

Queenstown Public and Passenger Transport Facilities

Indicative Business Case



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Queenstown Public and Passenger Transport Facilities: Indicative Business Case

Prepared for:

QUEENSTOWN LAKES DISTRICT COUNCIL

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Contents

Glossary of Terms	4
Executive Summary	5
1 Strategic Case (Strategy)	12
1.1 Purpose	12
2 Strategic Case (Activity)	13
2.1 Current Public and Passenger Provisions	13
2.2 Passenger Transport in Queenstown	15
2.3 Existing Public Transport Network.....	18
2.4 Otago Regional Council Public Transport Business Cases.....	21
3 Problems, Benefits and Constraints	22
3.1 Town Centre Masterplan	22
3.2 The Problems – Public and Passenger Transport	24
3.3 Public and Passenger Transport Facilities Benefits	29
3.4 Potential Constraints and Risks	32
4 Alignment to Existing Strategies / Organisational Goals	34
4.1 Current Related Strategies and Studies	34
4.2 Alignment to Existing Strategies / Organisational Goals	34
5 The Evidence	43
5.1 Growth	43
5.2 Modal Split.....	50
5.3 Projected future demand by mode.....	52
5.4 Land Use Change.....	54
5.5 Public and Passenger User Survey	55
5.6 Resident and Visitor Surveys.....	56
5.7 Park and Ride Survey 2016.....	61
5.8 Initial Masterplan Engagement Results	61
5.9 Masterplan preferred option engagement.....	62
5.10 Queenstown Airport growth forecasts.....	64
6 Activity development	66
6.1 Geographical & Environmental Context.....	66
6.2 Economic context	70
6.3 Supporting sustainable growth	72
7 Options development and assessment	74
7.1 The option development process.....	74
7.2 Strategic options	75
7.3 The need and location for a new interchange.....	78
7.4 PT Hub Ancillary Building site selection	83
7.5 Long list programme development	83

7.6	The do-minimum and do minimum plus (demand and productivity focus)	83
7.7	Assessment of options	86
7.8	Shortlisted options	87
8	Preferred Programme	94
8.1	Programme overview	94
8.2	Programme scope	94
8.3	Detailed programme description	95
8.4	Programme implementation strategy and trigger points	112
8.5	Preferred Programme – Assessment	121
9	Commercial Case	134
9.1	The deal – what is required	134
9.2	Market capability	134
9.3	Implementing organisations	134
9.4	Procurement Strategy	135
9.5	Consenting Strategy	135
9.6	Property acquisition	136
9.7	Implementation timing	136
9.8	Contract Management	136
9.9	Risk allocation	136
10	Financial Case	137
10.1	Indicative costs	137
10.2	Revenues	137
10.3	Funding arrangements	137
10.4	Affordability	138
11	Management Case	139
11.1	Programme governance and reporting	139
11.2	Project management and assurance	141
11.3	Risk Management	142
11.4	Communications and Stakeholder Engagement	142
11.5	Benefits Management	143
11.6	Change Management	143
11.7	Next Steps	143
	Appendix 1: Benefit Map	145
	Appendix 2: Business Case Governance Structure	146
	Appendix 3: Programme development process	147
	Appendix 4: Completed and planned engagement activities	148
	Appendix 5: Masterplan Programme Risk Register	150
	Appendix 6: Advisory Group Members	158
	Appendix 7: Queenstown Town Centre Masterplan Modelling and Economic Evaluation	161

Appendix 8: Queenstown Town Centre Masterplan Passenger Transport Requirements	162
Appendix 9: Queenstown Integrated Transport Programme Business Case	163
Appendix 10: Town Centre Masterplan workflow diagram	164
Appendix 11: Queenstown Town Centre Masterplan Programme Business Case	165
Appendix 12: Queenstown Town Centre Arterial Routes Indicative Business Case	166
Appendix 13: Queenstown Town Centre Parking Indicative Business Case	167
Appendix 14: Advisory Group Feedback and project team response	168
Appendix 15: Queenstown Town Centre Masterplan - Wakatipu Transport Model Peer Review	169
Appendix 16: Assessment of Environmental Effects (Beca Report)	170

Glossary of Terms

Abbreviation	Term
CBD	Central Business District
FIT	Free Independent Travellers
ILM	Investment Logic Map
KPI	Key Performance Indicator
LTP	Long Term Plan
NZTA (or the Agency)	New Zealand Transport Agency
ORC	Otago Regional Council
P&PT	Public and Passenger Transport
PBC	Programme Business Case
IBC	Indicative Business Case
PC	Plan Change
QLDC	Queenstown Lakes District Council
RLTP	Regional Land Transport Plan
RMA	Resource Management Act
SH(#)	State Highway (number)
QITPBC	Queenstown Integrated Transport Programme Business Case

Executive Summary

Document purpose

This Queenstown Town Centre Public and Passenger Transport Indicative Business Case is part of a Masterplan Programme for the Town Centre.

The Masterplan Programme brings together a set of other business cases to describe an integrated investment story. These business cases and frameworks are focused on:

- Public and Passenger Transport facilities
- Parking
- Town Centre Arterial Routes (Inner Links)
- Spatial Framework and Public Realm
- Community facilities, including development of a Community Heart.

Background

The Queenstown Lakes District Council is leading a multi-disciplinary team to identify and address the challenges facing the Town Centre through a Masterplan. The Masterplan is a 35-year vision that sets the direction for the future of the Queenstown Town Centre.

This Indicative Business Case (IBC) explains the role that Public and Passenger Transport facilities plays in this.

The case for change (Strategic Case)

Public and passenger transport facilities have a crucial role to play in delivering the vision for Queenstown's town centre. Indeed, the need to address public transport in the Wakatipu Basin has been recognised since the 2007 Wakatipu Transport Study.

Public transport services in the Wakatipu basin are managed by Otago Regional Council (ORC), but QLDC and NZTA need to provide the facilities to support this.

The need for investment in this area can be summed up in the following statements, which are supported by detailed evidence in section 5.

- In the next ten years, the Queenstown Lakes district is set to grow by 29% for residents, 25% for visitors and 24% for rating units. This growth will add extra pressure to the transport network.
- State Highway 6A, between Frankton and Queenstown town centre, is already operating at 88% of its theoretical capacity of 28,500 vehicles per day and it is expected to reach 100% by 2026.
- Shotover bridge is estimated to reach capacity in the coming years and there is no current alternative bridge planned for this corridor.
- The extreme car dependence in the district is driving congestion, constraining public transport and reducing the appeal of the town centre.
- Due to congestion, Trackabus collection service has recorded up to 60% of services running late during the morning peak and up to 77% services running late during the afternoon peak.
- The current bus hub on Camp Street is at capacity.
- Increased public bus services and reduced public transport fares (a reduction in average fare from \$5.20 to \$2 per trip) are expected to grow public transport demand substantially.
- Current forecasts demonstrate that a new public transport hub (due to Camp Street reaching capacity, even after its expansion to 4 bays) is required in the town centre by 2023.
- Recent modelling has shown that the peak hour mode share for Public buses needs to rise to 22% by 2025 to allow Queenstown to grow without severe congestion.

- Passenger transport services (including coaches) are growing and they need more space in the town centre. The distribution of commercial passenger transport loading zones to a variety of streets around the inner core is seen as adding to the vibrancy of the town centre experience.
- Public and passenger services could be improved to better service all abilities, including vision impaired and disabled passengers.
- As shown in the modelling completed as part of this project, the town centre roads are nearing capacity in peak times and growth must be supported through increased uptake of public and passenger transport.
- According to resident surveys, many commuters find that using their cars to travel into the town centre is cheaper and more convenient and rarely use public or passenger transport. Responses indicate that there is no incentive to use public transport which is considered expensive, unreliable and not convenient.
- Visitor surveys show that unreliable transport access and parking are negatively impacting their Queenstown experiences.
- The main access corridors to Queenstown are constrained in their size due to the land form and this means that significant mode shift must be achieved to allow the town to grow without creating more congestion. This is particularly the case for the SH6A (Frankton Road) corridor.

Growth and movement

- Ongoing growth is the fastest in New Zealand
- Ongoing transport challenges
- Need for radical and innovation responses

INBOUND PERSON TRIPS AM PERIODS (7-11AM)
ON THE FRANKTON ROAD CORRIDOR

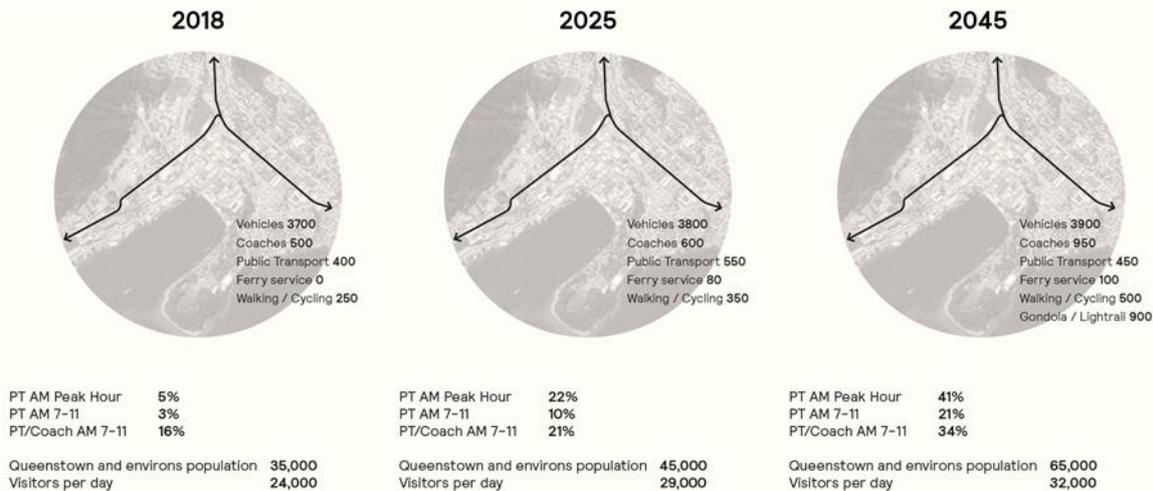


Figure 1: A snapshot of transport growth and movement in the Frankton Road corridor (inbound, with intervention)

As shown in the image above, public and passenger transport will need to take on a significant portion of the growth in inbound trips on the Frankton Road corridor (with intervention). If this is not achieved and people keep relying so heavily on cars, congestion will grow substantially, greatly reducing travel time reliability and creating a terrible first impression for visitors.

This diagram was created using the recent modelling completed by Abley Transportation Consultants with Beca (refer appendix 7). This snapshot demonstrates the required mode shifts, including:

- An increase of PT mode share in peak hour from 5% in 2018 to 22% in 2025 and 41% in 2045.
- An increase in PT/Coach mode share (between 7 and 11 am) from 16% in 2018 to 21% in 2025 and 34% in 2045.
- An extra 150 bus movements (7-11 am) by 2025.

- The use of a new mass rapid transit solution by 2045 to supplement buses, ferries and coaches.

Public and passenger transport facility improvements will play a crucial role in improving town centre access while supporting (and benefiting from) integrated initiatives around parking reform, public realm upgrades, and arterial road upgrades. All of these things combine to ensure Queenstown can continue to deliver the positive experiences it is famous for.

The inter-dependent nature of these projects cannot be underestimated and is important to recognise the following key dependencies:

- New public and passenger transport facilities cannot succeed without dedicated space and priority access, which is provided by moving the arterial route away from Stanley and Shotover Streets.
- Public transport will not be attractive to users if it is not efficient, convenient and well located in terms of the town centre attractions.
- Public transport will not be successful if parking availability and pricing, (including the current access to abundant free parking within easy walking distance to the town centre) are not better managed to encourage less car use.
- Proposed parking changes cannot succeed without moving the arterials away from the town centre to the new parking facilities and preventing the level of circling experienced in town today.
- The public spaces in the town centre cannot be improved without moving cars out of the town centre (including parking buildings) and shifting more people into public, passenger and active transport.

