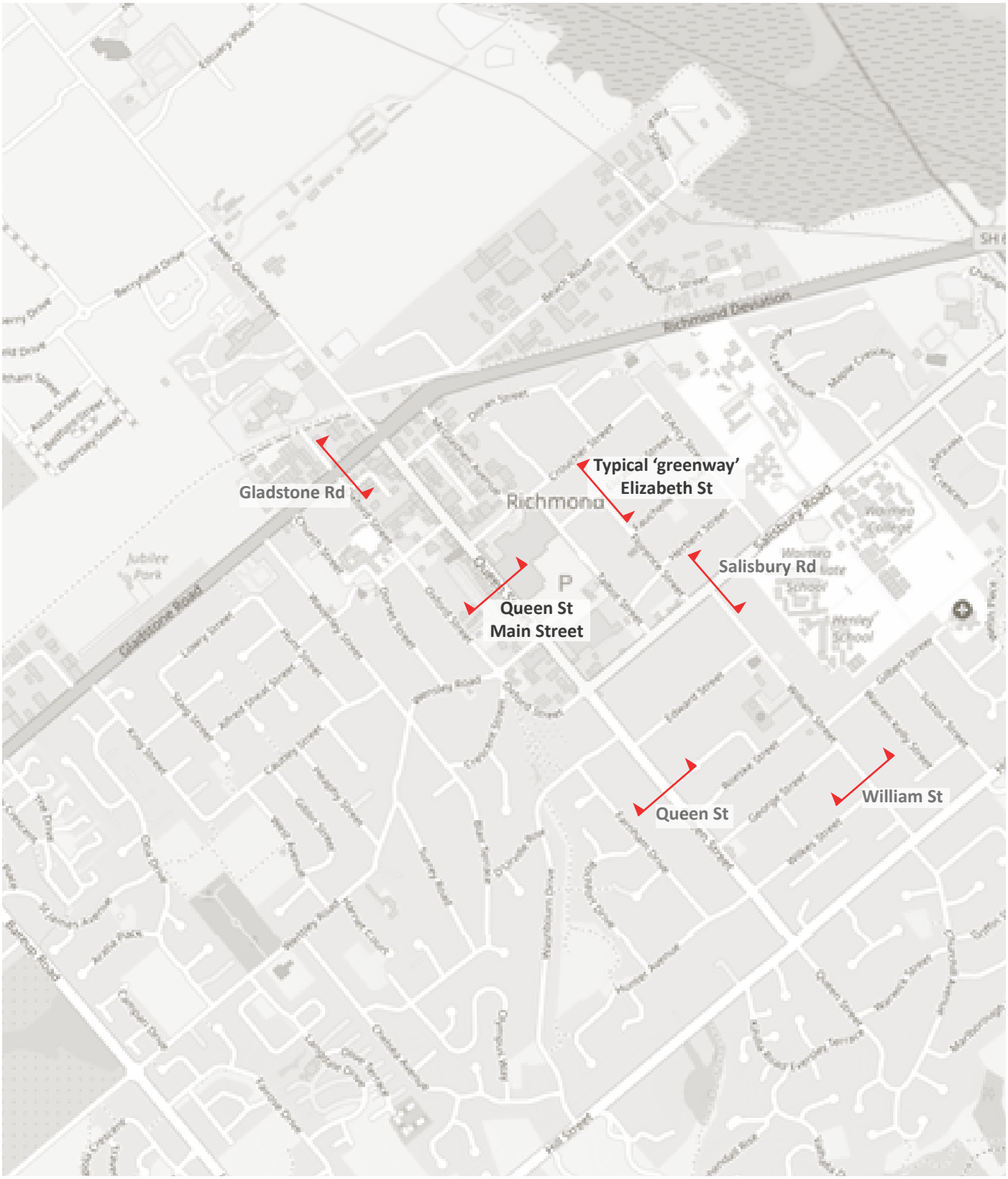
Next steps

- Issue workshop notes for feedback
- LTP submission
- Community engagement
- Finalise PBC
- PBC endorsed

Attachment B Street Typologies Associated with Options

Richmond PBC Workshop 2
31st March 2021

Locations of indicative street typology views



Gladstone Road - with bypass (or with significant mode shift)

Existing photograph

Indicative future view

Key features:

- Likely to remain as 4 lanes in this location (and two further south) - but could reduce to 2 lanes with outer lanes re-purposed for cycle lanes, wider footpaths or trees.
- If remaining as 4 lanes, potential for outer lanes to become priority lanes.
- Traffic volumes reduce leading to higher place quality.
- Increased pedestrian crossing provision.
- Increased street amenity and provision for people walking.
- Possible development of more retail and commercial along the road.

Programmes this relates to:

- Accessibility
- Liveability including the Hope Bypass
- Do maximum

Gladstone Road - without bypass (or without significant mode shift)

Existing photograph

Indicative future view

Key features:

- Remains as 4 lanes in this location (and two further south)
- Traffic volumes increase or stay the same.
- Place quality remains low.
- Potential for priority lanes in outer lanes.
- Development likely to remain constrained / low intensity with car based access.

Programmes this relates to:

- Do minimum
- Addressing immediate issues
- Accessibility
- Liveability excluding the Hope Bypass

Typical ‘greenway’ street in intensification area: Elizabeth Street

Existing photograph

Indicative future view

Key features:

- Traffic calming in street, including chicanes and planted kerb build outs**.**
- Slow speed environment so vehicles and cycles can share the street.
- More opportunity for ‘people activities’ in the streets.

Programmes this relates to:

- Liveability
- Do maximum
- Increased road capacity.

Richmond PBC Workshop 2 - Indicative street typology views
31st March 2021

Salisbury Road (and Wensley Street)

Existing photograph

Indicative future view

Key features:

- Improved bus service and facilities.
- Separated cycle lanes both sides.
- 30 kph speed in the ‘Schools’ area.
- New pedestrian crossings.

Programmes this relates to:

- Addressing immediate issues
- Accessibility
- Liveability - all
- Increased road capacity
- Do maximum

William Street

Existing photograph

Indicative future view

Key features:

- Separated cycle lanes on both sides
- Greening of the street
- Some on-street parking retained

Programmes this relates to:

- Accessibility

Queen Street (Salisbury Rd to Hill St)

Existing photograph

Indicative future view

Key features:

- Separated cycle lanes on both sides
- On-street parking removed

Programmes this relates to:

- Accessibility
- Liveability 1, 2 & 3
- Increased road capacity
- Do maximum

Queen Street (Main Street)

Existing photograph

Indicative future view

Key features:

- Greater pedestrian function to the street.
- Parking space converted to parklets, outdoor dining, cycle parking and taxi/ride share pick up/drop off.
- Slow speed environment enables use of the street for 'people activities' and events.
- Higher pedestrian numbers attract mixed-use redevelopment, including residential.

Programmes this relates to:

- More road capacity
- Do maximum

Example Streets - Separated / Protected Cycleway

Concrete kerb separator:

‘Copenhagen Kerb’ (half height kerb) separator:

Example Streets - Separated / Protected Cycleway

Concrete kerb separator with planting:

Concrete kerb separator - bi-directional cycleway:

Example Streets - Greenways

Cycle lanes and pedestrian priority at intersection:

Chicanes on street to reduce vehicle speeds:

Richmond PBC Workshop 2 - Indicative street typology - examples
31st March 2021

Example Streets - Greenways

Planted pinch-point with parking:

Chicane with tree planting in centre of road:

Example Streets - Shared Space / Main Street

Urban shared street environment with pedestrian priority and street dining:

Catenary lighting over street:

Example Streets - Overbridge / Flyover

Moorhouse Avenue overbridge - within urban setting:

Overbridges can pose significant challenges to integrating with the urban environment, such as the uses beneath and creating a people friendly environment on the street:

Example Streets - Overbridge / Flyover

SH1 Christchurch overbridge - view taken from approximately the same distance as from the Queen St and Gladstone Rd intersection to a potential overbridge at Richmond:

Waterview flyover - public open space and walking and cycling connections have been integrated beneath flyovers:

Example Streets - At grade bypass

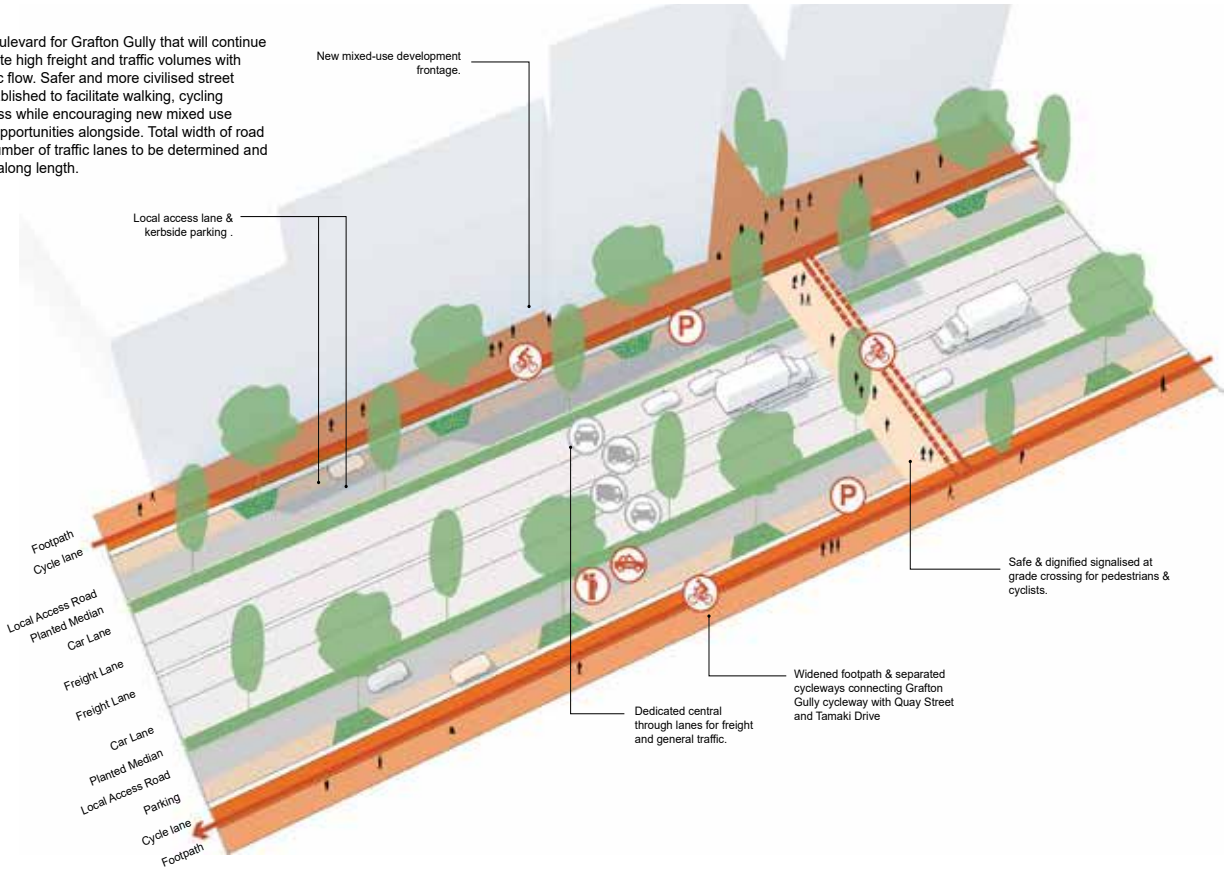
Octavia Boulevard, San Fransisco - central lanes allow through movements, while lanes on the sides allow slower speed, local access. A high quality environment provides a positive experience for people walking and cycling and encourages adjacent urban development:

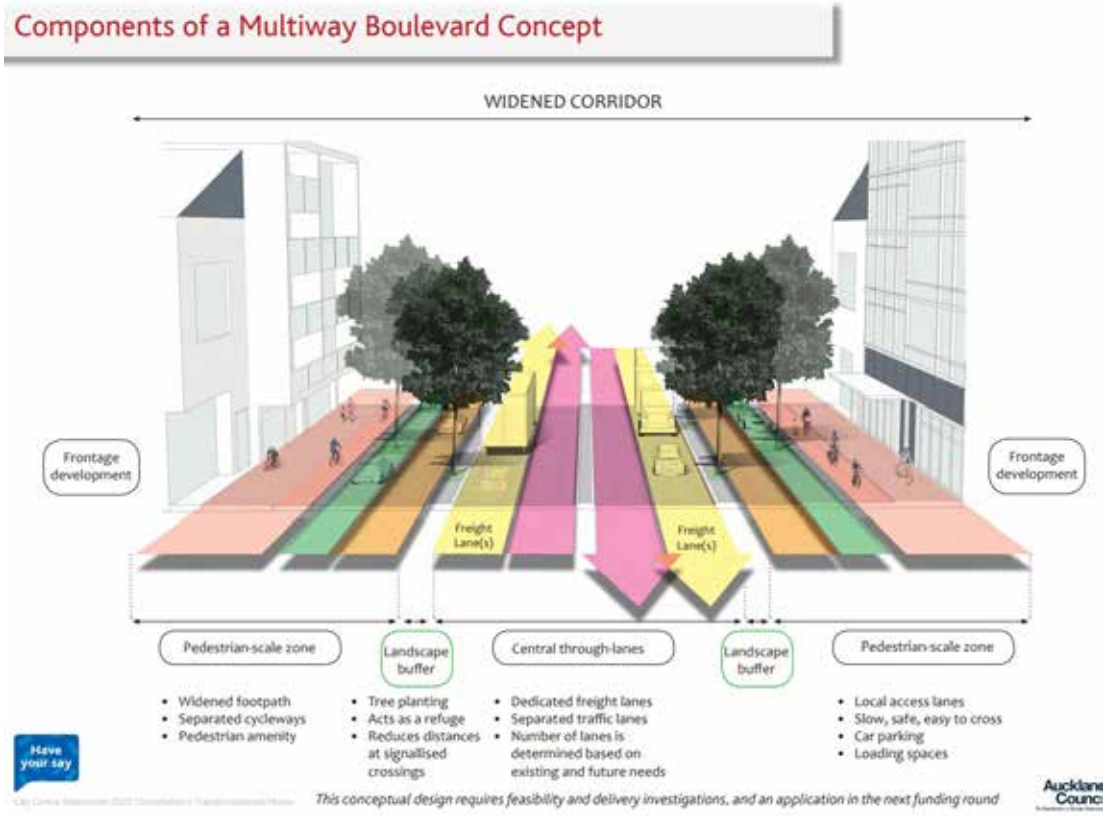
This tree lined through route with separated cycle lanes creating a high quality environment and positive street edge:

Example Streets - At grade bypass

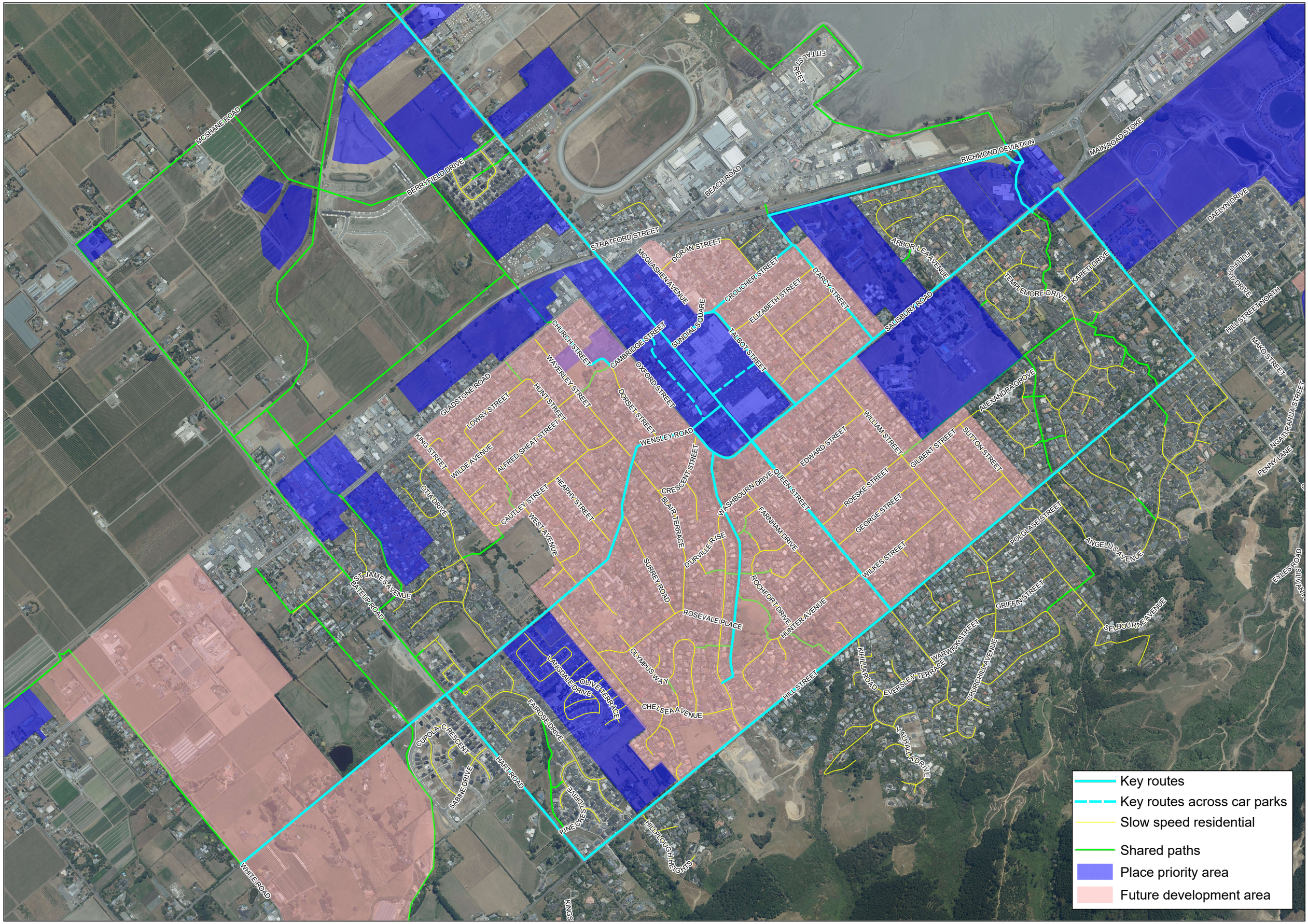
Auckland's City Centre Masterplan proposes a multi-way boulevard for Grafton Gully, similar to Octavia Boulevard in San Fransisco. The images below demonstrate how this could work. Note that this requires further feasibility studies to confirm how it would work. Image sources: Auckland Council website, CCMP 2020.

A multi-way boulevard for Grafton Gully that will continue to accommodate high freight and traffic volumes with improved traffic flow. Safer and more civilised street edges are established to facilitate walking, cycling and local access while encouraging new mixed use development opportunities alongside. Total width of road reserve and number of traffic lanes to be determined and will likely vary along length.





Appendix E Key routes


MCSHANE ROAD
BERRY FIELD DRIVE
BEACH ROAD
FITTAL ST
RICHMOND DEVIATION
MAIN ROAD STOKE
STRATFORD STREET
MCGLASHEN AVENUE
DORAN STREET
CROUCHER STREET
ELIZABETH STREET
D'ARCY STREET
ARBOR LEA AVENUE
DAELYN DRIVE
TEMPLEMORE DRIVE
KARETI DRIVE
FULLTON DRIVE
HILL STREET NORTH
SALISBURY ROAD
CHURCH STREET
CAMBRIDGE STREET
SUNDIAL SQUARE
TALBOT STREET
MAKO STREET
NGATI RARUA STREET
PENNY LANE
ALEXANDRA GROVE
GLADSTONE ROAD
LOWRY STREET
HUNT STREET
WAVERLEY STREET
OXFORD STREET
DORSET STREET
KING STREET
WILDE AVENUE
ALFRED SHEAT STREET
WENSLEY ROAD
EDWARD STREET
WILLIAM STREET
GILBERT STREET
SUTTON STREET
CRESCENT STREET
BLAIR TERRACE
WASHBOURN DRIVE
QUEEN STREET
ROESKE STREET
GEORGE STREET
WILKES STREET
FARNHAM DRIVE
OTTA DRIVE
CAUTLEY STREET
HEAPHY STREET
WEST AVENUE
D'URVILLE RISE
SURREY ROAD
ROCHFORT DRIVE
HUNTER AVENUE
POLGLASE STREET
ANGELUS AVENUE
EYLES ROAD
ST JAMES AVENUE
BATEUP ROAD
ROSEVALE PLACE
OLYMPUS WAY
GRIFFIN STREET
MELBOURNE AVENUE
LANGDALE DRIVE
OLIVE TERRACE
CHELSEA AVENUE
HILL STREET
KITHILLA ROAD
WARWICK STREET
EVERSLEY TERRACE
CHURCHILL AVENUE
VALHALLA DRIVE
FAIROSE DRIVE
CUPOLA CRESCENT
HART ROAD
SABINE DRIVE
PINE CRESCENT
HILLPLOUGH HEIGHTS
WHITE ROAD
KINGS
Key routes
Key routes across car parks
Slow speed residential
Shared paths
Place priority area
Future development area

Appendix F Current strategies

F.1 Future Urban Development Strategy 2019

The FDS is a high-level strategy and does not consider how development will occur but has been developed based on the following core principles. These principles were developed as a result of the analysis undertaken and public feedback. They describe an urban future for Richmond that is contained, equitable and dense, with housing, employment, retail and community facilities and services distributed in a way that supports more intensive living including active travel and public transport.

- Favour intensification of urban areas over expansion, and favour expansion over new settlements.
- Promote intensification close to facilities and services and in a way that supports public transport, walking and cycling.
- Expand in areas with good access to community services and infrastructure.
- Minimise expansion onto land of high productive value.
- Further development of areas prone to sea level rise in Nelson City is contingent upon an adaptation strategy being in place.
- Ensure the growth needs of all settlements are provided for.
- All development helps to revive and enhance the mauri of the natural world.

It notes the importance of intensification for the future of Richmond, and the importance of phasing to encourage that intensification. It identifies the importance of integrated land use and transport planning, helping support the development of passenger transport services, making shops, jobs and activities easily accessible and enabling different housing choices.

During the development of the FDS, the following top 5 considerations for urban settlement and growth for the Nelson-Tasman region were identified:

- Preservation of natural landscapes
- Preservation of flat productive land
- Affordable housing (such as lowering land costs)
- Climate change responsiveness and CO2 reduction
- Diverse housing choices

F.2 Intensification Action Plan 2020

The key principles that underpin the IAP are:

- More efficient use of land
- Providing range of housing choices
- Reduced sprawl onto productive land
- Support for passenger transport services
- Bring people closer to shops, jobs and activities
- Provide some three-storey terrace housing, some low-rise apartments, some mixed use (commercial ground floor residential above)

F.3 Draft Walking and Cycling Strategy

The key objectives of the Walking and Cycling Strategy are:

- Improve and encourage walking and cycling in the district as an alternative to driving a private car
- Enable people to walk and cycle more and feel safe doing so
- Create a network that connects a hierarchy of key ‘places’
- Enable a healthier more productive community
- Improve the environment
- Create a nicer place to live
- Improve traffic flows
- Make transport cheaper
- Support the local economy

A healthy and productive community that is enabled to choose walking and cycling as a primary form of travel to the places they need to go, through the provision of safe, well-function and connected infrastructure.

F.4 Nelson Tasman PT Review

The fundamental recommendations from the PT review are:

- Current service levels vary considerably within and between routes.
- Service levels reduce significantly on weekend days.
- Public surveys highlighted issues with timetables and routes.
- Key moves in the urban area:
- Simplify and optimise the network.
- Standardising and then progressively enhancing service levels.
- Refresh the branding to highlight its importance and widen its appeal.

F.5 Accessible Nelson-Tasman: Regional Public Transport Plan 2021-31

The Regional Public Transport Plan (RPTP) details the investment programme required to enable public transport (PT) to play a key role in the delivery of a multimodal sustainable transport future for the Nelson Tasman region that will combine with other key strategies to contribute to achieving the carbon emission reduction targets set.

The aim is to achieve a continual increase in public transport patronage to provide an integrated approach to accommodating sustainable travel demand.

The RPTP proposes 3 step changes. Step change 1 focuses on improvements the infrastructure, branding, routes and fares, step changes 2 and 3 focus on increasing frequency and levels of service.

Step Change 1 - July 2023

- New urban routes 7am and 7pm, 7 days per week
- Hourly weekend service
- Stoke demand responsive service
- Single urban fare
- Low emission buses
- Community Transport services to Motueka, Golden Bay, Wakefield and Hira
- Morning and evening bus to Motueka and Wakefield
- Super stops at Richmond, Stoke, Tahunanui, Hospital and Nelson
- Bus stop improvements elsewhere
- Regional branding of the services

Step Change 2 - July 2026

- All urban buses run every 30 minutes
- Weekday service to Motueka (4 daily) and Wakefield (6 daily)
- Park and ride facility

Step Change 3 - July 2029

- Additional buses at peak times
- Weekend bus service to Motueka (4 daily) and Wakefield (6 daily)

F.6 Richmond Network Operating Framework and ONF

As part of the NOF, the One Network Framework was applied to Richmond. This included identifying key places in Richmond, which included the following destinations:

- Health Centres
- Industrial Areas
- Parks & Reserves
- Commercial and Retail Areas

- Retirement Villages
- Education Facilities

These key places were then filtered to determine the key attractors for the area, which were then prioritised as ‘Activity Areas’. ‘Activity Areas’ are places in which there is a high volume and frequency of movement as well as a high amenity value of the place. The ‘activity areas’ are assigned a four-level place priority with 1 being the highest priority with the most activity and 4 being the lowest.

The NOF identifies modal priorities for walking, cycling, PT and general traffic on different priority corridors at three time periods: morning peak, inter-peak and afternoon peak. On some corridors, the modal priority changes and therefore interventions have been suggested for encouraging or discouraging certain modes across the day.

F.7 2020 Town Centre Health Checks

The key recommendations from the 2020 Town Centre health checks for Richmond, are:

- Increase the amount of landscaping and pocket parks within the centre.
- Provide more shade in Sundial Square.
- Encourage café and retail use at ground floor level to support an active shop frontage.
- Encourage an evening economy, which in turn may lead to greater numbers of people living in and around the centre.
- Replicate some of the aesthetic features in Takaka centre such as murals to improve the vibrancy of the centre.