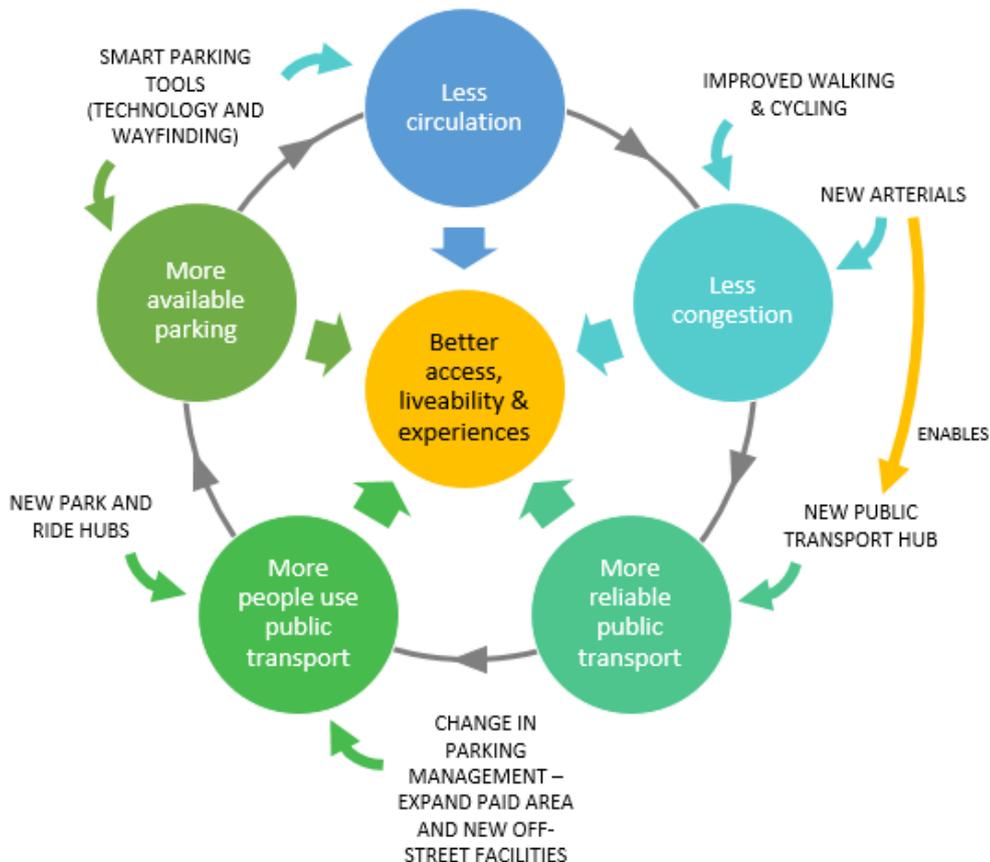


Figure 2: How integrated transport solutions can provide better town centre experiences

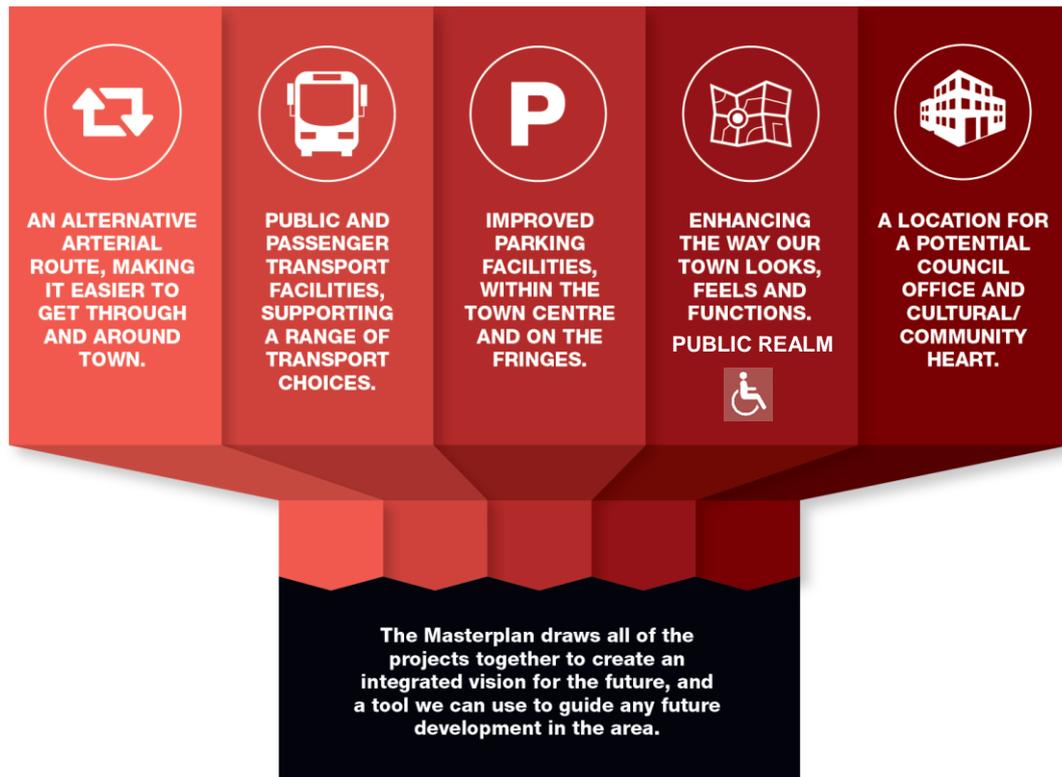


Figure 3: How the masterplan projects come together to guide future development

The proposed way forward (the Economic Case)

The preferred programme includes a range of new facilities, arrangements and supporting tools, as shown below.

Table 1: Proposed improvements by mode

Public Transport Mode	Developments
Bus	<ul style="list-style-type: none"> Establishment of an on-road Public Transport interchange at Stanley Street with 6-8 bus bays and an interchange building, by 2023. Bus priority measures along Stanley Street from Frankton Road, leading up to and at the Stanley Street interchange, by 2023.
Water Transport	<ul style="list-style-type: none"> Water Taxi fleet to increase progressively. A ferry wharf is to be developed at an agreed site near the town centre to support greater frequency of water taxi services and future public transport ferries. Scheduled Ferry Services across Frankton Arm (Lake Wakatipu). All selected jetties in Frankton Arm to be upgraded to wharf pontoons by 2027.
Cycling	<ul style="list-style-type: none"> Upgrading Frankton Track and extending a safe route into the town centre. Transport hubs create the linkages between public transport and active travel.
Mass Transit solution	<ul style="list-style-type: none"> A mass transit solution (such as a gondola, ferry or light rail system) between Frankton and the Queenstown Town Centre will be studied and planned, with construction expected around or beyond 2037.

Table 2: The proposed facility changes within Queenstown town centre

Street	Proposed Improvements / Changes
Shotover Street	<ul style="list-style-type: none"> • 3 new Taxi bays • 2 new loading zones for Passenger and Goods Transport • 3 new Passenger Transport zones
Camp Street	<ul style="list-style-type: none"> • 1 new loading zone for Passenger and Goods Transport • Removal of existing Coach parking facility • Removal of 2 existing Public Transport stops
Stanley Street (between Shotover Street and Ballarat Street)	<ul style="list-style-type: none"> • 14 new late-night Taxi bays • Development of a Public Transport interchange incorporating 6-8 Public Transport stops • Addition of a Pedestrian Crossing facility between the stops • Road marking changes and westbound bus priority measures (including bus lanes) • Restricted access for private vehicles
Duke Street	<ul style="list-style-type: none"> • 1 new Passenger Transport (coach / shuttle) zone
Ballarat Street	<ul style="list-style-type: none"> • 2 new taxi bays

Other programme features include:

- Marketing and Communications to enable better understanding of the transport options, including tourist information, maps, website information, airport and hotel marketing.
- Intelligent Transport Systems to engage and inform users and network planning through real time signage and apps providing traveller information.
- Provision for bus priority following the delivery of the upgraded arterial roads.

Value for money

The proposed Public and Passenger Transport improvements form part of a wider Masterplan programme that achieved a Benefit Cost Ratio (BCR) of 1.7.

When assessed against the 2018-2021 NZTA Investment Assessment Framework, the preferred programme performs strongly against both the criteria for the “High” and “Very High” results alignment requirements.

Commercial Case

As the biggest investment within the P&PT programme, the Public Transport Hub may be constructed through established and local suppliers in a traditional way or through a PPP.

Parts of the preferred way forward may be procured at a programme level to leverage efficiencies, such as technology and building. However, it is anticipated that the actual bus shelter facilities for the PT hub will be delivered using a standard construction contract.

Consenting and property acquisition strategies are progressing in line with other masterplan projects and will be developed further during the detailed business case phase.

Financial Case

The programme cost is currently estimated at approximately \$34 million.

The cost estimates below have been used to inform the QLDC Long Term Plan forecast.

Table 3: 10-year costs by activity

	10-year total
Detailed Business Case	\$75,000
Marketing and Communications	\$156,000
Property Costs	\$5,225,000
Public Ferry Wharf	\$5,699,000
Stanley St Interchange and Associated Works	\$22,693,000
	\$33,848,000

The following funding arrangements are proposed for this programme:

- The public transport facility is assumed to be eligible for NZTA funding under the normal QLDC Funding Assistance Rate (FAR) of 51 per cent.
- Recent QLDC discussions have highlighted the opportunity to investigate Private Public Partnership arrangements for vertical built infrastructure, which may include the Public Transport Facility. If applied, this may improve the programme's affordability by moving this cost off the Council's balance sheet.
- ORC and NZTA may also have an interest in the ITS solutions proposed in this programme and may benefit from shared investment.
- Possible central government investment.

Revenue opportunities from commercial leases alongside this hub will be investigated further during the detailed business case phase.

Management Case

An alliance has been proposed with NZTA and ORC to oversee this programme as part of the wider masterplan. This would be supported by a standard governance structure for managing and delivering the project within QLDC.

Project Management, Benefits Management and Risk Management strategies have been developed and they will be tested and agreed in the detailed business case phase.

Summary of recommendations

This Indicative Business Case demonstrates the value for money that can be provided through investing in public and passenger transport improvements in Queenstown as part of an integrated masterplan programme. It is therefore recommended that investment continues in the following activities:

- The Queenstown Town Centre Public and Passenger Transport Facilities IBC be accepted.
- The project be progressed to the Detailed Business Case (DBC) phase.
- The preparation of the DBC will be aligned with the Queenstown Town Centre Masterplan and its core projects: Town Centre Spatial Framework, Public Realm Framework, Town Centre Arterials/ Parking business cases and Project Connect (QLDC council office project).
- Improving town centre access for all abilities through these projects.

Key dates

In order to address the challenges facing the Queenstown Town Centre in a timely manner and to meet the timings outlined in the current schedule, the Masterplan Programme milestones below will need to be met.

- Completion of the Spatial Framework and Design Guidelines by February 2018.
- Completion of the Town Centre Arterials Detailed Business Cases by October 2018.

- Completion of the Parking Buildings and Public Realm (street upgrades) construction procurement documentation and associated financial feasibility by June 2018 (to meet the scheduled construction dates).
- Completion of the Town Centre Arterial designation process by June 2020 (commencing July 2018).
- Commencement of Town Centre Arterial construction by July 2020 (to enable delivery of the related public and passenger transport improvements).

1 Strategic Case (Strategy)

This Indicative Business Case (IBC) asks decision makers to consider proposed options to improve Public and Passenger Transport in Queenstown Town Centre, in the context of a Town Centre Masterplan programme.

This case outlines how a set of options were created to solve the public and passenger transport problems affecting the area and the project team are seeking endorsement to continue detailed analysis of the preferred option through a Detailed Business Case (DBC).

1.1 Purpose

The primary purpose of the programme business case is to provide decision-makers with an early indication of the preferred investment and to set out the requirements for funding to further develop the business case.

This IBC:

- revisits the strategic context and indicative assessment profile for the proposed investment
- re-examines the evidence base for the key problem or rationale for investing
- demonstrates how the potential benefits of investing may be measured with a range of KPIs
- demonstrates a collaborative approach to option development and selection
- considers a range of activities and presents an optimal programme to achieve the outcomes
- outlines the indicative commercial strategies to deliver the project
- demonstrates the affordability of the programme and potential funding strategies
- outlines indicative management strategies that can be applied for the implementation and evaluation of the project.

2 Strategic Case (Activity)

2.1 Current Public and Passenger Provisions

For the purpose of this business case, Public and Passenger Transport are often considered together and collectively described as P&PT. While public transport currently refers only to buses, there are different types of passenger transport services and they are described in the sections below.

2.1.1 Public Transport / Bus Service

Public transport is defined by services that are available to the public, run to a schedule, charge set fares and run on fixed routes as set out in the Otago Regional Public Transport Plan 2014 (RPTP).

Queenstown is served by Richies, an Auckland-based transport operator.

Key user groups for the bus network include:

- daily commuters who work in the town centre
- residents visiting the town centre
- Queenstown Resort College and international language school students
- school students
- regional and international tourists.

Richies has services in the Queenstown, Wanaka and Arrowtown areas and services all major hotels as well as the airport. Within Queenstown itself, Richies services local areas including Frankton, Arrowtown, central Queenstown, Sunshine Bay, Arthurs Point, Kelvin Heights, Lake Hayes Estate, Quail Rise and Fernhill. There is also a regular service between Wanaka and Queenstown.

The central Queenstown pick-up and drop-off point is Camp Street, although this is not a formal ‘hub’ for public transport services with limited real-time information, shelter and seating. The location, to the side of the busy O’Connells Shopping Centre, can lead to pedestrian congestion on the footpaths.

The current town centre stops include:

- 2 bus stops along Shotover Street
- 2 bus bays along Camp Street.
- 2 stops on Athol Street.

A number of bus routes operate between Queenstown Town Centre (QTC) and the neighboring towns, as well as to Queenstown airport, providing a comprehensive network coverage of the area. This is supported by two Public Transport hubs at Queenstown and Frankton, which allows users to interchange between services.

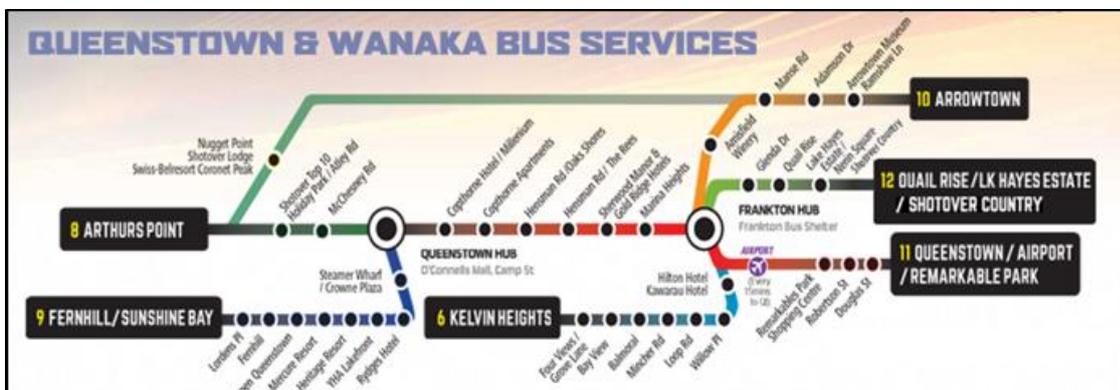


Figure 4: August 2017 Bus Route Network. Queenstown (Source: www.connectabus.com)

Not all bus services run full-day schedules, with some of the buses on some routes arriving far and few between. With the exception of the service on the Airport route, which runs every 15 minutes, most other routes run at frequencies of between 30 and 60 minutes.

Bus fares start at \$4.50 per adult and \$3.50 per child when paying by cash. However, it can cost as much as \$15.00 to travel from Arrowtown to Queenstown. GoCard holders (i.e. pensioners) receive a 10% discount on fares. There are also other discount cards and passes available for purchase.

Traffic along Frankton Road tends to be heavy during peak periods which inevitably results in slower traffic along this stretch of road, and delays to buses. As this is the most-direct road connection between Queenstown and Frankton, traffic delays can pose a big problem for passengers heading to catch their flight at the Queenstown Airport. Extended commuting times can also result in missed connection timings to other bus services at the two Public Transport hubs, which further discourages the use of Public Transport.

Otago Regional Council has recently consulted on a number of proposed improvements to the bus network, including simplified routes, enhanced service frequencies and longer hours of operation. The proposed network, and the proposed routes and frequencies, are shown below.



Route	Description	Desirable hours of operation between	Frequency	Contract Unit
1	Sunshine Bay (peak only) Fernhill to Queenstown-Frankton Flats-Airport-Remarkables Park-Airport	6.00am to 12 midnight	15 minutes 30 minutes (evening off-peak)	6
2	Arrowtown-Frankton Flats-Queenstown Town Centre-Arthurs Point	6.00am to 10.00pm	30 minutes (peak) 60 minutes (off-peak)	7
3	Five Mile-Frankton Flats-Airport-Remarkables Park-Kelvin Heights	6.00am to 10.00pm	60 minutes	7
4	Lake Hayes to Jacks Point	6.00am to 10.00pm	30 minutes (peak) 60 minutes (off-peak)	6

Services will operate at the same frequency every day of the year except Christmas Day

Figure 5: Future Bus route network for the Wakatipu Basin

In the future, there will be just two cross-town routes through QTC. Route 1 will operate every 15 minutes, and route 2 will operate every 30 minutes.

2.2 Passenger Transport in Queenstown

There are various forms of passenger transport offered in Queenstown including:

Water taxis	<p>Passenger service between Queenstown (Lake Esplanade), Hilton Kawarau and several jetties in the Frankton Arm (refer to Appendix 6 for current timetable and route map).</p> <p>Queenstown Water Taxis operate three boats with a combined capacity for 86-90 customers. At the busiest time of the year (New Year’s Eve), 1,200 customers were transferred to and from the town centre.</p>
School buses	GoBus operates all the school buses in the Wakatipu Basin (note that future operations are subject to pending contract arrangements).
Taxis	Three taxi companies service Queenstown. Recent law changes have also opened this market to new ventures such as TakeMe and Uber.
Mini-vans / shuttles	Provide passenger transport services for the airport and visitor destinations.
Tour buses / coaches	<p>Connexions provides a daily coach service throughout the South Island.</p> <p>There are also several tour companies that are primarily accommodated at the Athol Street long distant bus stop, including Intercity, Naked Bus, Scenic Pacific, and Atomic Shuttles.</p> <p>Hop on / hop off buses such as Stray Bus and Kiwi Experience also use the street with a scheduled timetable as well as charter services.</p>
Rental cars	Available at the airport and within Queenstown.
Queenstown Airport	Domestic flights provided to all major centres and regions with flight schedules recently extended into the evening to accommodate demand.

2.2.1 Taxis

Taxi ranks are currently classified into two types, namely, for the full day’s use and for late night use only. The latter parking slots are used in the day for other purposes such as loading/unloading zones and passenger transport stops. The locations of the existing taxi ranks are shown and described below.

Full-day Taxi Ranks

- 2 taxi bays along Shotover Street
- 3 taxi bays along Camp Street
- 2 taxi bays along Ballarat Street.

Late-night Taxi Ranks

- 13 taxi bays along Shotover Street
- 2 taxi bays along Camp Street
- 2 taxi bays along Ballarat Street.

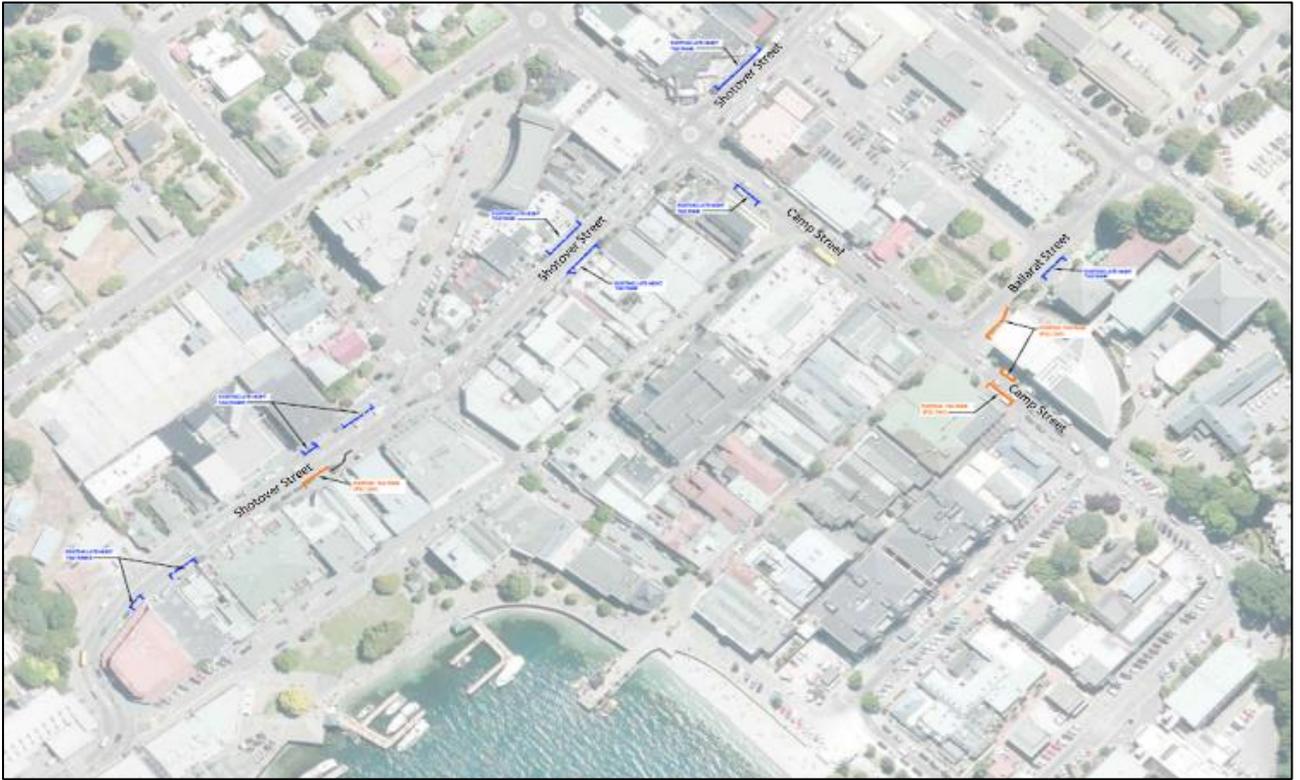


Figure 6: Existing Taxi Ranks

2.2.2 Loading Zones and Coach Parks

Existing loading zones are generally used for a combination of purposes (i.e. mixed-used) during the different times of the days. There are also loading zones for unloading and loading of goods only and separately, they are also to facilitate the pick-up/drop-off of passengers for all types of buses and coaches. The location of these loading zones are shown below.



Figure 7: Existing Loading Zones (Passenger and Goods Service)

Existing Loading Stops / Passenger Transport Stops / Late Night Taxi Stands

- 7 zones on Shotover Street
- 1 zones on Ballarat Street

Existing Loading Stops / Passenger Transport Stops

- 1 zone on Camp Street.

Existing Loading Stops (Goods only)

- 1 zone on Shotover Street
- 3 zones on Camp Street.

Existing Passenger Transport Stops

- 1 zone on Ballarat Street
- 1 zone on Camp Street
- 4 zones on Duke Street.

Existing Coach Parks

- 2 P120 and 2 Overnight Coach Parking spaces along Camp Street
- 4 P120 (Daytime) and four Overnight Coach Parking spaces along Robins Road
- 20 Overnight Coach Parking spaces at Boundary Road Car Park
- 5 Full-day and two Overnight Coach Parking spaces at Brecon Street Car Park
- 6 Overnight Coach Parks at the Gondola Terminal
- 1 Overnight Coach Parking outside Kiwi Birdlife Park.

2.3 Existing Public Transport Network

2.3.1 General

Public transport services in Queenstown are designed to minimise operational costs whilst optimising fare revenue. In practice, this means the network has a lot of variations in routes throughout the day, an inconsistent timetable and fares that are considered expensive in comparison to other public transport networks.

Feedback received from the community confirms that network legibility and fare reduction is key to growing patronage and encouraging a mode shift from car to public transport. The existing bus service operates without subsidy (such as through rates or taxes), which means that fares are generally higher than in other locations.

2.3.2 Mode Share

In 2010, a 32-month trial implemented by ORC invested \$3.2 million into the Wakatipu basin’s public transport services, primarily adding in feeder services. The outcome was a 20% increase in passenger trips per annum. However, the overall impact on mode share was negligible as patronage growth didn’t keep pace with growth in population and private vehicle trips.

This suggests that this level of investment is not enough to grow public transport mode share in the current environment. Patronage growth is not matching the increase in population and general traffic. Patronage has returned to pre-trial numbers, possibly due to fare increases and the availability of low-cost parking.

2.3.3 Parking availability and Rental Cars

Free all-day parking is available at numerous locations in Queenstown’s town centre. Paid parking is inexpensive, encouraging residents and visitors to drive into the town centre rather than seek alternative options.

High levels of visitor car rental vehicles are booked prior to arrival in Queenstown, therefore the promotion of local public transport service options is limited. Market research survey backs this up with 57% of visitors responding that they decided how they would travel in Queenstown at the point of planning their trip, well before arrival.

2.3.4 Proposed Short-Term Infrastructure Initiatives

Several further initiatives are planned for the near future, as shown below.