Appendix G Long list

Category	Intervention
Active Modes	New Residential Greenways - Low traffic neighbourhoods in intensification areas to support greater density, use of street as public realm and active modes choice.
Active Modes	Salisbury Road active mode crossing improvements - eg zebra crossings with raised platforms and cycle bypass (like a very large speed cushion); - alternative = signalise (replace existing zebras)
Active Modes	Oxford / Wensley Intersection Improvements (sight lines and pedestrian access)
Active Modes	Salisbury Rd underpass outside schools
Active Modes	Hill St/Hill St South/Haycock Rd cycleway connection
Active Modes	Make Church Street one way and add cycle lanes to connect to Jubilee Park and Richmond West across Gladstone Road.
Active Modes	Improve rail corridor cycle path and connections to it.
Active modes	More cycle facilities in urban residential streets, especially those linking to schools
Active modes	More public showers
Active modes	Separate walking and cycling paths (from each other)
Active modes	Reallocation of roadspace from parking to cycle lanes
Active Modes	Champion Road roundabout - safe cycle crossing
Car Parking	Goes against the key investment objective of reducing reliance on the private car
Demand management	Log barging from Rabbit Island to Nelson
Demand management	Congestion charging
Hope Bypass	Hope bypass (as per the designation) - including: - flyover - high quality active mode provisions - four laning to the three roundabouts - downgrading Gladstone Road, and amenity improvements
Increase road capacity	Partial or full closures of some of the intersections along SH6
Increase road capacity	Optimise SH6 / Lower Queen / McGlashen / Oxford intersections **as short-term low cost, low risk interventions**. Consider following: - SH6/ Lower Queen Street signal phasing optimisation - SH6/Lower Queen movement restrictions - Double RT into Lower Queen - Review length of lanes on approach to McGlashen SH6 intersection to prevent right turn queue blocking straight through movement - Allow left turn from McGlashen and right turn from Richmond Deviation to run at same time - Additional turning lane on Oxford Street
Increase road capacity	Widen between Stratford and Gladstone to enable left turn Stratford into SH6
Increase road capacity	Queen Street and Salisbury Road Intersection Improvements - utilise existing signals to facilitate walking/cycling crossing movements over through traffic movements during peaks Same as Option 87
Increase road capacity	Lower Oxford Street Hierarchy Improvements
Increase road capacity	Salisbury Road/William Street Intersection Upgrade
Increase road capacity	McShane Road Upgrade
Increase road capacity	Berryfield/Lower Queen Intersection Upgrade
Increase road capacity	Berryfield/Appleby Hwy Intersection Upgrade
Increase road capacity	SH RAB ramp metering at meatworks (3 RAB's site) if within scope
Increase road capacity	3 roundabouts improvements as per previous investigation
Increase road capacity	SH6 Whakatu Drive/Richmond Deviation flyover as suggested by Opus report
Increase road capacity	Suffolk Road connection to Nelson (to function as a winding resilience route)
Increase road capacity	Estuary Bypass (inc. flyover and/or potential tolling)
Land use	Encourage businesses to move into the CBD
Land Use	Consider measures to reduce/manage urban sprawl to support and integrated transport plan
Land use policy	Open up Hope Bypass / Gladstone block - Use space for retail or semi industrial (move out of the CBD)
Local Rd network mgmt	Traffic calming on local roads to disincetivise SH traffic rat-running
Local Rd network mgmt	Anything else (not included above) that was recommended/considered in the previous Hira to Brightwater Corridor Study
Mobility	Mountable kerbs across Richmond
Mobility	Signalised crossing with vibrating buttons
Mobility	Improve footpaths on primary walking routes (as per NOF) to make it easier to walk, mobility scooters and other mobility (smoother and wider)
New walkway / cycleway	Gladstone Road - grade seperated crossings - Grade separation of active modes across SH6 - at Jubilee Park (priority 1)
New walkway / cycleway	Gladstone Road - grade seperated crossings - Grade separation of active modes across SH6 - Lower Queen (priority 2)
New walkway / cycleway	Gladstone Road - grade seperated crossings - Grade separation of active modes across SH6 - Eastern Hills (priority 3)
New walkway / cycleway	Paton Road - cycle path to new subdivision covers previous Option 127
New walkway / cycleway	Widen provisions for cyclists on Dorset Street
New walkway / cycleway	Form pathways along stormwater corridors for walking and cycling
New walkway / cycleway	Upper Oxford Street Cyclepath
New walkway / cycleway	Wensley Road active mode corridor. Likely to involve land purchase and retaining especially over rise between Crescent and Dorset.
New walkway / cycleway	Salisbury Street - cycling to be separated from peds and general traffic: - utilising plastic bollard type solutions in the short term and physical buffer in longer term. - remove parking for separated cycleway.
New walkway / cycleway	William Street - traffic calming (speed humps / speed management / chicanes / partial closure to create neighbourhood greenway)
New walkway / cycleway	Borck Creek Cycle Trail Bridge
New walkway / cycleway	Creation of high quality seperated cycleway facilities on the eastern side of Richmond
New walkway / cycleway	Creation of buffered cycle lanes on primary collector roads in Richmond
New walkway / cycleway	William Street Seperated Path
New walkway / cycleway	Richmond West Active Transport Connections
New walkway / cycleway	Lower Queen Street Widening Stage 1 captures "attractive walking route between Showgrounds and Centre" option (no. 64) captures previous Option 90
New walkway / cycleway	Lower Queen Street Widening Stage 2
New walkway / cycleway	Potama Creek shared path
New walkway / cycleway	Cycle lane on Hart Road
Parking	Increase the number of bicycle parks within the core Richmond area
Parking	Charge for parking
Parking	Reduce car parking in the town and add more time restrictions to discourage driving
Parking	Parking restrictions on narrow streets
Parking	Build a car park building to free up parking for development and walking connection through to the CBD
Parking	Increase parking - especially by schools
Policy	Incentives for ride sharing
Policy	Actively promote school and business Travel Plans further (e.g. walking buses for schools, showers/bike parking for businesses, manage staff parking and access, work from home / flexibility of work timings)
Policy	Ensure cycleways are included in new developments
Policy	Implementing more manned crossings (school patrol) - assumed four locations
Policy	Policy to encourage more mixed use development
Policy	Balance centres at Richmond West with Richmond Central so they are complimentary rather than competing
Policy	Build up in the town centre - higher than single storey
Policy	Retain the industry for local jobs
Policy	Cycling on footpaths and speed of mobility devices (refer to Streets for People)
Policy	Subsidies for workplaces for showers and bike parking
Policy	Grow the CBD to support the growing population
PT / HOV	Gladstone Road - special vehicle lanes/Peak hour clearways – Priority lanes to effect mode shift and less overall private vehicles – can balance between crossing corridor and through movement along SH6 achieve ONF preferences:
PT / HOV	PT "B" phases @ three signals along Gladstone Road
PT / HOV	Bus bays indented opposite Salisbury Schools
PT / HOV	Salisbury Street - create Public Transport priority - peak hour priority lanes/Bus priority lanes - Use bus jumps at signalised intersections short term.
PT / HOV	Lower Queen Street - Bus Priority
PT / HOV	Richmond Bus Terminus
PT / HOV	Park and rides - showground/cemetary and pick up loop bus - Other P&R covered in PT review stage 2
PT / HOV	Regular transit loop around Richmond
Public Transport	- a new simplified urban route network, which will operate seven days a week with improved service levels - a new demand responsive service to supplement the main routes in Stoke - new regional commuter services from Motueka and Wakefield to Richmond - new high-quality super stops at Richmond etc - new regional commuter services from Motueka and Wakefield to Richmond - bus stop improvements elsewhere in the network - low emission buses - a new fare structure based around a single urban fare zone - information improvements Covers Option 41 (review PT fares) Covers Option 59
Public Transport	a shift to all day 30-minute frequencies on urban routes introduction of stand-alone regional routes introduction of park and ride facilities.
Public Transport	increased peak frequencies on urban routes the addition of weekend bus services on regional routes
Public Transport	- diversion of Route 1 between Hill Street in Richmond and Suffolk Road/Saxton Road in the Saxton area if a new road link is constructed, to provide better access to the sports complex and the southeast area of Stoke - route changes or a new route serving the southeast area of Richmond, if development in the area reaches sufficient scale - additional park and ride at gateway locations, such as the southern side of Richmond
Public Transport	Public Transport MAX
Public Transport	PT enabled intersection upgrades
Route efficiency	Pull off bay on deviation to allow school pick up and drop off with an underpass and high quality route to Salisbury Road.

Route efficiency	Large Gladstone/Queen elevated roundabout with underpasses to the inside for active trasnport modes (similar to SH5/SH30 Hemo Road intersection)
Route efficiency	2 laning Whakatu Drive southbound from Saxton on ramp to 3RAB's
Safety	Gladstone Road - one additional at-grade crossing
Safety	Gladstone Road / Queen Street safety improvements - liveability (people focus)
Safety	Gladstone Road / Queen Street safety improvements
Safety	Gladstone Road / Oxford Street safety improvements
Safety	Gladstone Road / Oxford Street safety improvements - liveability (people focus)
Safety	SH6 crossing improvement(s) for Ranzau School/active mode access to the railway reserve across SH6
Safety	Improve access for fire station on Oxford Street (e.g. installation of red flashing signals)
Safety	Salisbury / Talbot Street intersection - additional pedestrian crossing
Safety	Signage to address issue of driver travelling up Church Street the wrong way
Safety	Lower Queen St / McShane Rd Intersection Improvements
Safety	Lower Queen St / Landsdowne Rd Intersection Improvements Same as Option 115
Safety	Salisbury Street - reduced speed limit Consequence is encouraging traffic on the ring route (Option 120)
Safety	Queen Street (Wensley to Salisbury) speed management (from pedestrian area to Salisbury)
Safety	SH Safety improvement - SH6 between about 0.5km west of Ranzau Road, and White Road
Safety	SH Safety improvement - SH6 between White Road and about 0.5km east of White Road
Safety	SH Safety improvement - SH60 between about 0.5km West McShane Road and Swamp Road
Safety	SH Safety Improvement - SH60 between Swamp Road and Lansdowne Road
Safety	Improve crossing of Talbot and McGlashen to better connect northern intensification area to the centre.
Safety	Richmond Deviation WRSB median barrier
Safety	SH6/White intersection improvement
Safety	SH60/Waimea Estate intersection improvement
Safety	Speed limit review
Safety	SH60 approx 0.5km length beginning at SH6 running northwest. Review speed limit.
Safety	SH Safety improvement - SH6 between just west of Clover Road East, and about 0.5km east of Aniseed Valley Road
Traffic management	Use the Wellington Traffic Operations Centre (WTOC) to optimise the signal timings
Traffic management	ITS - Real-time travel information to allow for better trip planning
Urban realm	Two more green spaces in the heart of Richmond (land purchase to create a new park) Captures Option 61 Captures Option 132
Urban realm	Queen Str CBD pedestrian plaza (closure to traffic between Cambridge and Mall entrance) Captures Option 101
Urban realm	Make all Richmond Town centre inside ring roads a shared environment Captures previous Option 32
Urban realm	More granny flats and small units for aging population
Urban realm	Trees on every street
Urban realm	Using paving to delineate space for different road users
Urban realm	Urban street lighting improved for safety
Urban realm	Create waterfront esplande along the Waimea estuary with better connections

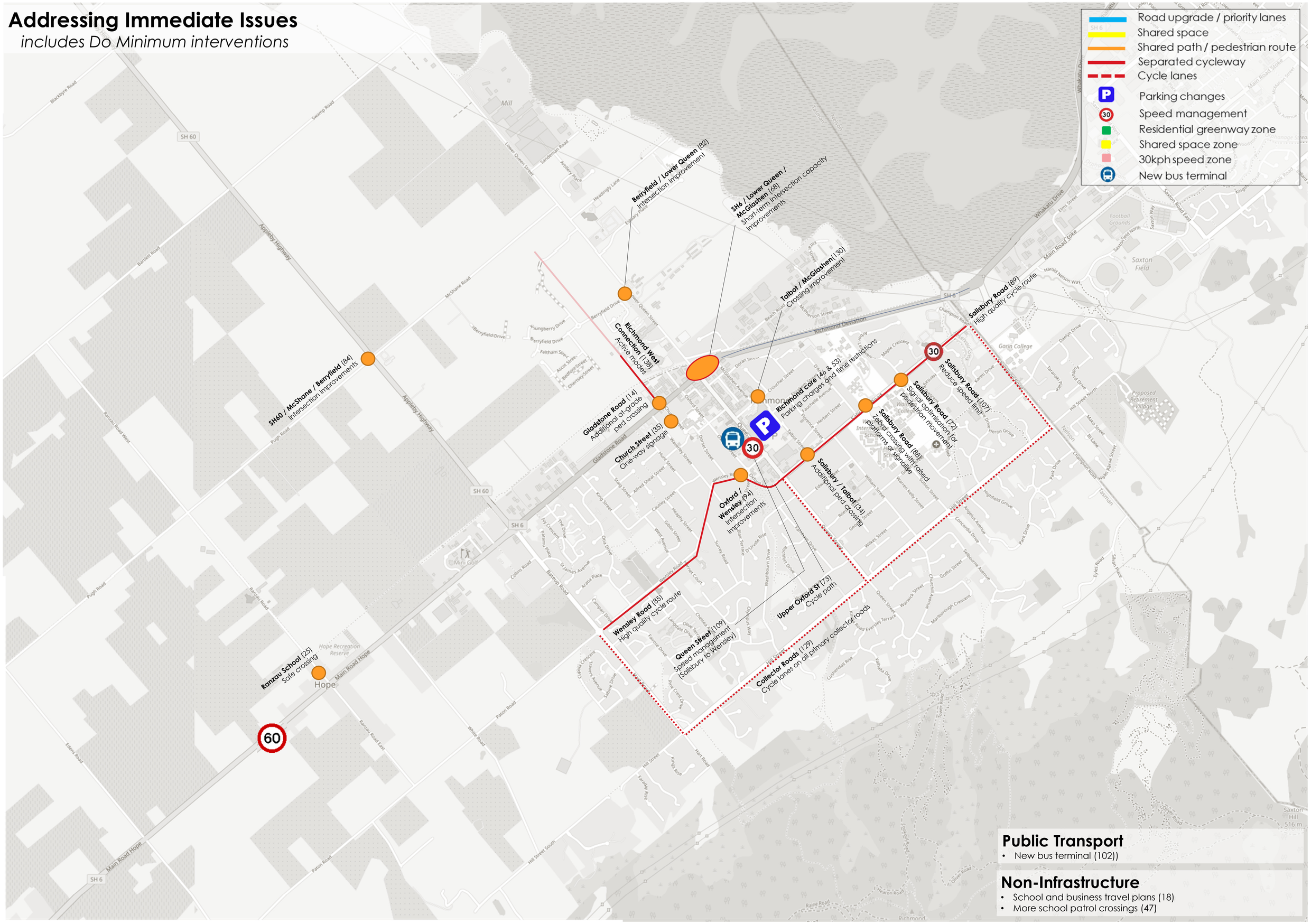
Appendix H Programme maps

Do Minimum


Road upgrade / priority lanes
Shared space
Shared path / pedestrian route
Separated cycleway
Cycle lanes
Parking changes
Speed management
Residential greenway zone
Shared space zone
30kph speed zone
New bus terminal
Potama Creek (405)
shared path
Borck Creek Bridge (96)
SH6 Richmond Deviation (303)
Median barrier
Champion Roundabout (93)
Safe cycle crossing
(under construction)
SH6 (410) speed limit review - reduce to 60kph
60
SH 60
SH 6
Appleby Highway
Richmond
Hope
Main Road Hope
Gladstone Road
Queen Street
Salisbury Road
Whakatu Drive
Main Road Stoke
Lower Queen Street
McShane Road
Berryfield Drive
Swamp Road
Blackbyre Road
Bartlett Road
Pugh Road
Ranzau Road West
Ranzau Road East
Paton Road
White Road
Hill Street South
Hart Road
Hill Street
Waimea Intermediate School
Waimea College
Henley School
Gorin College
Saxton Field
Football Grounds
Proposed Retirement Village
Jubilee Park
Hope Recreation Reserve
Mini Golf
Saxton Hill 516 m

Addressing Immediate Issues

includes Do Minimum interventions



Public Transport

- New bus terminal (102))