Table 4: Proposed short-term infrastructure initiatives

Description	Location	Timing
<p>O’Connells Interchange – inbound and outbound. Additional two bus stops. Road markings, pole with timetable to be installed.</p>	<p>Camp Street</p> 	<p>By late 2017</p>

Bus priority measures / bus lanes (NZTA)	SH6A Frankton Rd (southern side of road) – Suburb Street to Stanley Street. Stanley Street (southern side of road) – Coronation Drive to Ballarat Street. (Refer to Appendix 4 for draft plan).	Funding to be confirmed
Esplanade bus stop priority marking.	Steamer Wharf / Crowne Plaza	Before Oct 2017

Other initiatives being considered to increase public bus use are shown here.

Table 5: Other short-term initiatives being considered to increase public bus use

Otago Regional Council	NZTA	QLDC
Replacement of current ticketing system	Bus priority measures to provide for faster and more reliable bus services	
Introduction of improved real-time information		Revised parking prices, parking time limits and zones
Improved promotion and marketing of bus services		Intelligent parking enforcements

While these measures are intended to improve public transport in the short-term, longer-term projects are to be identified as part of this IBC.

2.3.5 Expansion of Camp Street bus station

The existing Camp Street stop is set to be expanded as an interim arrangement ahead of selecting and developing a new public transport facility.

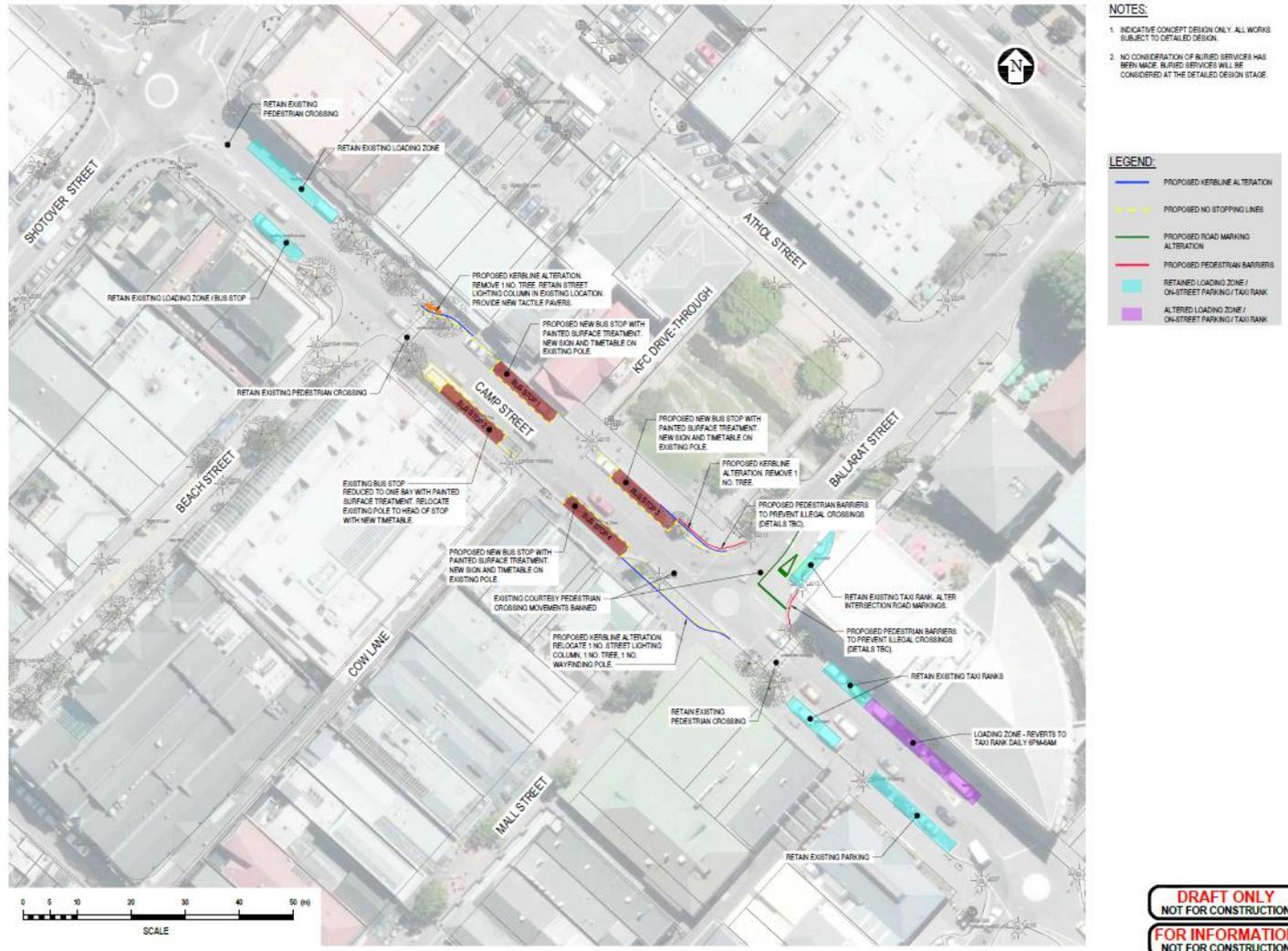


Figure 8: Proposed bus changes at Camp Street

2.3.6 Park and Ride Scheme

QLDC undertook a Park and Ride Survey in 2016, to which there were 428 respondents from across the district. The primary aim of the survey was to determine the demand for a park and ride facility.

Key points taken from the feedback are as follows:

1. Potential locations need to be assessed to maximise use and to provide links to other services.
2. Park and ride will not suit everyone; a wide range of operating hours and high frequency of shuttles would be needed to accommodate the mix of employment/enjoyment hours.
3. The bus fare needs to be lower. Public transport is currently seen as expensive and parking, although limited in Queenstown, is still cheap or free.

Due to land and consenting issues, a park and ride scheme has not yet been implemented but will be pursued primarily through the QITPBC with linkage to this PBC.

2.4 Otago Regional Council Public Transport Business Cases

Otago Regional Council (ORC) is addressing the wider Wakatipu Basin public transport network through its current business cases:

- Wakatipu Basin Public Transport Network Programme Business Case (2016)
- Wakatipu Basin Public Transport Detailed Business Case (2017)

This business case outlines the case for investing in improvements to the public transport choices of the Wakatipu Basin's community and visitors.

The 2016 Programme Business Case identified the following high-level investment objectives:

- Increased appeal to businesses and visitors.
- Increased customer satisfaction.
- Reducing the proportion of trips by car.
- Travel time reliability.
- Value for money.

The Detailed Business Case focuses on public transport service provision (routes, frequencies and fares) and includes patronage estimates. Supporting infrastructure, such as bus priority measures and improved interchange facilities, are to be progressed through separate business cases as recommended through the PBC.

3 Problems, Benefits and Constraints

3.1 Town Centre Masterplan

Queenstown town centre strategic documents, including the *Town Centre Strategy* (2009), *Transport Strategy* (2016) and the *Inner Links* project (2014), have generally been developed as stand-alone documents and have not fully considered land-use, development and wider strategic goals.

This has led to Queenstown potentially missing out on investment opportunities. Public investors including New Zealand Transport Agency (NZTA), Otago Regional Council (ORC), Ministry of Business, Innovation and Employment (MBIE) and Queenstown Lakes District Council (QLDC) are not confident that these discrete solutions are the best fit.

Consequently, the strategies have not been implemented. This has led to the community becoming increasingly frustrated as problems, such as traffic congestion and finding parking spaces in the town centre, become a common theme in resident and visitor surveys.

QLDC is now in the process of developing a masterplan for the town centre. As part of the town centre masterplan process, an Investment Logic Map (ILM) workshop was conducted on 27 March 2017 with elected members, investor partners, iwi, town centre stakeholders and the Town Centre Advisory Group. The purpose of the workshop was to commence setting the town centre vision by understanding the key problems and, if these problems were addressed, what benefits would be derived.

A key issue identified through the workshop was accessibility to the town centre and the acknowledgement that, until this is addressed, it will not be possible to deliver on the town centre vision '**Supporting a thriving heart to Queenstown, now and into the future**'.

Accordingly, the town centre masterplan ILM developed from the workshop (see below) has set the high-level benefits that the following town centre business cases will be measured against:

- Town centre arterials.
- Town centre parking.
- Public and passenger transport facilities.

For example, **P&PT solutions must deliver on the masterplan benefits as well as the project outcomes.**

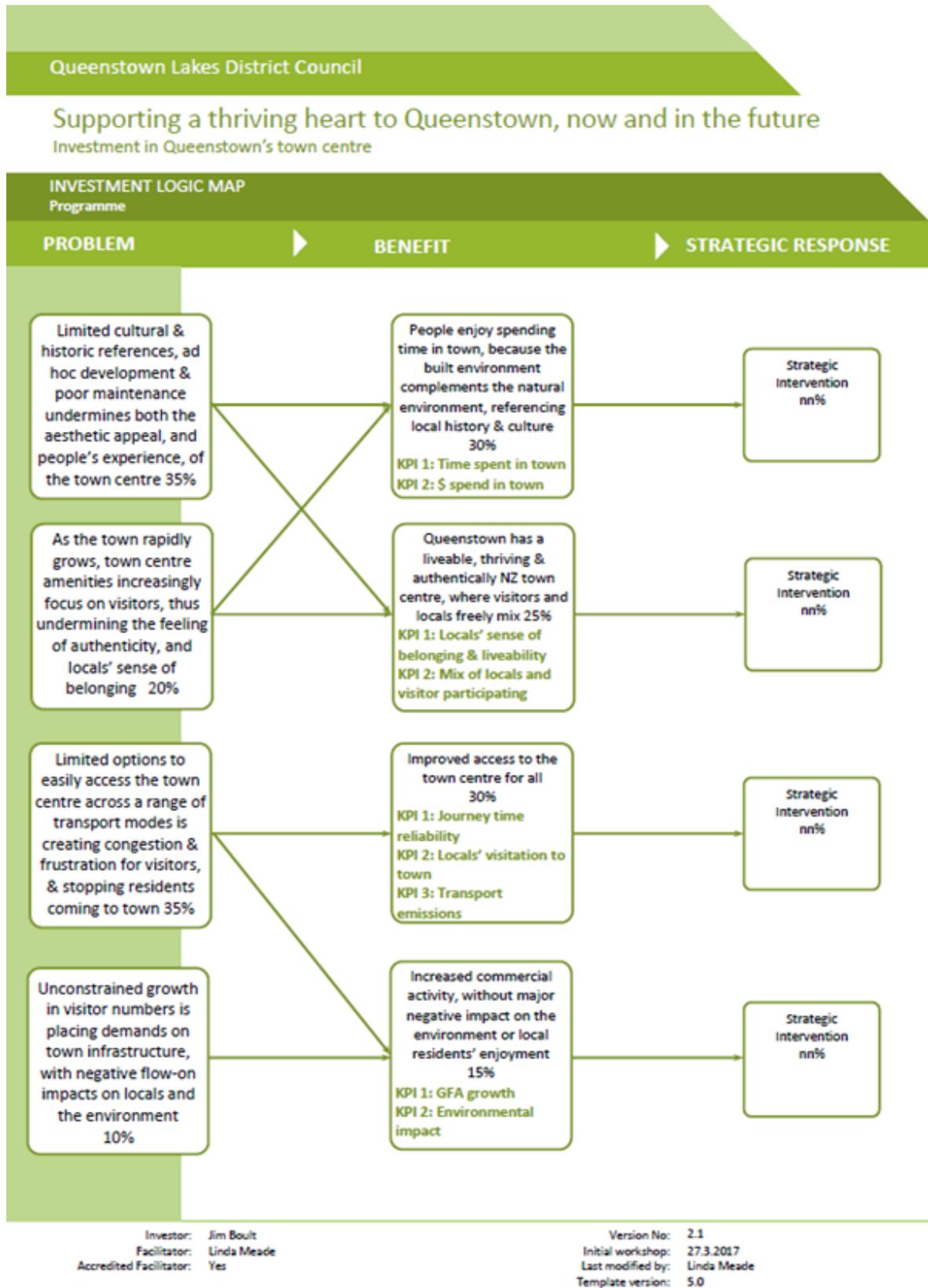


Figure 9: Town Centre Masterplan ILM

3.2 The Problems – Public and Passenger Transport

Problem Statement (from ILM):

‘Public Transport’s inability to compete with the car is contributing to traffic congestion in the Wakatipu Basin’

Rapid growth in both resident and visitor populations and the consequent demand on the roading network has exacerbated the problem. However, addressing the roading network or providing more parking spaces alone will not deliver the goals of Queenstown’s town centre. Improvements in the provision of passenger and public transport and encouraging the use of alternative mode choices such as walking and cycling are needed to reduce traffic entering the town centre.

Why do people not use public transport?

- Public transport is not reliable.
- The extent and frequency of the passenger and public transport services is not enough.
- The cost of passenger and public transport is considered high.
- Lack of clarity and information on services available.

These issues result in fewer people wanting to use the services with consequent continued and increasing congestion problems in the town centre.

These problems need to be addressed in an integrated manner to encourage a mode shift from the use of cars as the primary form of transport.

QLDC will look to secure information related to this as part of the agreement with ORC for the provision of these services. Periodically, QLDC will reconfirm through public satisfaction surveys alignment to the objectives.

Specific issues were identified during a P&PT stakeholder workshop in March 2017 and are summarised in the ILM and tables below. This workshop included representatives from:

- QLDC
- NZTA
- ORC
- Richies and Connectabus
- Queenstown Taxis & Taxi Federation
- Real Journeys
- Shotover Jet
- DowntownQT
- The Project and Design Teams.

Table 6: Project issues statements

Item	Issues	Discussion
Traffic Volumes / Congestion		

Item	Issues	Discussion
1.	Frankton Road (SH6A) will be at capacity in a very short time. This will further reduce the reliability of PT along this corridor.	Encourage alternative mode choice, including bus priority initiatives, to reduce volume of traffic.
2.	Inefficient movement/flow of buses through town	Buses and passenger transport are continually caught up in the congestion as they approach the town centre with little priority or alternative route options. Leads to service inefficiencies and little incentive to use PT. Integration with arterials, parking and masterplan business cases.
3.	Pollution	Increased pollution a result of congestion – health issues as well as making the town centre less attractive for residents and visitors.
4.	Free Independent Travellers (FIT) / rental cars	Marketing the improvements in public transport to encourage rental car use on the periods only when required rather than for the whole period of visitors stay and for journeys beyond Queenstown.
5.	Parking – too cheap. Lack of information about availability.	Cheap and free parking does not achieve a shift away from the use of private cars.
6.	Campervans in the town centre	Add to congestion – initiatives in place to remove all campervan parking from the town centre.



Shotover Street mix of traffic with high number of passenger transport vehicles

Planning

7.	Land Use Planning	Public transport does not adequately service the areas and there is low density land-use pattern predominately outside the town centre and Frankton corridor. Consider in all business case development, such as PC50 and Gorge Road Corridor, how these areas can best be
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Item	Issues	Discussion
		served to reduce dependency on cars for accessing town centre.
8.	More density makes the public transport system more viable.	District Plan review (transport chapter) will need to emphasise the financial link between high-frequency, cost-effective public transport services and a high concentration of people living or visiting within a 10-minute walk to access these services.
9.	Getting vehicles in and out of the town centre during events. The number of events is increasing.	Encourage use of public transport through improved services and event specific transport plans (similar to Eden Park event transport plans).
10.	Our understanding of the network operating frameworks.	The management of the network to prioritise public transport and regulate traffic at key times of the day will need to be developed when there are more traffic signals that will allow network manipulation.
Alternative Transport Links		
11.	How do we link the following? <ul style="list-style-type: none"> Local and intercity bus services. All forms of public and passenger transport. 	<p>Spatial integration of key public and passenger transport options to encourage alternative mode preference.</p> <p>Spatial framework within the masterplan will need to consider linkages, geographical constraints and length of walking time between modes</p>
12.	Taxis – not included as mainstream passenger transport providers.	<p>Need to incorporate taxi requirements in terms of parking, loading zones, etc.</p> <p>There were 395,000 pax trips in 2016 (average occupancy 2 pax) with up to 42 taxis on the road at any one time.</p>
13.	Water taxis and ferries.	Consideration of the infrastructure both in the town centre and the Frankton Arm needed to support an increase in water taxi services initially.
PT Services and Facilities		
14.	Pedestrians fighting their way through waiting bus customers. Use of footpaths restricted for pedestrians where queues of passengers are waiting. No seating or passenger/driver toilet facilities.	Fit for purpose public (and passenger) transport hub designed for the customer needs and future proofed for innovations and disruption technologies (i.e. electric buses, Uber, driverless vehicles).
15.	Intercity buses – Athol Street too small, can be blocked, can be used by any bus.	Alternative inter-city / regional bus hub locations to be considered in the economic case option analysis.
16.	Limited bus loading spaces in town centre (e.g. Camp Street) – public buses and tourism operators.	<p>The town centre arterials project gives the opportunity to detune Shotover Street and potentially allow additional bus stop / loading spaces for passenger transport operators.</p> <p>For example, need to consider ski buses - nominal 20-30 buses per day, 125-150,000 pax per year, with limited room for additional car parking on the mountain.</p>

Item	Issues	Discussion
17.	Town centre public transport facility isn't pleasant – it's poor quality. In the winter, it's dark and open to the elements.	Central hub would improve overall service



Camp Street bus stop with customers blocking the footpath and entrance to Shopping Centre.

Misuse of Facilities		
18	Enforce the use of bus stops and loading bays to ensure they are being used correctly.	Additional enforcement resource will need to be considered with changes to the parking regime. Consideration of changing the loading zone to account for passenger transport pick-ups / drop-offs should also be considered due to Queenstown tourism context.

The following *Town Centre Public and Passenger Transport Facilities ILM* reflects the issues above and the conversations from a stakeholder workshop held on 28 March 2017.

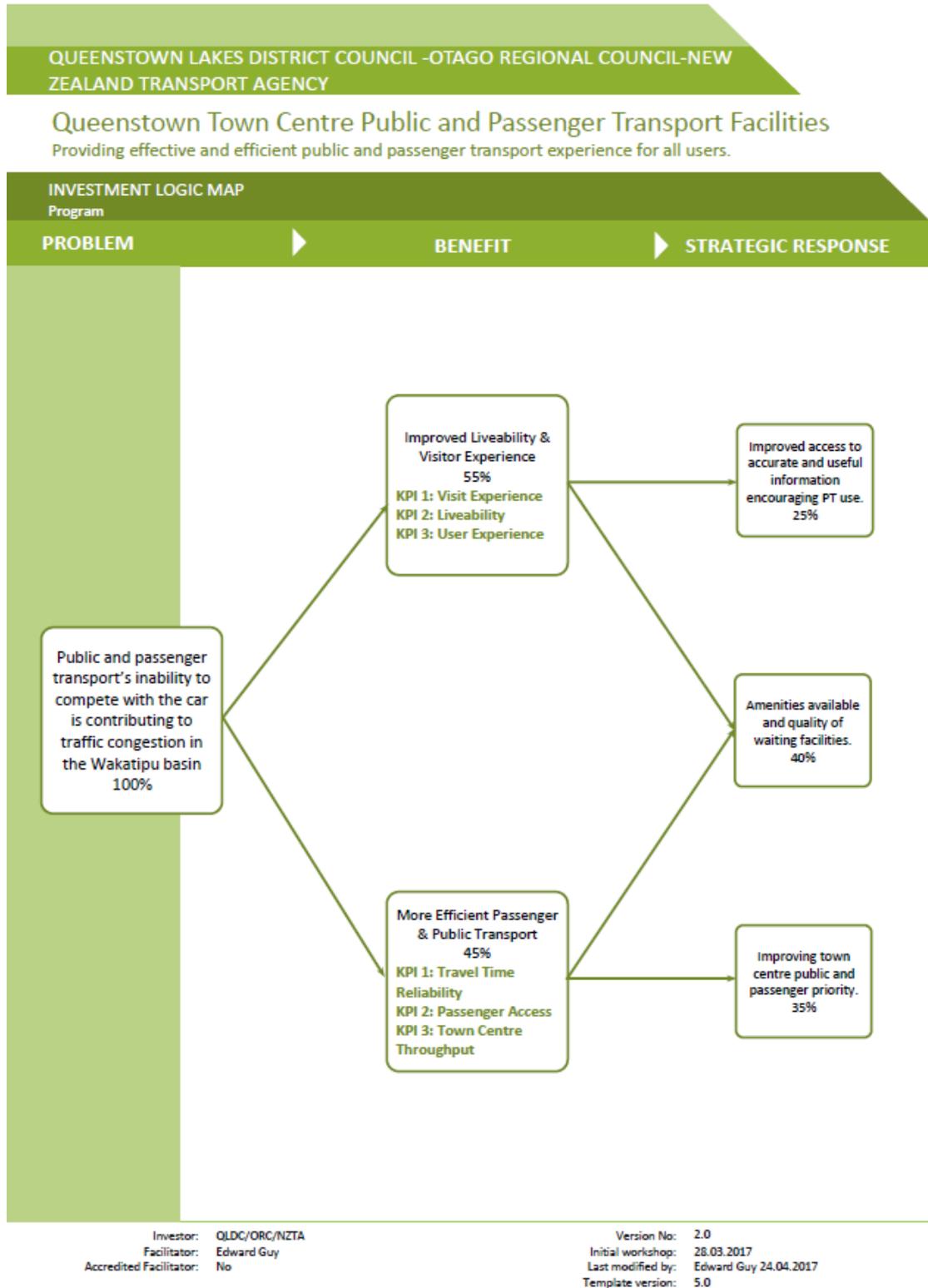


Figure 10: Town Centre Public and Passenger Transport Facilities ILM

3.3 Public and Passenger Transport Facilities Benefits

The potential benefits of successfully investing in passenger and public transport facilities were identified through the Investment Logic Mapping exercise as identified in the ILM above. (Refer to the Benefits Map – Appendix 1).

Key Performance Indicators (KPIs) are used as a method of measuring achievement of the benefits of investment. Each benefit should be supported by KPIs that demonstrate the investment's specific contribution to the identified benefit.

It is important that the potential benefits of successfully investing can be assessed and measured to demonstrate how an investment has contributed to the benefits identified in the strategic case. They should be meaningful, measurable and attributable to the investment. Targets should be developed for each KPI.

Targets and measures will be developed as the PBC progresses.

Achievement of these success factors will enable the following outcomes:

- Substantial patronage increases.
- Short-term impact on mode share.

Realisation of these outcomes will also see a significant reduction in the number of private vehicles in and around the town centre.

For each of the benefit statements, a snapshot is outlined below of what the current state is relative to the area of benefit, and what the business gap is between the existing arrangements and the desired future state.

Table 7: A snapshot of problems, benefits and the gaps between business needs and existing arrangements

Benefit Statement	Problem Statements Addressed	Existing Arrangements	Business Needs
<p>Improved liveability and visitor experience</p>	<p><u>P&PT</u> Public transport’s inability to compete with the car is contributing to traffic congestion in the Wakatipu Basin.</p> <p><u>Town Centre Masterplan</u> As the town rapidly grows, town centre amenities increasingly focus on visitors, thus undermining the feeling of authenticity and locals’ sense of belonging.</p>	<p>Destination Queenstown and QLDC measure visitor experience and resident satisfaction respectively through annual surveys. Although overall visitor experience continues to score very high in Queenstown (9/10 in the 2016 Designation Queenstown survey), the lowest score across all the categories was traffic and parking 6.6/10.</p> <p>Resident satisfaction surveys between 2013-2016 consistently raise parking, roading, transport and traffic congestion as the main areas that QLDC should look to improve.</p>	<p>Strategic Response:</p> <ul style="list-style-type: none"> • <i>Improve access to accurate and useful information encouraging PT use.</i> • <i>Amenities available and quality of waiting facilities.</i> <p>An integrated approach to the town centre masterplanning, parking, P&PT and arterials will enable these key issues of parking, roading, transport and traffic congestion to be addressed together, ensuring the most effective solution to improve liveability and the Queenstown experience.</p> <p>Each of these issues has been considered in the past, but using separate approaches, which has limited the ability to demonstrate the benefits of each and consequently secure funding.</p>
<p>More efficient passenger and public transport</p>	<p><u>P&PT</u> Public transport’s inability to compete with the car is contributing to traffic congestion in the Wakatipu Basin</p> <p><u>Town Centre Masterplan</u> Limited options to easily access the town centre across a range of transport modes is</p>	<p>Traffic growth on the main arterial State Highway 6A to and through the town centre is growing at a rate of 10% per annum, with traffic congestion now occurring daily on Stanley Street and Shotover Street during the morning and evening peaks.</p>	<p>Strategic Response:</p> <ul style="list-style-type: none"> • <i>Amenities available and quality of waiting facilities.</i> • <i>Improving town centre public and passenger priority.</i>

Benefit Statement	Problem Statements Addressed	Existing Arrangements	Business Needs
	<p>creating congestion and frustration for visitors and stopping residents coming to town.</p>	<p>Congestion along the main thoroughfares is often the cause of buses not being on time.</p> <p>There is currently no priority or dedicated space given to alternative modes (i.e. public transport, walking and cycling) within the arterials or town centre streets. This has resulted in poor P&PT reliability as all vehicles are caught in the same traffic.</p> <p>Public transport is currently seen as expensive, unreliable and not frequent enough to encourage higher patronage levels.</p>	<p>The need to address traffic and public transport in Queenstown has been cited in transport strategies dating back to 2007.</p> <p>The two consistent themes within Queenstown strategies is provision for and encouragement of the use of alternative modes to and through the town centre and that the 'place function' of inner CBD streets is becoming more important than the movement function.</p> <p>Improved priority for buses would increase reliability as congestion on priority routes reduces. This could include bus priority lanes and a centralised bus 'hub'.</p> <p>Providing a dedicated transport hub would centralise stops, provide safe, secure waiting areas, improve ticketing facilities, wayfinding, driver facilities and enable greater capacity – which will enable an increase use of public transport through a dedicated facility.</p>

3.4 Potential Constraints and Risks

3.4.1 Constraints

Potential key economic, social, environmental, transport, stakeholder and other issues and constraints that could affect the scope of the project outcomes and outputs, should be considered as part of the PBC.