Non-Infrastructure

- School and business travel plans (18)
- More school patrol crossings (47)

Accessibility

includes Do Minimum interventions

- Road upgrade / priority lanes
- Shared space
- Shared path / pedestrian route
- Separated cycleway
- Cycle lanes
- Parking changes
- Speed management
- Residential greenway zone
- Shared space zone
- 30kph speed zone
- New bus terminal

Lower Queen / Lansdowne (75) Intersection safety improvement

SH60 (114) Safety Improvement

SH60 (113) Safety Improvement

SH60 / McShane / Berryfield (84) Intersection Improvements

McShane Road Upgrade (81)

Lower Queen / McShane (74) Intersection Improvements

Lower Queen Street (79 & 80) Widening and shared path

Oxford Street Fire Station (33) Improve access

Berryfield / Lower Queen (82) Intersection Improvement

Lower Queen (69) Widen between Stratford and Gladstone

SH6 / Lower Queen / McGlashen (68) Short-term Intersection capacity improvements

Talbot / McGlashen (130) Crossing improvement

Rail Corridor Cycle Path (203) Improve and add connections

Richmond West Connection (138) Active modes

Gladstone Road (67) Partial or full closures of some intersections

Gladstone Road Grade separated crossings

Church Street (209) One-way and cycleway

Richmond core (46 & 53) Parking changes and time restrictions

Lower Oxford (76) Reconstruction to improve traffic flow

Dorset Street (31) Widen for cyclists

Oxford / Wensley (94) Intersection Improvements

Queen / Salisbury (72) Intersection upgrade

Salisbury / Talbot (34) Additional ped crossing

Salisbury / William (78) Intersection upgrade

Salisbury Road (206) Pedestrian Underpass

Salisbury Road (72) Signal optimisation for pedestrian movement

Salisbury Road (107) Reduce speed limit

Salisbury Road (89) High quality cycle route

Salisbury Road (97) Special Vehicle Lanes

SH6 Gladstone Road (4) Special Vehicle Lanes

Eastern Richmond Collector Roads (128) Separated cycleways

Salisbury Road (17) Indented bus bays opposite schools

William Street (137) Separated path

William Street (91) Traffic calming

Upper Oxford St (73) Cycle path

Queen Street (109) Speed management (Salisbury to Wensley)

Wensley Road (85) High quality cycle route

Collector Roads (129) Cycle lanes on all primary collector roads

Hill St South / Haycock Road (208) Cycleway Connection

Paton Road (24) High quality cycle route

SH6 (111) Safety Improvement

Ranzau School (25) Safe crossing

SH6 (112) Safety Improvement

SH6/White (406) Safety improvement

Non-Infrastructure

- School and business travel plans (18)
- More school patrol crossings (47)

Public Transport

- New bus terminal (102)
- 2023 Draft PT Network (103)
- Long Term PT Network (106)

Richmond Wide

- Mountable kerbs across Richmond (48)
- Signalised crossing with vibrating buttons (49)
- More cycle parking (126)
- Smoother footpaths (43)

Liveability excl. Hope Bypass

includes Do Minimum interventions

Non-Infrastructure

- School and business travel plans (18)
- More school patrol crossings (47)
- Ensure cycleways are required as part of new subdivisions (39)

Public Transport

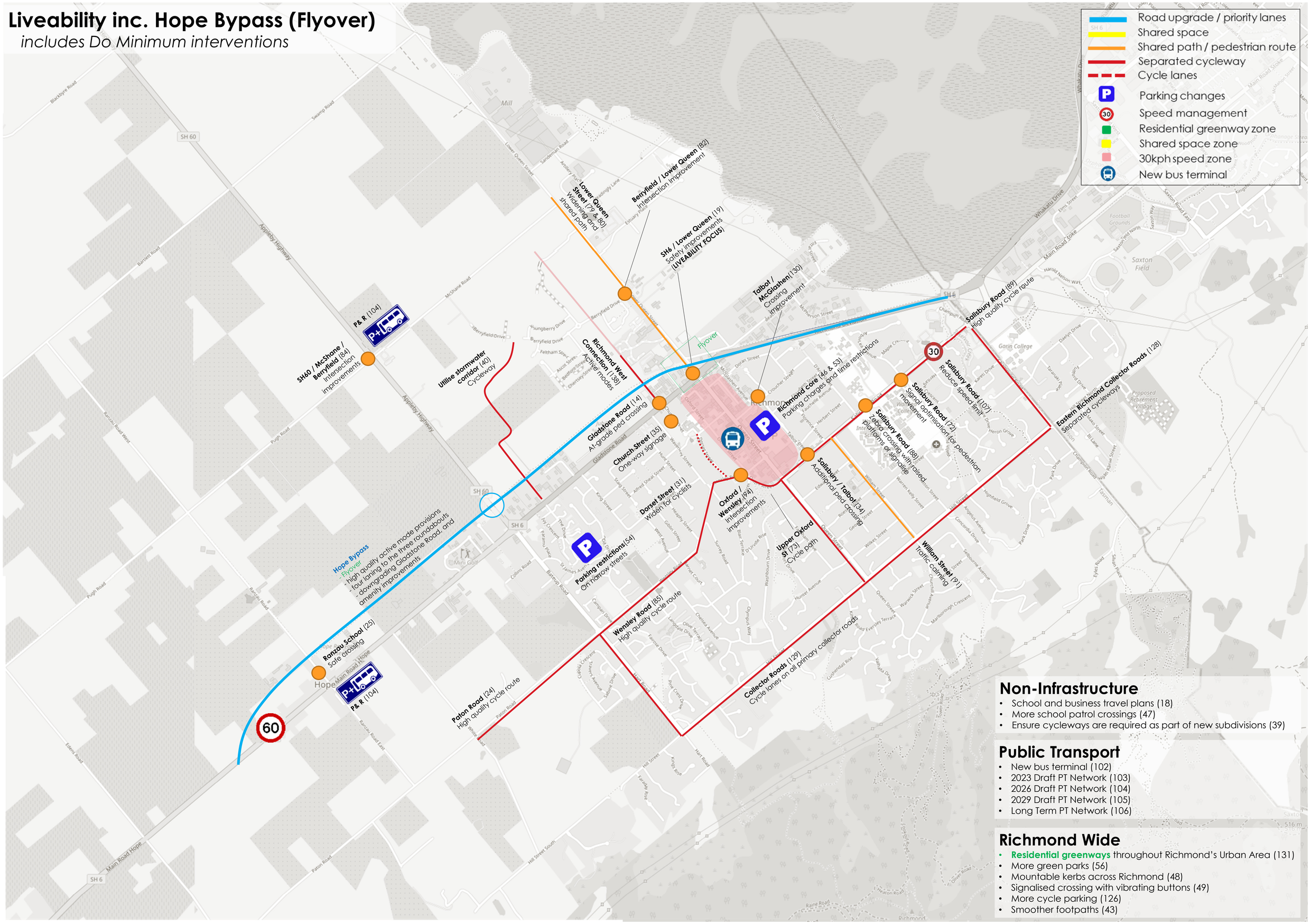
- New bus terminal (102)
- 2023 Draft PT Network (103)
- 2026 Draft PT Network (104)
- 2029 Draft PT Network (105)
- Long Term PT Network (106)

Richmond Wide

- **Residential greenways** throughout Richmond's Urban Area (131)
- More green parks (56)
- Mountable kerbs across Richmond (48)
- Signalised crossing with vibrating buttons (49)
- More cycle parking (126)
- Smoother footpaths (43)

Liveability inc. Hope Bypass (Flyover)

includes Do Minimum interventions



Non-Infrastructure

- School and business travel plans (18)
- More school patrol crossings (47)
- Ensure cycleways are required as part of new subdivisions (39)

Public Transport

- New bus terminal (102)
- 2023 Draft PT Network (103)
- 2026 Draft PT Network (104)
- 2029 Draft PT Network (105)
- Long Term PT Network (106)

Richmond Wide

- **Residential greenways** throughout Richmond's Urban Area (131)
- More green parks (56)
- Mountable kerbs across Richmond (48)
- Signalised crossing with vibrating buttons (49)
- More cycle parking (126)
- Smoother footpaths (43)

Increased road capacity

includes Do Minimum interventions

- Road upgrade / priority lanes
- Shared space
- Shared path / pedestrian route
- Separated cycleway
- Cycle lanes
- Parking changes
- Speed management
- Residential greenway zone
- Shared space zone
- 30kph speed zone
- New bus terminal

Lower Queen / Lansdowne (75) Intersection safety improvement

Lower Queen / McShane (74) Intersection improvements

McShane Road Upgrade (81)

Lower Queen Street (79 & 80) widening and shared path

Berryfield / Lower Queen (82) Intersection improvement

Gladstone Road (8) "B" Phases of signals

SH6 / Oxford (20) Safety improvements **(LIVEABILITY FOCUS)**

SH6 / Lower Queen (19) Safety improvements **(LIVEABILITY FOCUS)**

Three roundabouts (304 202 and/or 201) Roundabout metering, upgrade or flyover

Talbot / McGlashen (130) Crossing improvement

Salisbury Road (89) High quality cycle route

Salisbury Road (97) Special Vehicle Lanes

SH60 / McShane / Berryfield (84) Intersection Improvements

Richmond West Connection (138) Active modes

Flyover

Richmond core (46 & 53) Parking charges and time restrictions

Salisbury Road (1107) Reduce speed limit

Eastern Richmond Collector Roads (128) Separated cycleways

SH60/Waimea Estates (407) Safety improvement

Gladstone Road (14) At-grade ped crossing

Church Street (35) One-way signage

Salisbury Road (206) Pedestrian underpass

Salisbury / Talbot (34) Additional ped crossing

Oxford / Wensley (94) Intersection improvements

Lower Oxford (76) Reconstruction to improve traffic flow

Queen Street (204 & 98) Close to traffic except buses

Upper Oxford St (73) Cycle path

Salisbury Road (17) Indented bus boys opposite schools

Hope Bypass
- flyover
- high quality active mode provisions
- four laning to the three roundabouts
- downgrading Gladstone Road, and amenity improvements

Wensley Road (85) High quality cycle route

Collector Roads (129) Cycle lanes on all primary collector roads

SH6/White (406) Safety improvement

Paton Road (24) High quality cycle route

Public Transport

- New bus terminal (102))

Non-Infrastructure

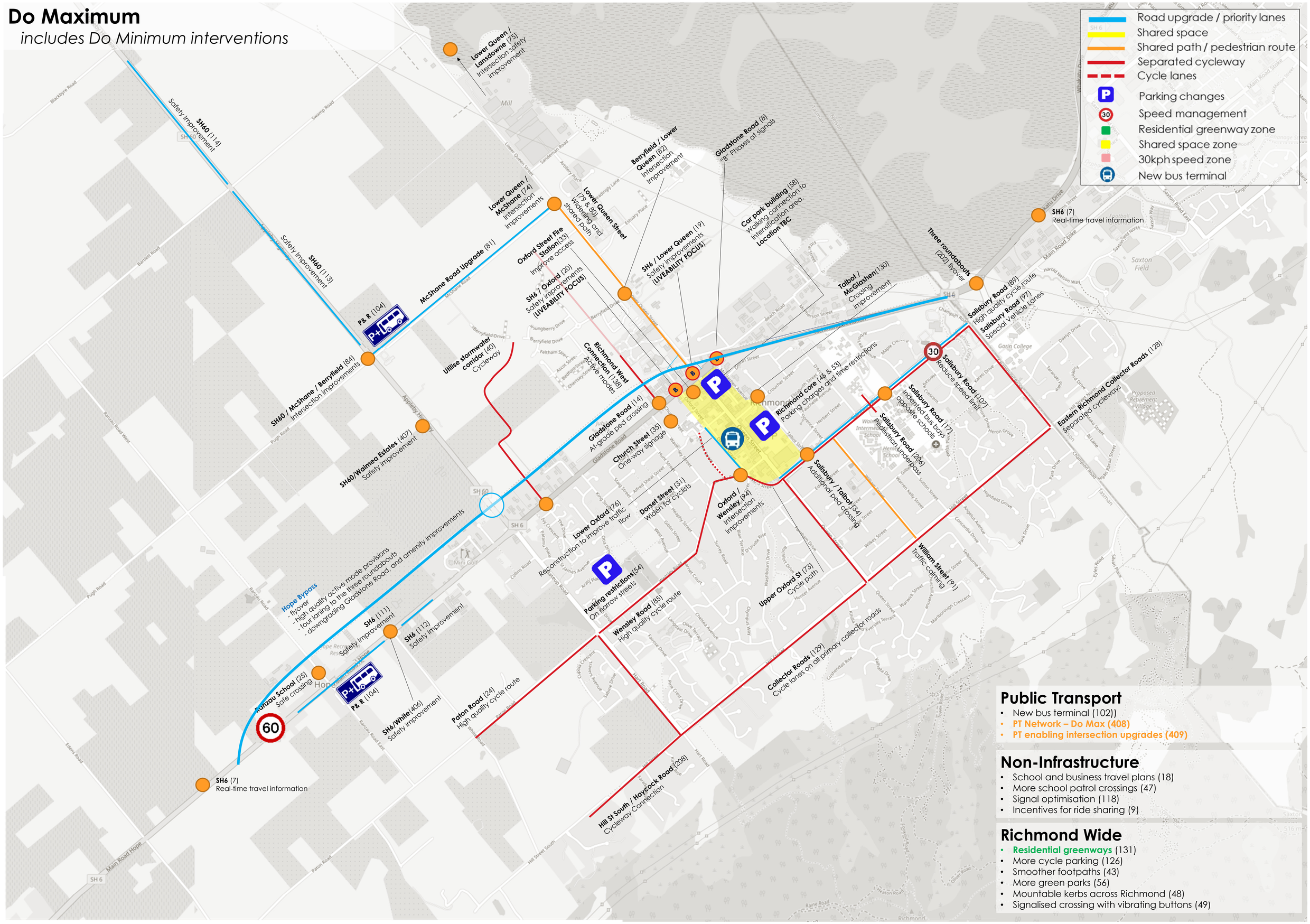
- School and business travel plans (18)
- More school patrol crossings (47)
- Signal optimisation (118)
- Ensure cycleways are required as part of new subdivisions (39)

Richmond Wide

- **Residential greenways** throughout Richmond's Urban Area (131)
- More cycle parking (126)
- Smoother footpaths (43)