For Queenstown, the following constraints could potentially affect the Queenstown Public and Passenger Transport Facilities PBC.

Table 8: Constraints for P&PT

Constraint	Discussion in relation to P&PT
Approval to proceed with other related business cases	Current approach is an integration of business cases under the umbrella of the masterplan using a place-based spatial framework to give each programme context and help coordinate and evaluate the interventions proposed across arterials, parking, public realm and public and passenger transport facilities. Approval of each individual business case will consequently impact on others.
The outcomes of the QITPBC and the ORC public transport business cases	This Public and Passenger Transport Facilities PBC must be informed by the overarching 'wider' business cases being developed by NZTA and ORC. Programmes of works should not be in conflict.
The impact of land-use changes through the District Plan Review	District Plan currently under review; need to be aware of likely land use changes to enable appropriate service provisions to be developed to encourage the use of P&PT.
The impact of major new development, tourist attractions, accommodation, etc	Will have an impact on the service provisions required.
Changes to school bus funded services that may affect services	Potential effect on demand for public bus services
Cost and consequent funding approval	Investment needed to allow programmes to proceed.

3.4.2 Risk

The risks involved with this business case should be assessed as the PBC develops with actions identified to minimise those risks. Key risks specific to the public and passenger transport facilities project include:

P&PT Risk	Discussion
The uptake of public transport is slower than predicted	The benefits associated with both the P&PT business case and the masterplan will not be realised if people do not use buses in place of cars. Congestion will continue to increase and town centre accessibility will not be improved.
Adverse reaction from the community	Due to, for example, increased noise and vibration associated with increased bus frequency near their property.

Risk for the P&PT project(s) must be assessed alongside those for the masterplan to ensure an integrated approach. Such risks are centred around:

Masterplan Risk	Discussion in relation to P&PT
Not meeting programme or failure to agree on LTP, RLTP, NLTP	Lack of decision making, falling behind programme etc. may impact on funding and investment.
Fail to meet public/political expectations	Issues such as not fixing immediate problems, not considering public opinion, scope creep, level of aspiration, willingness to pay, empire building etc. will impact on decision making, overall delivery programme, Council's reputation etc.
Programme unaffordable, deemed unaffordable / not value for money	Lack of investment and funding, negative impact on Council reputation, programme does not happen.
Budget over-run	Project(s) not completed, Council reputation (elected members and staff).
Masterplan can't adapt to external influences	This includes such things as private development that conflicts with Council proposals.
Failures to align all programmes of work	This needs to include short and long term interventions around public transport interventions.

4 Alignment to Existing Strategies / Organisational Goals

4.1 Current Related Strategies and Studies

There are numerous related business cases, strategies and projects being developed concurrently with the Public and Passenger Transport Facilities PBC including the following:

- Queenstown Town Centre Masterplan (QLDC)
- Dependencies
 - Queenstown Integrated Transport Programme Business Case (NZTA).
 - Wakatipu Public Transport Network Programme Business Case (ORC).
 - Wakatipu Public Transport Detailed Business Case (ORC).
- Urban Design and Development
 - Spatial Framework/Urban Realm Framework.
 - Lakeview Development.
 - Project Connect - Queenstown Office – Indicative Business Case.
- Transport Projects
 - Queenstown Town Centre Arterials Business Case.
 - Town Centre Parking Indicative Business Case.

The integration of these business cases will enable the likely impact on the P&PT provisions to be determined through consideration of:

- Higher strategic use for QLDC's town centre land holdings such as external seating areas for cafes / public realm elements being developed through the masterplan.
- Potential reduction / changes in parking provision with the development of projects such as Town Centre Arterials, pedestrianisation and shared spaces.
- Potential reduction in parking requirements because of pedestrianisation and cycleway proposals to encourage active mode choices.
- Potential increased patronage due to reduction / changes in parking provisions.

4.2 Alignment to Existing Strategies / Organisational Goals

Many strategies and studies have been developed for public transport since 2007, generally with the same theme and similar recommendations/proposals. However, the implementation of recommendations has had limited success. This is partly due to the inability to demonstrate the benefits of these 'stand-alone' projects and hence secure funding. Integration with other transport related business cases is intended to better demonstrate the need for investment and the potential benefits.

4.2.1 Queenstown Integrated Transport PBC (2017)

The NZTA is developing a Programme Business Case that aims to deliver an integrated package of transport projects (QITPBC).

The QITPBC has identified the following key problems:

1. The significant growth in visitors, residents and vehicles, leads to reduced trip reliability and worsening customer experience across the network.
2. Car dominance and associated congestion is affecting the liveability and attractiveness of the area.

There is significant alignment between the Town Centre Masterplan Business Case and the QITPBC.

The programme of activities selected for the QITPBC share a common focus on balanced public transport and active modes in addition to recognising the significant role that effective transport to the town centre has on visitor and resident experiences. The outcomes targeted by the preferred programme provide guidance to and support of the ambitions around access for the masterplan programme.

These outcomes include:

- 30% alternative mode share (by 2045 up from 15%)
- 329 public transport patrons per hour by 2045 (Frankton to Queenstown)
- 225 fewer vehicles per hour by 2045 (Frankton to Queenstown – based on predicated growth)
- 16-minute reduction in travel time by 2045 (between Frankton and Queenstown)
- 3-minute travel time variability by 2045 (difference between 15 and 85 percentiles in the AM peak period travel time).

The QITPBC also draws on common market research that demonstrates the impact poor public transport offerings, congestion and car domination are having on visitor and resident experiences. This includes the visitor and resident surveys completed by QLDC, Downtown QT and ThinkPlace.

The table below also demonstrates the alignment between the investment objectives of the masterplan and the QITPBC.

Table 9: Alignment of objectives/benefits between the programme business cases

Town Centre Masterplan PBC Investment Objective/ Benefits	Queenstown Integrated Transport PBC Investment Objective
<ul style="list-style-type: none"> • People enjoy spending time in town, because the built environment complements the natural environment, referencing local history and culture. • Queenstown has a liveable, thriving and authentically NZ town centre, where visitors and locals freely mix. • Improved access to the town centre for all. • Increased commercial activity, without major negative impact on the environment or residents' enjoyment. 	<ul style="list-style-type: none"> • To improve network performance for private vehicles, public transport and cycling. • Improved liveability and visitor experience.

The masterplan project also aligns with current thinking around when transport solutions need to be put in place to support the needs of the town centre and the district. The draft implementation schedule for the QITPBC is shown below.

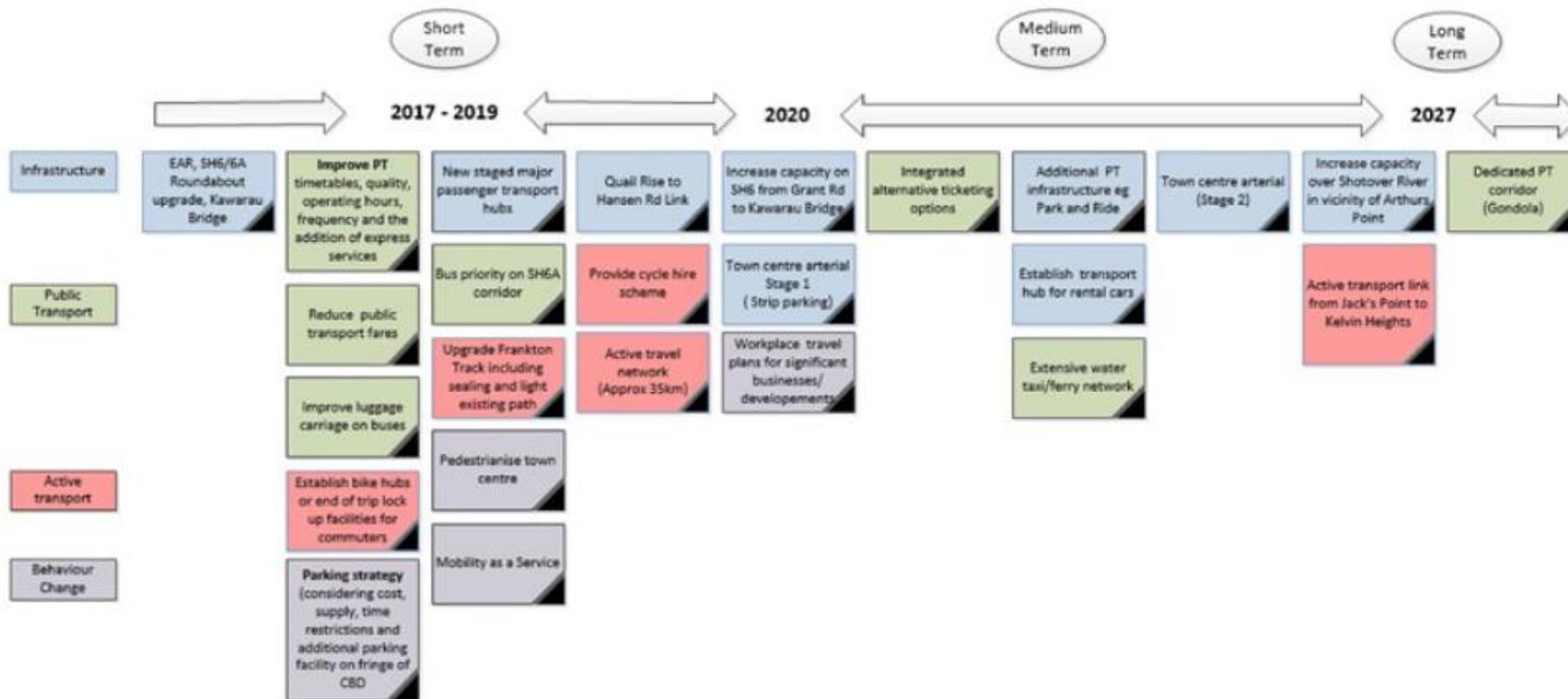


Figure 11: Draft Queenstown Integrated Transport Implementation Programme (Source: NZTA)

4.2.2 Alignment to other strategies and goals

The table below demonstrates the link between several regional and organisational strategies in the Wakatipu Basin / Queenstown area and this PBC. Implementation of these various strategies (both those developed through QLDC and other entities) needs to be well-planned to ensure consistent timing and integration with other transport projects.

Table 10: Alignment to existing strategies and goals

Strategy	Description	Alignment with the Passenger and Public Transport PBC and Contribution to the Benefits
REGIONAL		
Wakatipu Transportation Strategy (2007)	<p>QLDC, NZTA and ORC developed the Wakatipu Strategy to deliver a “fully integrated transport system that meets the growth in travel demand in the Wakatipu Basin”. Overall strategy for passenger transport:</p> <ul style="list-style-type: none"> • Wide network coverage within Wakatipu. • High frequency bus service (every 4 minutes) combined with ferry, and park and ride. 	<p>This PBC, through the development of programme options, will address service frequency and coverage of public bus services as well as the extent of other passenger services such as ferry, taxis, shuttles, etc. Park and ride facilities have already been implemented with little success but this will be further investigated.</p> <p>integration with other transport related business cases, primarily QITPBC and the QLDC parking, arterials and masterplan business plans will ensure a “fully integrated transport system that meets the growth in travel demand in the Wakatipu Basin”</p>
Otago-Southland Regional Land Transport Plan 2015-2021	<p>Provision for Public Transport Services and Infrastructure and the forecast implementation programme.</p> <p>Objective 4.6 - <i>Public transport use and infrastructure in Dunedin and the Wakatipu Basin grows steadily - providing a fully accessible public transport service, easing congestion where needed, reducing car dependency in urban areas, and ensuring resilience</i></p>	<p>The RLTP specifically refers to:</p> <ul style="list-style-type: none"> • Public Transport Improvement Programme Business Case (QLDC). • Public Transport Programme of Improvements (ORC). <p>This PBC will assist in delivery of Objective 4.6 of the Regional LTP and will develop the business case and programme of improvements.</p>
Wakatipu Basin Public Transport Programme Business Case (2016)	<p>This PBC aims to deliver an integrated package of public transport projects.</p> <p>Problem statements for the Wakatipu Basin were identified as:</p> <ol style="list-style-type: none"> 1. <i>Public transport’s current inability to compete with the car is contributing to traffic congestion in the Wakatipu Basin.</i> 2. <i>The absence of a common vision, and how to achieve it, is leading to fragmented service delivery.</i> 3. <i>Our limited understanding of the market and necessary level of service makes it difficult to establish clear priorities for investment.</i> 	<p>ORC is developing a new bus network and fare system that will aim to incentivise people, especially town centre commuters, to utilise public transport. This new network has a planned roll out in the third quarter of 2017 (September-October).</p> <p>Benefits derived for the Wakatipu PBC were:</p> <ol style="list-style-type: none"> 1. Improved liveability & visitor attractiveness 2. More effective investment in transport

Strategy	Description	Alignment with the Passenger and Public Transport PBC and Contribution to the Benefits
	<p>Core activities identified through the PBC include:</p> <ul style="list-style-type: none"> Public transport service improvements – enhanced transfers, increased frequency, different/more routes, improved service quality (ORC). Parking restrictions, prices and enforcement (QLDC). Fare structure and pricing. Marketing. 	<p>These are very much aligned with this P&PT Facilities PBC.</p>
<p>Wakatipu Basin Public Transport – Detailed Business Case (May 2017)</p>	<p>This business case outlines the case for investing in improvements to the public transport choices of the Wakatipu Basin’s community and visitors.</p> <p>This DBC focuses on public transport service provision (routes, frequencies and fares) and includes patronage estimates. The supporting infrastructure such as bus priority measures and improved interchange facilities will be progressed through separate business cases.</p>	<p>The Wakatipu Basin DBC covers a wider area than this P&PT Facilities PBC, which focusses on the town centre.</p>
<p>DISTRICT</p>		
<p>QLDC Future Links Transport & Parking Strategy (2005)</p>	<p>Key considerations and strategies identified specific to public transport included:</p> <ul style="list-style-type: none"> Development of a public transport network within the Wakatipu Basin to encourage less vehicle use. A public transport link should include the Queenstown CBD, Fernhill, SH6A, the airport and Remarkables Park. Council to focus on land based public transport in the first instance to make these services operate effectively and efficiently. To be successful it will be necessary to provide junctions, intersections, termini, hubs and public transport infrastructure. Changes to town centre parking (charges, extent of facilities etc) to encourage alternative use to the private car. Park and ride facilities. Community awareness, education and participation. 	<p>Some recommendations of the Futurelinks study have been implemented but with little impact on reducing congestion in Queenstown. The car is still seen as the most convenient and cheapest mode for access to the town centre and PT is seen as unreliable, expensive and with too few services.</p> <p>This current approach, integrating all transport related business cases, will address all the considerations identified.</p> <p>Community engagement has commenced, primarily through the Queenstown Town Centre Masterplan PBC.</p>

Strategy	Description	Alignment with the Passenger and Public Transport PBC and Contribution to the Benefits
<p>QLDC Issues and Opportunities Scoping Report</p> <p>Passenger Ferry Service (2008)</p>	<p>Scoping report outlining the potential issues and opportunities of operating a commercial passenger ferry service between Queenstown Steamer Wharf and various locations on Frankton Arm.</p> <p>The report concluded that there are several existing and potential jetty options that could be explored for a waterborne ferry service with only minor improvements required. Further research is required on whether additional consents would be required.</p> <p>A consultation workshop indicated that there was general community support for a ferry service with the congestion experienced on SH6/6A.</p>	<p>The Public and Passenger Transport Facilities PBC will consider the report's conclusions including:</p> <ul style="list-style-type: none"> • Provision of several options on how any future waterborne ferry services will be accommodated. • Understanding the planning and consenting considerations of the development around the ferry hubs.
<p>Queenstown Town Centre Strategy (2009)</p>	<p>Five key issues affecting the town centre were identified including, specific to transport:</p> <p><i>'Easy access to the town centre is essential. However, the amenity of the town centre can be adversely affected by traffic volumes and the town centre is increasingly dominated by vehicle traffic.'</i></p> <p>With rapid growth being experienced over the previous 15 years, this strategy considered the issues facing the town centre and made recommendations on how to address those issues.</p>	<p>The Passenger and Public Transport Facilities PBC will address the strategy's recommendations including:</p> <p>Recommendations with regards to 'Access' and PT in the town centre include:</p> <ul style="list-style-type: none"> • Development of a transport centre for buses, coaches and taxis. • Development of bus priority measures.
<p>Queenstown Town Centre Transport Strategy (2015)</p>	<p>Overriding goal of this strategy: 'Preserve and improve residential and visitor enjoyment of the town centre by reducing congestion and leading a necessary shift away from reliance on private cars'.</p>	<p>Public feedback has been sought on the Strategy and any feedback should be considered in the PBC.</p>
<p>Queenstown Town Centre Transport Strategy – the Next Steps (2016)</p>	<p>With regard to increasing PT patronage, the following statements are made:</p> <p><i>'Improving choice of transport modes is a key element in reducing dependency on cars. This needs to include improved bus services and the possibility of enhanced water-based services, while also recognising the emergence of other high capacity types of transport in the future.'</i></p> <p><i>'The plan needs to address elements of price, convenience, frequency and reliability to encourage public transport use. This will require us to work closely</i></p>	<ul style="list-style-type: none"> • Development of Park Street ferry facility to support an expanded waterborne ferry service. • Camp Street bus stops facility improvements. • Long term town centre bus terminal. • Bus and ferry service review. • Tourist services stops review • Skifields to town centre journey review.

Strategy	Description	Alignment with the Passenger and Public Transport PBC and Contribution to the Benefits
	<p><i>with both NZTA and the Otago Regional Council. The plan will seek to ensure that future public transport options are attractive to residents and visitors'</i></p> <p>Goals to be achieved by June 2017 were as follows:</p> <ul style="list-style-type: none"> • Work with Queenstown Airport Corporation and rental companies to address the movement of visitors between Queenstown airport and accommodation in Queenstown. • Investigate and trial public transport 'park and ride' facilities to reduce the volume of commuter traffic coming into Queenstown. 	
<p>Queenstown Town Centre Masterplan</p>	<p>The proposed Masterplan will identify the collective vision for Queenstown town centre and how QLDC will manage growth pressures to enable that vision to be realised, including transport related pressures.</p>	<p>Through appropriate urban design through the masterplanning exercise, the relationship between transport and the built environment can be optimised. A people-friendly town centre with management and encouragement of non-car based transport can improve/reinforce the liveability and tourism experience.</p>
<p>Queenstown Integrated Transport PBC (2017)</p>	<p>NZTA is developing a programme business case that aims to deliver an integrated package of transport projects (QITPBC).</p> <p>The QITPBC has identified the following key problems:</p> <ol style="list-style-type: none"> 3. The significant growth in visitors, residents and vehicles, leads to increasing trip unreliability and worsening customer experience across the network. 4. Car dominance and associated congestion is affecting the liveability and attractiveness of the area. 	<p>Making public transport an attractive and viable alternative to the private car through improvements to service provision, and the introduction of bus priority, park and ride and a dedicated corridor between Queenstown and Frankton (e.g. a gondola).</p>
<p>Queenstown Town Centre Arterials Detailed Business Case</p>	<p>Previously referred to as Inner Links, this business case considers an alternative through-route to reduce the volume of traffic accessing the town centre to enable the town centre vision being developed through the masterplan to be realised</p>	<p>Strong alignment is required between the arterials and P&PT with potential benefits of creating additional capacity within the roading network to allow for priority bus lanes, facilities and improved connectivity around the town centre.</p>

Strategy	Description	Alignment with the Passenger and Public Transport PBC and Contribution to the Benefits
Queenstown Town Centre Parking Programme Business Case	This PBC addresses the parking facilities in the town centre and how these can be modified to enable the town centre vision being developed through the masterplan to be realised.	
OTHER		
QLDC Long Term Plan	Sets the Council's vision and objectives as well as identifying infrastructure projects and their funding streams. For Infrastructure, QLDC's outcome is: <i>High performing infrastructure and services that:</i> <ul style="list-style-type: none"> • meet current and future user needs and are fit for purpose • are cost effective and efficiently managed on a full life-cycle basis • are affordable for the District. Specific to passenger and public transport, QLDC is planning: <ul style="list-style-type: none"> • Enhanced provision of public transport services in the Wakatipu • Aim to reduce growth in vehicle use by promoting greater use of other transport modes – public transport (buses and ferries), walking and cycling. Council's Infrastructure Strategy recognises that ' <i>Public Transport Solutions are required to minimise delays and congestion</i> '	The principal options identified to address the 'significant issues' related to public transport include the following: <ul style="list-style-type: none"> • In the short-term, regular bus services. • Longer-term 'park and ride' facilities and water-based services (ferries). • Dedicated bus / multi-passenger lanes. • Upgrade intersections and reducing turning movements. • Potential road widening for SH6A. • Secondary route from Frankton to Gorge road (via Tucker Beach) or connection from Kelvin Peninsula. This will contribute to the benefits through easing congestion (with less vehicles entering the town centre) and improving the efficiency of public and passenger transport facilities, working with other transport-related business cases to determine the optimal solution and programme of works.
QLDC Economic Development Strategy (Feb 2015)	One of the supporting priorities identified was for the future proofing of infrastructure, ensuring adequate investment to maintain quality.	This is important for P&PT, improving access to the town centre for all and so enabling economic development.
Queenstown Downtown Commercial Strategy (Downtown QT Association 2015)	This strategy aims to ensure that the downtown area develops strategically in alignment with the region's wider economic, social and tourism strategies. Key comments/statements regarding public/passenger transport include: <ul style="list-style-type: none"> • Predominantly a car-centric community - Private vehicle use has been a traditional expectation. 	There is considerable alignment in both the Commercial Strategy and this business case to better utilising Council's land holdings including streets, open spaces and strategic land (i.e. Lakeview, Stanley Street, Boundary Street) to enable a more efficient and effective public transport services and facilities. There is also an opportunity to allow

Strategy	Description	Alignment with the Passenger and Public Transport PBC and Contribution to the Benefits
	<ul style="list-style-type: none"> • Limited alternative transport options - Region lacks a comprehensive public transport network. • Public transport relatively costly - Little incentive for consumers to change modes. 	<p>for growth of the passenger transport services to be located closer to the point of sale and provide better customer service.</p>
<p>Queenstown Transport Taskforce Report – Shaping our Future (Sep 2016)</p>	<p>Shaping our Future is a community collaboration that attempts to bring together community, council and commerce around issues within Queenstown.</p> <p>The reports recognises that <i>‘...transport solutions cannot be dealt with in isolation. Transport is an integral and interdependent component of overall spatial planning as our community contemplates its vision of the future and the steps necessary to bring the vision to reality’</i></p>	<p>The PBC will address recommendations included in the taskforce report such as:</p> <ul style="list-style-type: none"> • Development of bus priority measures. • Provision of a collective multi-agency approach to encouraging the use of P&PT. • Build high tech educative support that provides real time, useful and relevant information i.e. intelligent transport systems. • Short-term focus on key routes and markets. • Long-term focus on visitor perceptions. • P&PT solutions to be more convenient, affordable, accessible and timely than private vehicles to change user behaviour. • Target people who will be thinking about different transport choices (visitors, seasonal workers) or who have less choices (school children). • Create public transport hubs that are safe, sheltered and attractive

5 The Evidence

5.1 Growth

Problem Statement (from ILM):

‘Public Transport’s inability to compete with the car is contributing to traffic congestion in the Wakatipu Basin’

As population and traffic grows, congestion in the town centre will continue to increase without a shift in mode share such as increased patronage of public and passenger transport. This will continue to reduce accessibility of the town centre along with visitor experience and liveability.

5.1.1 Population

Rationale produced a report in December 2015 entitled ‘QLDC Growth Projections 2015-2055’ to review and develop growth projections for QLDC. The report considered resident population, visitors, dwellings and rating units.

The following graph and table shows the population change occurring in the Queenstown Lakes District and the change in projections from 2004. During the Global Financial Crisis (2007-2012) the projections were downgraded (shown purple). However, since that time, there has been a considerable spike in both visitor numbers and residential growth partly driven from larger than expected immigration numbers.