Do Maximum

includes Do Minimum interventions



Public Transport

- New bus terminal (102))
- **PT Network – Do Max (408)**
- **PT enabling intersection upgrades (409)**

Non-Infrastructure

- School and business travel plans (18)
- More school patrol crossings (47)
- Signal optimisation (118)
- Incentives for ride sharing (9)

Richmond Wide

- **Residential greenways** (131)
- More cycle parking (126)
- Smoother footpaths (43)
- More green parks (56)
- Mountable kerbs across Richmond (48)
- Signalised crossing with vibrating buttons (49)

Appendix I MCA criteria

Attribute & weighting		Matters to consider
Investment Objectives (50%)		
Place quality	20%	• Supports intensification (residential and commercial) in and around Richmond's centre. • Supports sustainable expansion (into Richmond South & West) • Improves function of streets for 'public life'. • Improves 'place function' & 'place quality' (noise, air quality, visual impacts, urban design).
Accessibility	15%	• Improves accessibility by active modes and PT to key destinations. • Supports social cohesion by reducing severance. • Connects people to places they want to go (i.e. open spaces, centres, social infrastructure, schools).
Safety	30%	• Has a positive impact on road safety. • Reduces the number of injury crashes. • Improve safety for vulnerable users. • Reduced rat running along local roads.
Route efficiency	20%	Contributes to maintaining movement of people/goods and provide reliable journey times.
Travel choice	15%	• Improves and/or provides better quality (increased choice, safer, more convenient) walking, cycling and public transport networks. Positive health, environmental and socio-economic outcomes.
Critical Success Factors (25%)		
Potential achievability	33%	• How difficult the programme is to complete from an engineering and construction complexity perspective. • Including consideration of temporary effects, staging and consenting.
Potential affordability	33%	• Whether the cost of this option fits within the likely funding available; provides an affordable option. Consider scale of capex and opex required.
Potential value for money	33%	Guidance requires consideration of the balance between costs and benefits.
Supplier capacity and capability	n/a	Guidance requires consideration of external resourcing challenges. *Not used because availability and ability of potential suppliers to deliver the required services unlikely to be known at such an early stage in project development. Interventions that may have created supplier capacity/capability issues eg rail, gondola had been excluded due to not meeting thresholds for feasibility, deliverability and/or cost.*
Scheduling/programming	n/a	Guidance requires consideration of when alternative/option could be delivered and other timing requirements. *Not used because ability to stage and/or complete works within the required timeframe unlikely to be known at such an early stage in project development.*
Opportunities and Impacts (25%)		
Mandatory		
Climate change adaptation	20%	Assesses whether interventions within the programme are exposed to climate change risk or other natural hazards over time.
Cumulative impacts (Land Use / Transport integration)	20%	• Assess cumulative impacts associated with the option. • Consideration to include extent programme supports regional opportunities; land use and transport infrastructure integration; creates resilience and provides certainty of access across the network. • Assesses how programme aligns with regional priorities; contributes to shared regional goals/objectives of Nelson/Tasman Future Development Strategy; aligns to Nelson Future Access, PT Strategy. Consideration as to how the programme will enable land use change.

Attribute & weighting		Matters to consider
Property	20%	Guidance requires consideration of programme options impact on property – i.e. can the necessary property rights be obtained?
Impacts on Te Ao Māori	20%	• What, if any, impacts there are on Te Ao Māori (including areas of significance for Māori, Māori land and Kaitiakitanga). *Assessment drawn from the Nelson Future Access engagement with Iwi would suggest it appropriate to consider the following (however, this should be reviewed with Iwi Partners).*
Other		
Climate change mitigation	20%	Guidance requires consideration of long-term carbon emissions impact. Assessment to include how the programme will influence demand for vehicle travel now and in the future.
Environment Effects (Natural Environment Values)	n/a	Guidance requires assessment of environmental effects associated with this option. • Not used because the balance of what might be assessed - e.g. environmental effects related to stormwater, natural hazards, contaminated land, heritage (including archaeology), and resource efficiency, are unlikely to be known at such an early stage in project development • Noise and vibration, air quality, visual impacts and urban design will be assessed as part of Investment Objective/Place Quality Areas of significance to Te Ao Maori, including the natural and cultural environment (e.g. water quality, landscape, biodiversity, ecology) will be assessed by iwi partners
Social and cultural impacts	n/a	Guidance requires consideration of social or cultural impacts e.g. human health, impacts on community in relation to jobs, recreation, services, impacts on farming and business operations. • *Excluded because the balance of what might be assessed is unlikely to be known at such an early stage in project development.* • *Severance will be assessed as part of investment objectives (accessibility is a primary criteria to be evaluated).*

Appendix J LTP Submission Memo

Memo

To:	Melissa Feather, Waka Kotahi NZ Transport Agency	From:	Andrew Maughan
	Drew Bryant, Tasman District Council		Stantec NZ
File:	Richmond Transport Programme Business Case For LTP consideration	Date:	April 19, 2021

Reference: **310204514**

Introduction

1. The purpose of this memo is to provide Tasman District Council (TDC) with an update on progress on the Richmond Transport Programme Business Case (PBC), to assist in the deliberations of the Long-Term Plan.

2. The Richmond Transport PBC is being developed jointly by TDC and Waka Kotahi. The PBC commenced in January 2021 and follows completion of a draft Richmond Transport Strategic Case in August 2020 that identified there was a case for change.

3. The PBC and emerging preferred programme has used the principles outlined in the Waka Kotahi Business Case guidelines to provide the information required to make an investment decision. This includes using evidence, information collection, analysis and engagement with key stakeholders. Key evidence used to date includes traffic modelling, and three key stakeholder workshops have been held to collate information on alternatives and options. The Richmond PBC is in progress and further development, analysis, evidencing and engagement is required, prior to the project seeking required approvals for endorsement.

Background / Context

1. Richmond's population is growing at an unprecedented rate, and there is a need to support the implementation of the recently adopted joint Tasman/Nelson Future Development Strategy.

2. The key drivers for this business case are:
    - Impacts of a growing population and associated access concerns.
    - Richmond's urban transformation.
    - Changing freight demands and connections to Port of Nelson, Stoke and Nelson.
    - Connections to nearby areas such as Wakefield, Brightwater, Mapua and Motueka.
    - TDC goal to increase use of alternative transport mode and active mode.
    - Waka Kotahi's 'Hope Bypass' designation lapse in 2023.
    - Access onto SH60 from Richmond West development area.

3. The Problems identified (along with their weightings in brackets) are:
    - **Problem 1:** Increasing traffic volumes as a result of growth creates severance and rat running, leading to reduced place value and increased safety risk (50%).
    - **Problem 2:** Traffic congestion through Richmond causes delays to people and goods reducing travel time reliability and access to economic opportunities (30%).
    - **Problem 3:** Reliance on private cars for short journeys as a result of car-oriented development results in low utilisation of public and active transport modes and conflict between modes (20%).

4. This PBC is the strategic response and first step towards understanding the broad mix of activities that could be delivered by multiple parties over a period of time in response to the key drivers and problems.

5. It is being prepared within and alongside development of a draft urban design framework (for the purposes of the PBC only). Planned intensification in Richmond over the next decade will create a denser urban environment. Significant greenfield expansion will assist TDC to meet the increasing demand for housing in the longer term. The pressure this change creates is also an opportunity to bring environmental,

social and economic benefits to Richmond and support the high quality of life that attracts people to live in Richmond and the Tasman Region.

6. The extent of the project area is Richmond and the Waimea Plains from Wairoa River to the south, Waimea River to the north and Champion Road to east. The project area includes the "three roundabouts" at Nelson City's southern boundary. The project area is influenced by transport network issues and land use change in the wider Tasman District and Nelson City areas (shown below).

Project Area

Area of Influence

7. Interventions within the emerging preferred programme respond to themes of:
   - Liveability with the aim of promoting place making and better land use and transport integration, to create vibrant, connected communities and improved transport choice
   - Accessibility with the aim of improving access for all modes across the network, and
   - Increasing capacity in land development and movement to best enable growth.

8. The emerging preferred programme has the following key features:
   - **Short-term interventions –** these are the interventions that address immediate issues, are straightforward to implement at relatively low cost or low risk or are currently under investigation for delivery.
   - **Medium-term interventions** – these are interventions that will address many of the issues but due to cost, deliverability, feasibility or land development, cannot be implemented in the short term. This group also includes some second stage interventions, which rely on implementation of short-term interventions.
   - **Long-term interventions** – these are interventions that are likely to be needed to address the issues but cannot be implemented earlier due to cost or complexity. In most cases, they rely on monitoring of short and medium-term interventions prior to scope being fully defined. This group also includes some second or third stage interventions, which rely on implementation of short and medium-term interventions.

   The maps in Attachment A show the short-term, medium-term and long-term interventions.

9. Each intervention in the emerging programme is described on the spreadsheet in Attachment B.
   - The "LTP submission" sheet lists all the emerging programme interventions, by category, lead agency, period, cost and priority. Priority is provided to help guide understanding the relative merits of projects in achieving the overarching project outcomes:

- Core interventions, are those the PBC considers fundamental to help solve the identified problems
- Desirable interventions, are strongly recommended due to the benefits expected to be realised towards achieving the overall project vision
- Optional interventions are options that have been identified and have merit towards achieving project outcomes but are not necessarily fundamental to solving the identified problems, and the benefits are potentially not readily quantified.

- The "Emerging Preferred Programme" sheet includes the sources of the idea (how the idea or information was collected), source of the cost estimate, confidence level in the estimate and associated assumptions.
- The "Not Progressed" sheet lists the ideas or information collected about potential interventions, which have not been explored beyond early assessment. There are a number of reasons for this. Examples include duplicated ideas, broad ideas that could not be defined for costing purposes, interventions that were out of scope or did not meet early assessment thresholds for feasibility, deliverability and cost.

10. At this stage an indicative high level expenditure profile of potential investment commitment over time (30-year horizon) is:

	0 to 3	4 to 10	10+	0-30
TDC	$26,900,000	$69,800,000	$55,500,000	$152,200,000
Core	$25,000,000	$35,000,000	$16,900,000	$76,900,000
Desirable	$1,900,000	$23,300,000	$12,600,000	$37,800,000
Optional	$-	$11,500,000	$26,000,000	$37,500,000
Waka Kotahi	$4,600,000	$58,800,000	$291,400,000	$354,900,000
Core	$4,600,000	$7,500,000	$244,200,000	$256,300,000
Desirable	$-	$14,300,000	$500,000	$14,800,000
Optional	$-	$37,000,000	$46,800,000	$83,800,000
Total TDC & Waka Kotahi	$31,500,000	$128,700,000	$346,900,000	$507,100,000

11. In relation to these costs, the following is noted:
    - Costs have been estimated using assumptions about likely intervention type, design and construction rates and deliverability risk. Costs include a contingency of 10% to 30% depending on the scale of the intervention and when it might be delivered (short, medium, long term).
    - Interventions grouped in the short, medium and long-term periods are recommendations to give the lead agencies an indication of how benefits can be achieved through staged delivery over time. It is understood that projects listed against each lead agency are still subject to future approval and funding decisions (that is, a decision has not yet been made to approve or fund them). In addition to TDC decisions on project priorities, all Waka Kotahi projects will be subject to further investigation and national funding prioritisation in accordance with Waka Kotahi processes.
    - Development contributions are collected by TDC towards the cost of interventions relating to growth and land development areas e.g South Richmond, West Richmond industrial development (SH60).

Current Status of PBC and Next Steps

1. The PBC is a work in progress and the emerging preferred programme may change.
2. There are a number of uncertainties that could lead to change to any elements of the emerging preferred programme before it is finalised later this year and these include:
    - Further work by TDC on land use types and locations within Richmond
    - Public engagement which is currently scheduled to occur in the coming months
    - As an emerging proposal it is subject to stakeholder and Iwi feedback, and final evaluation
    - Identification of project preconditions
    - It is subject to final Council approval and Waka Kotahi NZ Transport Agency Board approval, which may also lead to changes being requested

3. The next steps in developing the PBC are:
    - Public engagement of the long list of possible interventions in the emerging preferred programme
    - Consultation with Iwi
    - Completion of the draft PBC
    - Endorsement of the draft PBC by TDC
    - Endorsement of the PBC by Waka Kotahi NZ Transport Agency
4. Endorsement of the PBC is to be sought from Waka Kotahi NZ Transport Agency Board in Q4 of the 2021 Calendar year.

Tasman District Council

Richard Kirby
Engineering Services Manage
Phone: 64 3 543 8440
Richard.kirby@tasman.govt.nz

Waka Kotahi NZ Transport Agency

Kesh Keshaboina
Regional Manager Systems Design
Phone: 04 894 5091
Kesh.keshhaboina@nzta.govt.nz

Attachments: Emerging Preferred Programme Map 1
Emerging Preferred Programme Spreadsheet

Appendix K Hope Bypass – Planning Memo

Memo

To:	Waka Kotahi and Tasman District Council	From:	Stantec NZ
File:	Hope Bypass – Planning Approvals Memo	Date:	May 24, 2021

1 PURPOSE OF MEMO

The Richmond Transport Programme Business Case (PBC) is being developed to better understand the current and future transport problems that Richmond in the Tasman district is facing, and to establish a preferred programme of interventions.

The 'Hope Bypass' is a designated, but undeveloped, route alongside SH6 heading south towards Hope from Lower Queen Street in Richmond. Waka Kotahi is the requiring authority for the designation, which will lapse in 2023. One of the key drivers for undertaking the PBC is to help inform a decision around whether the designation duration should be extended.

The purpose of this memorandum is to provide planning advice in relation to the lapsing of the Hope Bypass designation. This memorandum does not provide recommendations on whether the Hope Bypass designation should be extended, but rather provides advice regarding the planning requirements to extend the designation and to give effect to the designation moving forward.

2 PROJECT AREA

The extent of the PBC project area includes Richmond and the Waimea Plains from Wairoa River to the south, Waimea River to the north and Champion Road to the east. Figure 1 below shows the location of the township of Hope near Richmond, relative to Nelson City and other key regional destinations.

Figure 1: Location of Hope suburb in the Tasman Region

The project area is situated within the Tasman Region. The Tasman District Council (TDC) is a unitary authority and a single resource management document, the Tasman Resource Management Plan (TRMP) contains the District Plan, the Regional Coastal Plan, and other Regional Plan provisions.

The Hope Bypass designation is situated north, and parallel to, SH6 as illustrated in Figure 2 below.

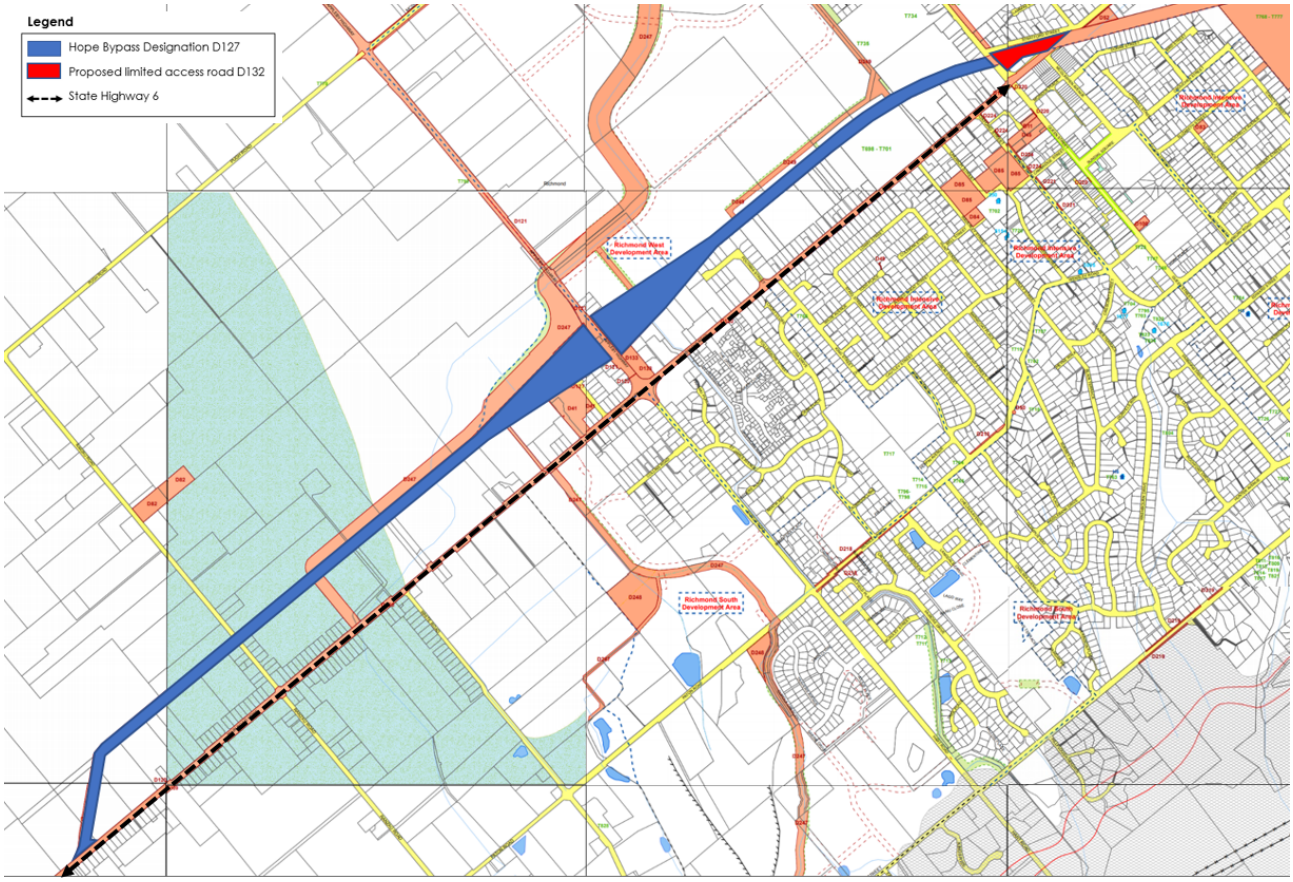


Figure 2: Location of existing Hope Bypass designation (D127) and Access Road (D132), north of SH6.

3 DESIGNATION AND DISTRICT COUNCIL REQUIREMENTS

3.1 HOPE BYPASS DESIGNATION

The Hope Bypass is designated under the TRMP as D127 for the purpose described as 'State highway purposes'. The 'NZ Transport Agency' (now Waka Kotahi) is identified as the requiring authority.

It is understood that the Hope Bypass designation was set aside as a long term transportation measure should additional capacity in the Richmond transportation network be needed. As such, there is little information about the intended use or development of the Hope Bypass, beyond 'State highway purposes', as it's future use is understood to be determined based on the long term future transport demand. There are no conditions associated with the designation.

The Hope Bypass corridor is currently accommodating a section of the National Cycle Trail 'Great Taste' ride. Implications of existing activities and land use within the designation is discussed further in Section 3.3 below.

Relevant to the Hope Bypass designation is designation D132 which is situated between the Richmond Deviation and the eastern end of the Hope Bypass D127 (also shown in Figure 2). D132 provides a critical link in the connection between the existing transport network and any future development and use of the Hope Bypass. D132 was initially authorised for a duration of 10 years, lapsing on 1 November 2018. A decision was made by TDC, dated 30 August 2018, in response to Waka Kotahi's (then NZ Transport Agency's) request to extend the lapse period for D132 to align with the duration of Hope Bypass designation D127. As such, D132 will also lapse on 1 November 2023.

3.2 LAPSE DATE OF DESIGNATION

The requirements for the lapsing of designations which have not been given effect to are set in s184 of the RMA. In accordance with s184, both D127 and D132 will lapse on 1 November 2023 unless:

- they are given effect to before the end of that period; or
- the territorial authority determines, on an application made within 3 months before the expiry of that period, that substantial progress or effort has been made towards giving effect to the designation and is continuing to be made and fixes a longer period (i.e., an extension beyond the current lapse date in 2023).

At the time of this memorandum, designations D127 and D132 have not been given effect to. The corridor is currently accommodating a section of the National Cycle Trail 'Great Taste' ride, between Ranzau Road (western end of D127) and the Richmond Deviation (eastern end of D132). The cycle trail is shown in Figure 3 below. West of Ransau Road, the designation runs behind several rural zoned properties and traverses No. 326 and No. 304 Main Road before connecting back to SH6 (Main Road).

Figure 3: National Cycle Trail. *Source: Google Street View 2021*

As the designations have not been given effect to, an application must be made within 3 months before 1 November 2023. An application must demonstrate, to the satisfaction of TDC, that 'substantial progress or effort' has been made towards giving effect to the designation and is continuing to be made.

Continuing substantial progress or effort

The 'continuing substantial progress or effort' test is similar to that for applications to extend the lapse period of resource consents under s125 of the RMA, and does not require completion or near completion of the works. It also does not necessarily always mean that physical works must be underway[1]. However, the applicant's personal and financial circumstances or the financial viability of the proposal are not a relevant consideration to a consent authority's determination on the lapsing period[2]. There is considerable case law in relation to what constitutes making 'substantial progress or effort' and for determining whether the extension of a designation or resource consent lapse period is appropriate.

It is noteworthy that case law[3] states that 'a private landowner should not have the use of its land significantly limited for a long period because of a possible third party requirement which might never happen' and that 's184 was in place in the RMA to prevent unfair blighting of property for extended periods of time where the designating authority does not make substantial progress or effort towards giving effect to the designation'. Anyone, other than the relevant requiring authority,

[1] Quality Planning. 2021. www.qualityplanning.org.nz
[2] Akaroa Organics v Christchurch City Council [2010] NZEnvC 37
[3] Meridian 37 Ltd v Waipa DC [2015] NZEnvC 119; and Bunnings Ltd v Auckland Transport [2020] NZEnvC 92, (2020) 22 ELRNZ 1

proposing to undertake works within a designation must not prevent or hinder the project or work to which the designation relates, without first obtaining the requiring authority's written consent (as per s176(b) of the RMA).

In this regard, the extent of land affected by the designation which is owned by Waka Kotahi will be an important consideration, as the extension of the lapse period essentially locks up the use of the land for any other reason, preventing its possible use by others for the period of the designation. A memorandum was prepared in October 2013[4], reviewing properties owned by Waka Kotahi at that time in relation to the Hope Bypass alignment, and making recommendations as to the retention or disposal of the land holdings. The memorandum recommended a mixed disposal and retention strategy. It is recommended that a similar review of properties currently owned by Waka Kotahi is undertaken (if not already known) in order to better understand the extent of private landowners potentially affected by the designation over their property.

To extend the lapse period of the designation, Waka Kotahi will also need to prove that the designation is reasonably necessary to secure or enable the functioning of the transportation network and is not fanciful or theoretical. Particular and convincing reasons will be needed, as well as a reasonable degree of certainty about the designation's use and timeline.

It is recommended that a review of land ownership within the designation is undertaken to confirm where land, not owned by Waka Kotahi, would be further limited by the designation, and to gain an understanding of acquisition required for Waka Kotahi to give effect to the designation. The reasons to support an application to extend the lapse period should also be discussed with TDC in advance of any application.

3.3 OUTLINE PLAN OF WORK

Section 176 of the RMA directs that land use rules in district plans established in accordance with s9(3) of the RMA do not apply to activities within designations, that are consistent with the purpose of that designation. This means that consent is not required for any activities occurring within the designation, which would otherwise trigger the need for consent under the district plan. The purpose of the designation is broad, therefore the type of activities and use of the designation should also be discussed with TDC.

Section 176A of the Resource Management Act 1991 (RMA) requires that, unless waived, an outline plan of works (OPW) must be submitted to the territorial authority (in this case TDC) before any construction commences within a designation. The territorial authority may waive the requirement for an OPW at the request of a requiring authority.

While there are no criteria within s176A(2)(c) of the RMA for determining whether to waive the need for an outline plan, guidance may be provided on such decisions by assessing the level of effects that the proposed work or project may have and whether the proposal or work would otherwise meet any relevant performance standards of the underlying zone provisions.

Anyone, other than the relevant requiring authority, proposing to undertake works within a designation must not prevent or hinder the project or work to which the designation relates, without first obtaining the requiring authority's written consent (as per s176(b) of the RMA). The corridor is currently accommodating a section of the National Cycle Trail 'Great Taste' ride. It is understood that TDC obtained from Waka Kotahi a license to occupy land within the designation D127 for a cycleway and walkway for use by the general public. Information received from TDC related to the Hope Byass (scanned records) included documentation of this agreement (license to occupy) in draft form noting an expiration date of 30 September 2014 and a right of renewal of one (1) further term of three (3) years through to 1 October 2017. No other documentation or agreement was found. The continued occupation of the designated area for the use of the cycleway facility will be subject to the agreement by Waka Kotahi as the requiring authority. It is recommended that the validity and status of any agreement to occupy land within the designation is confirmed, in particular to ensure that future use of the designation is not prevented or hindered by any other past or current arrangement between the requiring authority and TDC.

To give effect to the designation, an OPW, or request to waive the requirement for an OPW, will need to be submitted to TDC. The level of detail must be commensurate to the scale and effects of the activities proposed.

Works outside the designation

As a result of the PBC, transport options may be identified which may occur outside the existing boundaries of D127 and D132. The planning options for the works proposed outside the designation are to:

- obtain any relevant district council resource consents (where required); or
- alter the designation to include these areas (which would negate the need for district council consent).

[4] Author unknown, however memorandum drafted on NZ Transport Agency/Waka Kotahi letterhead

Regardless of whether resource consent is required for any work outside the designation boundary, it is recommended that the designation boundary is altered to correctly align the parcel boundaries with the activities 'on the ground' to capture the areas of state highway within the designation and protect the area of work for future access and maintenance. Alterations to the designation are discussed in Section 3.4 below.

3.4 ALTERATION TO DESIGNATION

The boundary of D127 and/or D132 can be altered to include land on which works are required outside the designation.

An alteration can be done either as a 'minor' alteration to designation in accordance with section 181(3) of the RMA, or as a 'full' alteration to designation in accordance with section 181(2) of the RMA.

To be done as a minor alteration, the following RMA criteria must be met:

181 Alteration of designation
(3) A territorial authority may at any time alter a designation in its district plan or a requirement in its proposed district plan if—

(a) the alteration—

(i) involves no more than a minor change to the effects on the environment associated with the use or proposed use of land or any water concerned; or

(ii) involves only minor changes or adjustments to the boundaries of the designation or requirement; and

(b) written notice of the proposed alteration has been given to every owner or occupier of the land directly affected and those owners or occupiers agree with the alteration; and

(c) both the territorial authority and the requiring authority agree with the alteration— and sections 168 to 179 and 198AA to 198AD shall not apply to any such alteration.

An alteration to the designation could be done as a minor alteration where the land is already under the control of Waka Kotahi, or if the landowner is in agreement in accordance with criteria (b). Therefore, a review of all other land owners within the designation boundary (as mentioned above) is beneficial.

If the landowner's written approval is not obtained and/or an agreement for use (purchase/ acquisition) is not obtained, a 'full' alteration to designation in accordance with section 181(2) of the RMA would be required. It is likely that this application would be (at least) limited notified to directly affected landowners.

3.5 REMOVAL OF DESIGNATION

If Waka Kotahi decides the designation(s) or part of the designation is no longer required, notice in accordance with s182 of the RMA, in the prescribed form, is to be given to:

(a) the territorial authority concerned; and
(b) every person who is known by the requiring authority to be the owner or occupier of any land to which the designation relates; and
(c) every other person who, in the opinion of the requiring authority, is likely to be affected by the designation.

In accordance with s182(2), as soon as reasonably practicable after receiving the notice as above, TDC shall, without using the process in Schedule 1 of the RMA, amend its district plan accordingly.

TDC may, within 20 working days of receipt of the notice decline to remove that part of the designation, if TDC considers the effect of the removal of part of a designation on the remaining designation is more than minor.

Waka Kotahi may also object, under section 357 of the RMA, to any decision to decline removal of part of a designation as above.

4 OTHER APPROVALS

4.1 REGIONAL CONSENT REQUIREMENTS

As noted earlier in this memorandum the TRMP contains the District Plan, the Regional Coastal Plan, and other Regional Plan provisions. Designations do not remove the need for the requiring authority to obtain any necessary regional consents (i.e. stormwater management, works in the margins and beds of streams, etc).

In addition to requirements in relation to the designation, the future use and development of the designation may also require consents for activities such as earthworks, vegetation clearance and managing stormwater as well as placement or upgrade of any existing structures such as pipes or culverts including where these are located within an existing waterway (including drainage channels). A full review of any future proposal should be undertaken against the regional provisions of the TRMP.

4.2 NATIONAL PLANNING INSTRUMENTS

The Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (Freshwater NES) took effect on 3 September 2020[5]. The standards regulate activities that pose a potential risk to the health of freshwater and freshwater ecosystems.

These regulations relate to activities which involve the installation of structures in a waterway which may affect fish passage. The NES-F regulations also apply to activities within, or between 10 – 100m of, wetlands. Further information and assessment is required to identify areas of wetland and if any other proposed activities in proximity to wetlands or in rivers or lakes (as defined by the RMA) require consent under these regulations.

The National Policy Statement for Freshwater Management 2020 (NPS-FM) sets out the objectives and policies for the management of freshwater. The NPS-FM took effect on 3 September 2020 and replaces the National Policy Statement for Freshwater Management 2014 (amended 2017).

The NPS-FM applies to all freshwater (including groundwater) and, to the extent they are affected by freshwater, to receiving environments (which may include estuaries and the wider coastal marine area). Any resource consent application for activities in relation to a wetland, structures in waterways, stormwater discharges or dewatering activities will require an assessment of the proposal against the provisions of the NPS-FM.

The Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NESCS) provides a nationally consistent set of planning controls for the management of activities that disturb contaminated and potentially contaminated land. The preparation of a Preliminary Site Investigation (PSI) for the whole corridor would provide assurance of the extent of any contaminating land activities (identified on the Ministry for the Environment - Hazardous Activities and Industries List) within the designation and reduce the likelihood of encountering unexpected contamination in the future.

4.3 HERITAGE NEW ZEALAND POUHERE TAONGA ACT 2014

The Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA) came into effect in May 2014, repealing the Historic Places Act 1993. The purpose of this act is to promote identification, protection, preservation, and conservation of New Zealand's historical and cultural heritage. HNZPT administers the act and was formerly known as the New Zealand Historic Places Trust (Pouhere Taonga).

Archaeological sites are protected under Section 42 of the HNZPTA, and it is an offense to carry out work that may "modify or destroy, or cause to be modified or destroyed, the whole or any part of that site if that person knows, or ought reasonably to have suspected, that the site is an archaeological site", whether or not the site has been previously recorded.

If any archaeological sites are likely to be disturbed by the works, an archaeological assessment should be completed by an archaeologist and archaeological authority from Heritage New Zealand Pouhere Taonga may be required. There are no archaeological sites identified on the New Zealand Archaeological Association Archsite (www.archsite.eaglegis.co.nz).

[5] Except subpart 4 of Part 2 (application of synthetic nitrogen fertiliser to pastoral land) come into force on 1 July 2021.

There is only one site listed on the NZAA Archsite, that is situated in proximity to the existing designations. The site (referenced N27/180) is located in the southwest corner of Gladstone Road and Queen Street just south of the boundary between D127 and D132. The site contained an historic hotel however this was demolished in 2009 and the site was redeveloped.

Notwithstanding, further advice should be sought to provide a better understanding of significance of the area and to confirm any requirement for any further investigation or Archaeological Authority.

5 CONCLUSION

The Hope Bypass is designated under the TRMP as D127 for the purpose described as 'State highway purposes'. The 'NZ Transport Agency' (now Waka Kotahi) is identified as the requiring authority. Designation D132 provides a critical link between the Richmond Deviation and the eastern end of the Hope Bypass D127 and, as such, the lapse date of D132 is aligned with D127, being 1 November 2023.

To extend the lapse date beyond 1 November 2023, an application must be made within 3 months before that date, demonstrating that substantial progress or effort has been made towards giving effect to the designation and is continuing to be made.

To extend the lapse period of the designation, Waka Kotahi will need to prove that the designation is reasonably necessary to secure or enable the functioning of the transportation network and that it is not fanciful or theoretical. Particular and convincing reasons will be needed, as well as a reasonable degree of certainty about the designation's use and timeline. This is especially important where land is not owned by Waka Kotahi, as the extension of the lapse period essentially locks up the use of the land for any other reason other than the purpose of the designation, preventing its possible use by others including the current land owners.

It is recommended that a review of land ownership within the designation is undertaken to confirm where land, not owned by Waka Kotahi, would be further limited by the designation, and to gain an understanding of acquisition required for Waka Kotahi to give effect to the designation. It is important that the reasons to support an application to extend the lapse period are discussed with TDC in advance of any application.

Other advice is provided in this memorandum in relation to giving effect to the designation and to alter or remove the designation. A more detailed review of planning requirements and consent pathways should be undertaken relative to any future activities proposed within the designation.

Appendix L Cost estimates

Priority	Intervention	Cost estimate	Next Phase
0 to 3 years			
Core	PT Network - Stage One	$875,000	Pre-implementation
Core	Richmond East On Road Cycle Lanes	$1,560,000	Pre-implementation
Core	Richmond West Active Transport Connections	$400,000	Pre-implementation
Core	Potama Creek shared path	$195,800	Pre-implementation
Core	Church/Cambridge cycle connection	$500,000	Pre-implementation
Core	Gladstone Road / Church Street - At-grade crossing	$300,000	Pre-implementation
Core	William Street slower speed road	$450,000	Pre-implementation
Core	Berryfield/Lower Queen improvements	$3,080,000	Business Case
Core	SH60 / McShane / Pugh intersection upgrade	$6,500,000	Pre-implementation
Core	Salisbury Road - zebra crossing opp. schools	$450,000	Pre-implementation
Core	New and improved crossing points for walking and cycling at the Hope Recreation Reserve	$450,000	Pre-implementation
Core	Improve school patrol crossings	$52,000	Pre-implementation
Desirable	30kph speed for Salisbury Road	$150,000	Pre-implementation
Desirable	30kph speed environment in Richmond Core	$1,125,000	Pre-implementation
Core	SH6 - Speed limit review	$260,000	Pre-implementation
Core	Residential greenway - trial	$130,000	Pre-implementation
Core	More bicycle parks within town centre	$800,000	Pre-implementation
Core	Charge for off-street parking	$140,000	Pre-implementation
Core	Parking time restrictions in the inner core	$187,500	Pre-implementation
Core	Richmond Deviation WRSB median barrier	$825,000	Pre-implementation
Core	Gladstone Road - special vehicle lanes	$1,050,000	Business Case
Core	SH6 / Lower Queen / McGlashen / Oxford improvements	$4,975,000 (total) $2,000,000 (0-3 yrs.)	Pre-implementation
Core	SH roundabout metering (3 RAB's site)	$750,000	Business Case
Core	Extend the Hope Bypass Designation	$150,000	Pre-implementation
Core	Detailed Design for the cycling arterial	$750,000	Pre-implementation
Core	Ongoing monitoring to understand changes to the number of active and PT trips	$150,000	Pre-implementation
Core	Richmond Town Centre bus terminus	$1,534,000 (total) $150,000 (0-3 yrs.)	Business Case
Core	Flush median on Lower Queen Street	$112,500	Pre-implementation
Core	Wensley / Waverley Street – active mode improvements	$150,000	Pre-implementation
4 to 10 years			
Core	Separated cycle lanes on Salisbury Road	$2,200,000	Business Case
Core	Salisbury / Talbot Street - additional pedestrian crossing	$75,000	Pre-implementation
Core	Talbot / McGlashen crossing improvements	$300,000	Pre-implementation
Core	Detailed Design for the cycling arterial	$750,000	Pre-implementation
Core	**PT Network - Phase Two**	$4,982,000	Business Case
Desirable	Re-designing Lower Oxford Street to help keep traffic moving and make it easier for people driving cars to turn on and off the road.	$960,000	Pre-implementation
Desirable	New bus detection system on Salisbury Road	$165,000	Pre-implementation
Core	Oxford / Wensley Intersection Improvements	$1,690,000	Pre-implementation
Desirable	McShane/Lower Queen Intersection Upgrade	$2,000,000	Pre-implementation
Core	Wensley Road - Cycleways	$6,710,000	Business Case
Core	Upper Oxford Street Cycle path	$447,000	Pre-implementation

Priority	Intervention	Cost estimate	Next Phase
Core	Creation of high-quality separated cycleway facilities on the eastern side of Richmond (Hart, Hill, Queen, Champion)	$2,924,000	Business Case
Core	Lower Queen Street Widening Stage 1	$4,667,000	Business Case
Core	Lower Queen Street Widening Stage 2	$3,631,500	Business Case
Core	Queen Street and Salisbury Road Intersection Improvements	$1,061,000	Pre-implementation
Desirable	New Residential Greenways	$16,050,000	Business Case
Optional	SNP - SH60 between Hope Bypass Designation and Moutere Highway. Median barrier; SH60 / Lansdowne Road – roundabout; SH60 / Moutere Hwy - roundabout	$31,811,000	Pre-implementation
Core	McShane Road Upgrade	$2,850,000	Business Case
Core	Paton Road Improvements	$5,300,000	Business Case
Optional	Signalised crossing with vibrating buttons	$195,000	Pre-implementation
Desirable	SNP - SH6 Hope to Wakefield - Wide centrelines (Ranzau Road to Clover Road) - SH6 / Aniseed Valley Road roundabout - SH6 / Clover Road roundabout	$14,300,000	Pre-implementation
Optional	SH6/White intersection improvement	$5,200,000	Business Case
Optional	SH60 / Richmond West Commercial / Mixed Zone - Roundabout Specific location TBC	$5,200,000	Business Case
Optional	Hill Street/Hart Road intersection upgrade	$325,000	Pre-implementation
Optional	Queen Street/Hill Street intersection upgrade	$520,000	Pre-implementation
Optional	Champion Street/Hill Street intersection upgrade	$1,300,000	Pre-implementation
Optional	White Road (improvements to support subdivision/capacity)	$741,000	Business Case
Optional	White Road/Paton Road intersection upgrade (capacity/safety)	$6,890,000	Business Case
Optional	Wensley/Paton/Hart/Bateup - active modes safety upgrade	$1,500,000	Business Case
Core	Charge for parking	$900,000	Pre-implementation
Desirable	Parking restrictions on narrow streets	$150,000	Pre-implementation
Core	Stormwater corridor - new shared path	$2,137,500	Pre-implementation
Core	SH6 Corridor - Indicative Business Case	$1,300,000	Business Case
10 to 30 years			
Core	**PT Network - Phase Three**	$16,806,000	Business Case
Desirable	**PT Network - Long Term**	$7,315,100	Business Case
Core	SH6 Gladstone Road - On road cycle lanes	$650,000	Pre-implementation
Desirable	Hill St/Hill St South/Haycock Rd cycleway connection	$645,000	Pre-implementation
Optional	Build a car park building to free up parking for development and walking connection through to the CBD	$26,000,000	Business Case
Desirable	Mountable kerbs across Richmond	$1,248,000	Pre-implementation
Desirable	Smoother and wider footpaths	$3,375,000	Pre-implementation
Optional	SH6 Whakatu Drive/Richmond Deviation upgrade - potential flyover (TBC)	$46,800,000	Business Case
Desirable	Gladstone Road / Queen Street safety improvements - liveability (people focus)	$150,000	Pre-implementation
Desirable	Gladstone Road / Oxford Street safety improvements - liveability (people focus)	$300,000	Pre-implementation
Core	Hope Bypass	$243,500,000	Business Case

Appendix M Management of interventions

Project	Package	Funding	Manager	Programme	Procurement
0 to 3 years					
PT Network - Stage One	RPTP programme	TDC / NCC - subsidised	NCC	PT services	Open tender
Richmond East on-road cycle lanes	Richmond / Motueka cycle lanes	TDC LTP - subsidised	TDC	LCLR - walking / cycling	TDC Maintenance Contract
Richmond West walking/cycling connection		TDC LTP - subsidised	TDC	LCLR - walking / cycling	TDC Panel
Potama Creek shared path		TDC LTP - subsidised	TDC	LCLR - walking / cycling	TDC Panel
Church/Cambridge cycle connection		TDC LTP - subsidised	TDC	LCLR - walking / cycling	TDC Panel
Gladstone / Church - at-grade crossing		Waka Kotahi	WK	LCLR - walking / cycling	Open tender
William Street slower speed road		TDC LTP - subsidised	TDC	LCLR - walking / cycling	TDC Panel
Berryfield/Lower Queen improvements		TDC LTP - subsidised	TDC	Local road improvements	Open tender
SH60 / McShane / Pugh upgrade		Waka Kotahi	WK	R2Z	Open tender
Salisbury Road - zebra crossing	Salisbury Road	TDC LTP - subsidised	TDC	LCLR - walking / cycling	TDC Panel
Salisbury / Talbot - additional ped crossing	Salisbury Road	TDC LTP - subsidised	TDC	LCLR - walking / cycling	TDC Maintenance Contract
Talbot / McGlashen crossing improvements		TDC LTP - subsidised	TDC	LCLR - walking / cycling	TDC Panel
Crossing points at Hope Recreation Reserve		Waka Kotahi	WK	LCLR - walking / cycling	Open tender
Improve school patrol crossings		TDC LTP - subsidised	TDC	LCLR - walking / cycling	TDC Maintenance Contract
30kph speed for Salisbury Road	Salisbury Road	TDC LTP - subsidised	TDC	LCLR - R2Z	TDC Maintenance Contract
30kph speed environment in Richmond Core		TDC LTP - subsidised	TDC	LCLR - walking / cycling	TDC Panel
SH6 - Speed limit review		Waka Kotahi	WK	LCLR - R2Z	Open tender
Residential greenway - trial		TDC LTP - subsidised	TDC	LCLR - walking / cycling	TDC Maintenance Contract
More bicycle parks within town centre		TDC LTP - subsidised	TDC	LCLR - walking / cycling	Direct appoint
Charge for off-street parking		TDC LTP - unsubsidised	TDC	TDC LTP	Direct appoint
Parking time restrictions in the inner core		TDC LTP - unsubsidised	TDC	TDC LTP	Other
Richmond Deviation WRSB median barrier		Waka Kotahi	WK	SNP	SNP
Gladstone Road - special vehicle lanes		Waka Kotahi	WK	LCLR - State Highway improvements	Open tender
SH6 / Lower Queen / McGlashen / Oxford improvements		Waka Kotahi	WK	LCLR - State Highway improvements	Open tender
SH roundabout metering (3 RAB's site)		Waka Kotahi	WK	LCLR - State Highway improvements	Open tender

Project	Package	Funding	Manager	Programme	Procurement
Extend the Hope Bypass Designation		Waka Kotahi	WK	State Highway improvements	Invited tender
Detailed Design for the cycling arterial		TDC LTP - subsidised	TDC	LCLR - walking / cycling	TDC Panel
Ongoing monitoring of active and PT trips		TDC LTP - subsidised	TDC	Local Roads Maintenance Operations and Renewals	TDC Maintenance Contract
Richmond Town Centre bus terminus		TDC LTP - subsidised	TDC	LCLR - PT infrastructure	TDC Panel
4 to 10 years					
Separated cycle lanes on Salisbury Road	Salisbury Road	TDC LTP - subsidised	TDC	LCLR - walking / cycling	Open tender
PT Network - Phase Two		TDC LTP - subsidised	NCC	LCLR - PT services	Open tender
Re-designing Lower Oxford Street		TDC LTP - subsidised	TDC	LCLR - local road improvements	Open tender
Bus detection system on Salisbury Road		TDC LTP - subsidised	TDC	LCLR - PT infrastructure	Invited tender
Oxford / Wensley Intersection Improvements		TDC LTP - subsidised	TDC	LCLR - walking / cycling	Open tender
McShane/Lower Queen upgrade		TDC LTP - subsidised	TDC	LCLR - local road improvements	Open tender
Wensley Road - Cycleways		TDC LTP - subsidised	TDC	LCLR - walking / cycling	Open tender
Upper Oxford Street Cycle path		TDC LTP - subsidised	TDC	LCLR - walking / cycling	Open tender
High-quality separated cycleway on Hart, Hill, Queen & Champion		TDC LTP - subsidised	TDC	LCLR - walking / cycling	Open tender
Lower Queen Street Widening Stage 1		TDC LTP - subsidised	TDC	LCLR - walking / cycling	Open tender
Lower Queen Street Widening Stage 2		TDC LTP - subsidised	TDC	LCLR - walking / cycling	Open tender
Queen Street and Salisbury Road Intersection Improvements		TDC LTP - subsidised	TDC	LCLR - walking / cycling	Open tender
New Residential Greenways		TDC LTP - subsidised	TDC	LCLR - walking / cycling	TDC Maintenance Contract
SNP - SH60		Waka Kotahi	WK	SNP	SNP
McShane Road Upgrade		TDC LTP - subsidised	TDC	LCLR - local road improvements	Open tender
Paton Road Improvements		TDC LTP - subsidised	TDC	LCLR - walking / cycling	Open tender
Signalised crossing with vibrating buttons		TDC LTP - subsidised	TDC	LCLR - walking / cycling	TDC Maintenance Contract
SNP - SH6 Hope to Wakefield		Waka Kotahi	WK	SNP	SNP
SH6/White intersection improvement		Waka Kotahi (+ developer contribution)	WK	State Highway improvements	Open tender
SH60 / Richmond West Commercial / Mixed Zone - Roundabout		Waka Kotahi (+ developer contribution)	WK	State Highway improvements	Open tender

Project	Package	Funding	Manager	Programme	Procurement
Hill / Hart intersection upgrade		TDC LTP - subsidised	TDC	LCLR - local road improvements	TDC Panel
Queen / Hill intersection upgrade		TDC LTP - subsidised	TDC	LCLR - walking / cycling	TDC Panel
Champion / Hill intersection upgrade		TDC LTP - subsidised	TDC	LCLR - walking / cycling	TDC Panel
White Road – capacity and safety improvement		TDC LTP - subsidised	TDC	LCLR - local road improvements	Open tender
White / Paton intersection upgrade		TDC LTP - subsidised	TDC	LCLR - local road improvements	Open tender
Wensley/Paton/Hart/Bateup - active modes safety upgrade		TDC LTP - subsidised	TDC	LCLR - walking / cycling	Open tender
Charge for parking		TDC LTP - unsubsidised	TDC	TDC LTP	Direct appoint
Parking restrictions on narrow streets		TDC LTP - unsubsidised	TDC	TDC LTP	TDC Maintenance Contract
Stormwater corridor - new shared path		TDC LTP - subsidised	TDC	LCLR - walking / cycling	Open tender
SH6 Corridor - Indicative Business Case		Waka Kotahi	WK	State Highway improvements	Open tender
10 to 30 years					
PT Network - Phase Three		TDC / NCC - subsidised	NCC	PT services	Open tender
PT Network - Long Term		TDC / NCC - subsidised	NCC	PT services	Open tender
SH6 Gladstone Road - On road cycle lanes		TDC LTP - subsidised	TDC	LCLR - walking / cycling	TDC Panel
Hill St/Hill St South/Haycock Rd cycleway connection		TDC LTP - subsidised	TDC	LCLR - walking / cycling	Open tender
Car park building		TDC LTP - unsubsidised	TDC	TDC LTP	Open tender
Mountable kerbs across Richmond		TDC LTP - subsidised	TDC	Local Roads Maintenance Operations and Renewals	TDC Maintenance Contract
Smoother and wider footpaths		TDC LTP - subsidised	TDC	LCLR - walking / cycling	TDC Maintenance Contract
SH6 Whakatu Drive/Richmond Deviation upgrade		Waka Kotahi	WK	State Highway improvements	Open tender
Gladstone / Queen safety improvements (people focus)		Waka Kotahi	WK	State Highway improvements	Open tender
Gladstone / Oxford safety improvements (people focus)		Waka Kotahi	WK	State Highway improvements	Open tender
Hope Bypass		Waka Kotahi	WK	State Highway improvements	Open tender

Appendix N Appraisal Summary Tables (AST)

Appraisal Summary Table
Preferred Programme

Date: 13/12/2021 | **Evaluation Period:** 2021-2051

Problem/opportunity statement:	Investment objectives:	How project gives effect to GPS:	How project gives effect to local community outcomes:
Safety and Place Increasing traffic volumes as a result of growth creates severance and rat running, leading to reduced place value and increased safety risk.	**Traffic volumes on key local roads (e.g. Salisbury Road and Wensley Road) to reduce by 25% by 2028 when compared to a 'Do Nothing' scenario.** Preferred Programme • Reduction of around 33% of traffic on Salisbury Road during peak periods in 2028 (Do Min vs Preferred Programme) • Reduction of around 15-20% of traffic on Wensley Road during peak periods 2028 (Do Min vs Preferred Programme)	The project directly with the all five Transport Outcomes - 'Inclusive Access', 'Economic prosperity', 'Healthy and Safe People', 'Resilience & Security' and 'Environmental Sustainability'. **Short term** Cycle lanes on key local routes Priority lanes for freight and public transport Targeted safety treatments for pedestrians and cyclists **Medium term** Safety improvements on the State Highway High quality cycle lanes connecting residential zones with areas with high place value **Long term** Hope Bypass keeps 'the right traffic on the right roads', meaning local streets can be made safer. Hope Bypass ensures reliable freight journey times and supports future growth of Richmond	Targeting short-term improvements at the key existing issues that have been identified by the community - focusing on routes to schools and measures to reduce rat-running on local streets. Slower speed zones support 'better place value' community outcomes. Interventions also support accessibility by walking/cycling to new short-term residential areas such as Richmond West.
	75% of 'key routes' offer high quality active and/or public transport options within ten years Preferred Programme • All key routes identified within the UDS, aside from Darcy Street, to have either on-road or full separated cycle lanes within the next ten years. This accounts for approximately 90% of all key routes.		
	a) Reduce the proportion of cyclists riding on the footpath along Wensley Road and Salisbury Road to 5%, from the current 19%. **b) Increase the number of people who stated that they feel safe cycling in Richmond in the next ten years. Note that baseline data is required.** Preferred Programme • This Investment Objective can only be answered during post-implementation surveys. However, modelling to date has estimated that the programme will deliver a safety benefit (see Section 16.2.3) and the economics has identified a significant number of new cyclists will be created (up to 600 per day). • Providing 6km of separated cycleway (plus 15km of on-road cycleways) which connect key places to schools is expected to significantly reduce the number of cyclists riding on the pavement to below 5%.		
Route efficiency Traffic congestion through Richmond causes delays to people and goods reducing travel time reliability and access to economic opportunities and key destinations.	**Freight travel time along SH6 between Hope and the 'three roundabouts' remains within 2 minutes of current travel times for the next 10 years.** Preferred Programme • Modelling identified an increase in travel time for freight in 2028 (see Section 16.5). This is because the Hope Bypass is not programmed until the 4 to 10 year period. The modelling does not however capture mode shift, or the potential for freight priority lanes. Freight priority lanes are therefore an important feature of the short-term programme for achieving improved freight reliability. • With the Hope Bypass a 33% improvement in freight travel time is expected.		Focuses on providing seperated cycle lanes throughout Richmond which help support long-term mode shift and climate change aspirations of the local community. Wider improvements target safe access to the Richmond South growth area, plus new roundabouts and safety interventions on the state highways.
Travel choice Reliance on private cars for short journeys as a result of car-oriented development leads to low utilisation of public and active transport modes and conflict between modes.	**a) Mode share for journeys to work by public or active modes (people living and working in Richmond) increases from 12% in 2018 to 22% by 2031.** **b) Mode share for journeys to school by public or active modes increases from 51% in 2018 to 66% in 2031.** Preferred Programme An additional 360-600 cyclists per day across an enhanced network which captures: • 6 km of new separated cycleways • 15 km of new on-road cycleways. Traffic modelling has indicated that to achieve the Investment Objective, a reduction of around 200 vehicle trips will be required by 2030 .		The Hope Bypass will provide the additional network capacity to limit potential rat-running on local streets, support efficient freight movement and enable residential growth to occur. New parking building on the outskirts of the town core encourages a more pedestrian focused town centre.

1. Summary of Non-Monetised Impacts (Description)

Improved safety
Personal and collective risks
Safety perception surveys
No. cyclists using the footpath rather than the road

Access to jobs and opportunities
Proportion of population living within travel threshold (15 minutes, 30 minutes or 45 minutes) of key social opportunities (including education, health care, supermarkets) by different modes (walking, cycling, public transport, private motor vehicle) in the morning peak

Mode shift and environmental sustainability
Mode shift from single occupancy private vehicles
Spatial coverage of cycleways and paths

2. Summary of Financial Impacts (nominal, non-discounted)

Capital Costs

Intervention type	TDC / NCC - subsidised	TDC LTP - subsidised	TDC LTP - unsubsidised	Waka Kotahi	Waka Kotahi (+ developer contribution)	Total
Bike Parking		$1m				$1m
Car Parking			$27m			$27m
Cycle lanes / shared path		$28m				$28m
Efficiency		$1m		$297m		$298m
Intersection Upgrade		$8m		$7m		$15m
Maintenance		$5m				$5m
Pedestrian crossing		$1m		$1m		$2m
Planning / monitoring		$1m		$1m		$2m
Public Transport	$25m	$7m				$32m
Reduced Speed		$17m				$17m
Safety		$20m		$47m	$10m	$77m
TOTAL	$25	$89m	$27m	$353m	$10m	$504m

Operating Costs: n/a for a PBC

Total Financial Costs: As above

3. Summary of Monetised Option Impacts (present value, discounted)

Total Monetised Benefits, excluding Wider Economic Benefits (WEBs): Table below based on the 'High' benefit range

Investment Objective	Economic benefit (High estimate)		ILM Weighting	Alignment
Place Quality	$129.9m	21%	20%	Very Strong
Accessibility	$76.5m	13%	15%	Very Strong
Safety	$173.9m	29%	30%	Very Strong
Route Efficiency	$133.3m	22%	20%	Very Strong
Mode Share	$93.9m	15%	15%	Very Strong
All	**$607.7m**	**100%**	**100%**	**Very Strong**

Total Monetised Benefits, including Wider	n/a for a PBC
Total Economic Costs	$504m (capital cost)
BCR (excluding WEBs)	n/a for a PBC
BCR (including WEBs)	0.5 to 1.5

		Baseline:		Preferred Programme
Healthy and safe people				
1.1 Impact on social cost and incidents of crashes	1.1.3 Deaths and serious injuries	n/a	Increase in likeliness in DSIs occuring as a result in an increase in traffic on local roads - i.e. more conflict with vulnerable road users (inc. cyclists)	Safe seperation of cyclists from traffic, slower speeds and reducing rat-running will reduce the likelines of DSIs
3.2 Impact of air emissions on health	3.1.1 Physical health benefits from active modes	n/a	Increasing tendancy towards private car use, as people percieve a more unsafe transport system. This will trigger increasing emissions, which with more rat-running, will be become more focused in town centre areas.	Reduction in CO2 in the town core, and health benefits through an uptake in active travel
Resilience and security				
4.1 Impact on system vunerabilities and	4.1.1 Availablity of a viable alternative to high-risk and high-impact route	n/a	Growth will trigger increasing demands and more unreliable journey times for freight along SH6 and SH60	Reliable journey times for freight travelling through Richmond
Economic prosperity				
5.2 Impact on network productivity and utilisation	5.1.2 Travel time reliability - motor vehicles	n/a	Increasing congestion, with LOF F conditions being frequently experianced on the state highway through Richmond.	A more free-flow transport system, with through traffic using the Hope Bypass and away from areas of high place value.
Environmental sustainability				
8.1 Impact on greenhouse gas emissions	8.1.1 CO2 emissions	n/a	Additional residential growth on the edge of Richmond will see an increase in car usage without a programme that offers appealing active and public transport choices.	
Inclusive access				
11.3 Impact on townscape	10.1.1 People - throughput of pedestrians, cyclists and public transport boardings	n/a	Limited additional uptake in public transport, despite an increasing residential population	Supporting the wider TDC/NCC public transport strategy, and increase in productivity (people throughput) with prioritisation for public transport where possible.

Rationale for preferred programme selection

The preferred programme brought together key interventions from a range of regional strategies and the Richmond NOF. The programme will strongly deliver upon all Investment Objectives, and focuses on supporting mode shift and improving safety in the short-term. The programme was tested with a wide stakeholder group and refined to offer the best value for money.

The Hope Bypass is a fundamental element of the long-term programme. Any short-to-medium term benefits gained through public and active transport interventions could largely be lost in the long-term if increases to traffic through the local road network occurs. Traffic modelling has indicated that the Hope Bypass is an essential component for 'keeping the right traffic on the right roads' and reducing potential rat-running through areas of high place