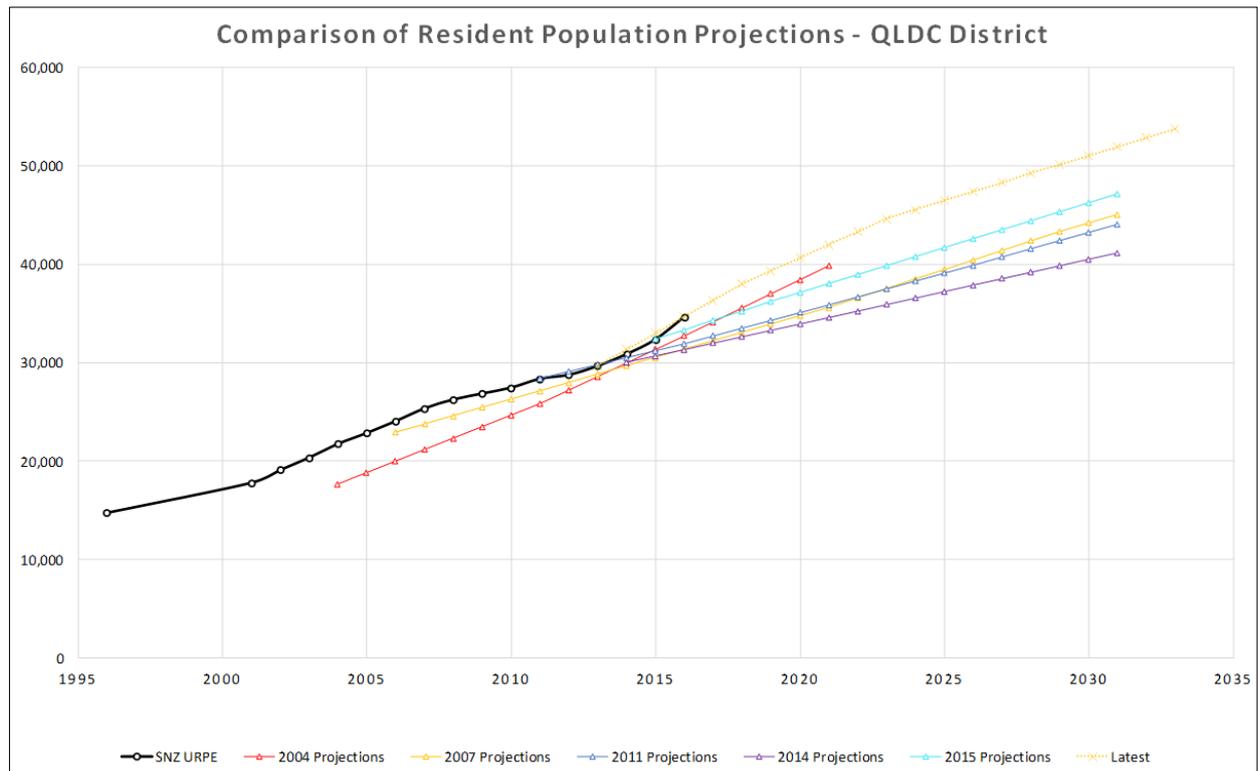


Figure 12: Comparison of Resident Population Projections - QLDC District 2004-2016

Table 11: QLDC Residential and Visitor Growth Predictions 2018-2048

Growth Variable	2018	2028	2048	Average annual growth (10 years)	Average annual growth (30 years)
Usually Resident Population	38,050	49,280	66,350	1,120	945
Residential Dwellings	19,720	24,670	31,600	500	400
Total Visitors (Peak)	79,300	99,750	126,375	2,045	1,570
Total Visitors (Average)	24,860	31,490	39,040	665	475
Total Rating Units	26,025	30,900	38,780	490	425

The table below, from the same report (Table 2), shows the acute difference between the 2014 and 2015 predictions.

Table 12: Previous projections (2014) versus 2015 projections district-wide.

Output	2015 LTP Projections (Apr 2014)			2015 Projections (Dec 2015)		
	2015	2025	Change (2015-2025)	2015	2025	Change (2015-2025)
Usually Resident Population	30,700	37,300	6,600	32,400	41,700	9,300
Total Visitors (average day)	17,100	19,700	2,600	20,900	26,100	5,200
Total Visitors (peak day)	65,800	78,200	12,400	66,900	83,900	17,000
Total Dwellings	16,300	19,300	3,000	17,000	21,100	4,100
Total Rating Units	22,400	26,500	4,100	22,500	27,800	5,300

Current projections show that the following changes are expected over the next 10 years:

- A resident population increase of 29%.
- A total visitor increase of 25%.
- A 24% increase in the number of dwellings and rating units.

NB: Population continues to grow (both resident and visitor) at a higher rate than that predicted in 2014 and in earlier years.

Increased population generally means an increase in traffic without initiatives to reduce the reliance on private car use to access the town centre

5.1.2 Traffic

The Queenstown Lakes District, and the wider South Island, is considered a desirable place to live and to visit. As Queenstown is the 'gateway' to the wider southern region, it has become New Zealand's second largest vehicle hire port. The continued increase of visitors, their use of rental vehicles, and the growth of Queenstown Airport (including evening flights) is expected to place further strain on the transport system.

Through the QITPBC programme case development, transportation modelling was undertaken to forecast future traffic flows for the district. Across the sites identified, the lowest projected increase in traffic volumes under current conditions, is 52% at the One Mile Roundabout while the highest increase at 93% at the Kawarau Falls. The modelling traffic forecasts for Frankton Road indicate an increase in traffic from 23,700

vehicles per day to 36,500 by 2045. With the theoretical capacity of Frankton Rd approximately 28,500 vehicles per day, it is forecast to exceed capacity around 2025.

Table 13: Modelled traffic flows (sourced from the Queenstown Integrated Transport Programme Business Case)

Location	2016	2025	2045	2016 - 2045 % Change
Gorge Road	10,000	12,200	15,500	55%
One Mile Roundabout	9,000	10,600	13,700	52%
Frankton Road	23,700	28,600	36,500	54%
Lower Shotover	17,700	22,700	29,200	65%
Kawarau Falls	7,700	9,900	14,900	93%

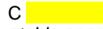
With no bus priority measures in place, increased traffic and congestion has a significant effect on bus reliability. Trackabus collection service has recorded up to 60% of services running late during the morning peak and up to 77% services running late during the afternoon peak.

5.1.3 Traffic Modelling

Further studies since the 2012 modelling with supporting computer/capacity models have been developed and support the need for intervention in relation to the town centre access.

The latest modelling results (Abley, November 2017) show continued predicted traffic growth with significant increased traffic volumes through to 2045. The images below show a predicted increase in traffic volumes and subsequent degradation of service levels under a do-minimum scenario.

Key to Levels of Service:

- A  free-flow operations at average travel speeds
- B  reasonably unimpeded operations at average travel speeds.
- C  stable operations; ability to manoeuvre and change lanes may be more restricted than at LoS B
- D  small increases in flow may cause substantial increases in delay and decreases in travel speed.
- E  significant delays caused by a combination of adverse progression, high volumes and extensive delays at critical intersections.
- F  extremely low flow speeds. Intersection congestion is likely at critical locations, with high delays, high volumes, and extensive queuing.

2016 PM Peak Level of Service Plot

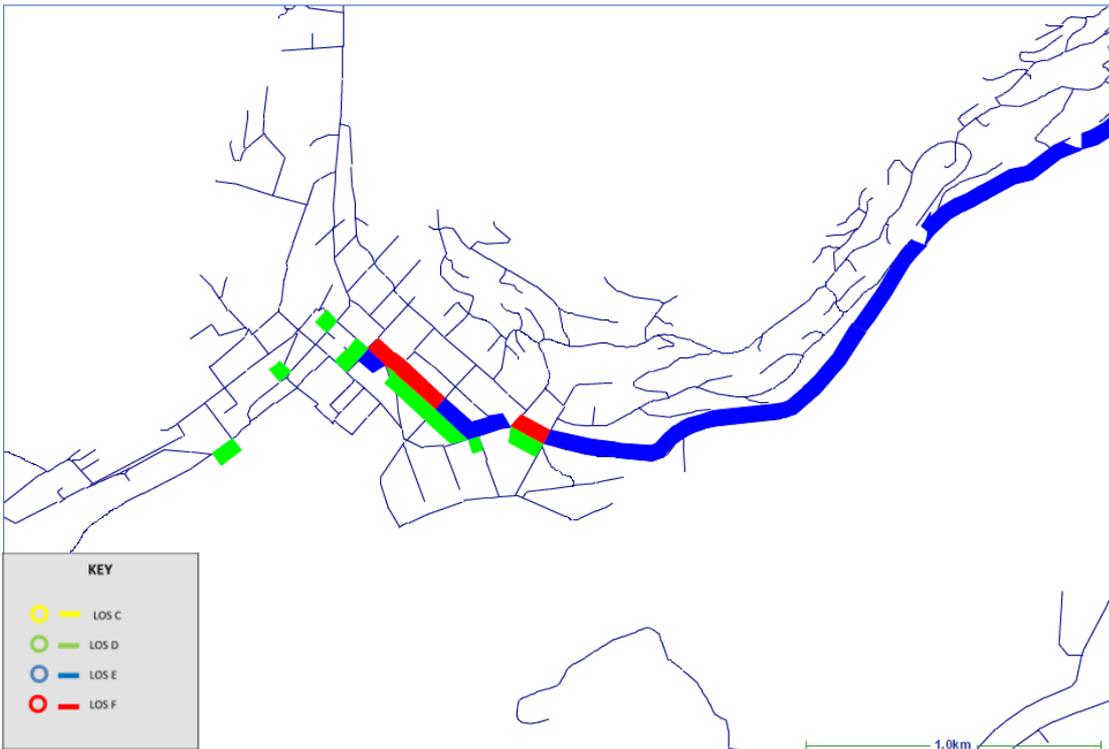


Figure 13: 2016 Level of service PM Peak

The 2017 Abley modelling showed significant degradation of levels of service through modelling a 'do minimum' scenario with no new arterials.

2025 PM Peak Level of Service Plot (Do Minimum no arterials)

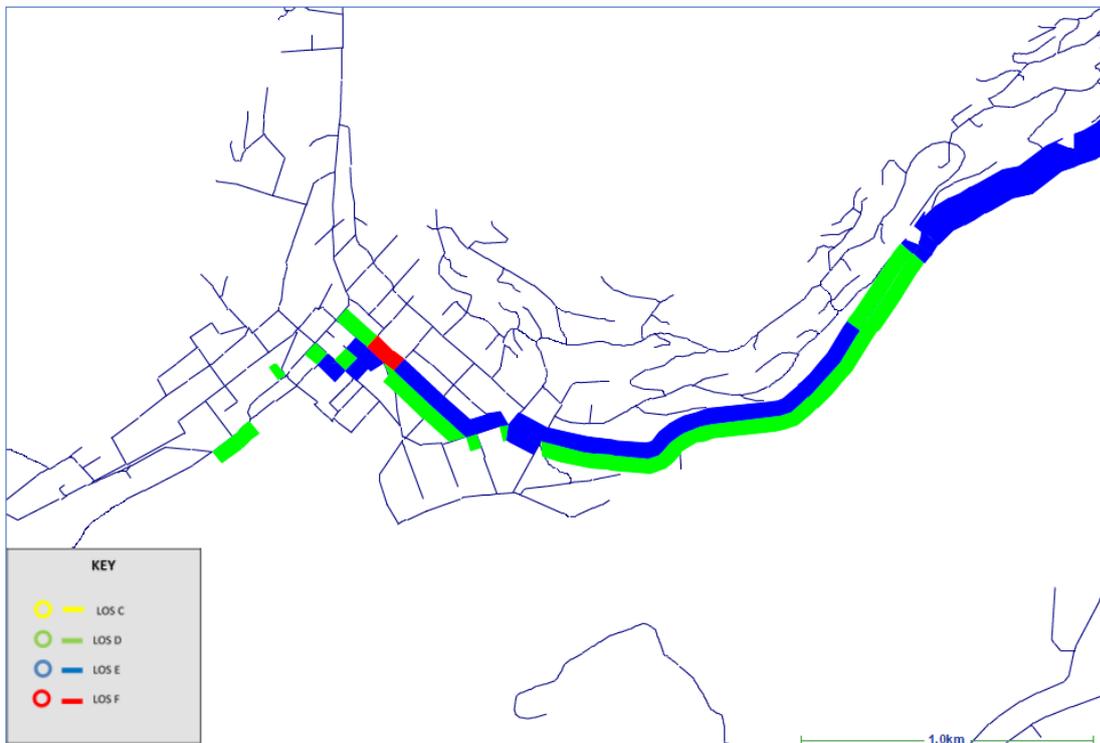


Figure 14: 2025 PM Peak Level of service – do minimum (no arterials)

2045 PM Peak Level of Service Plot (Do Minimum no arterials)

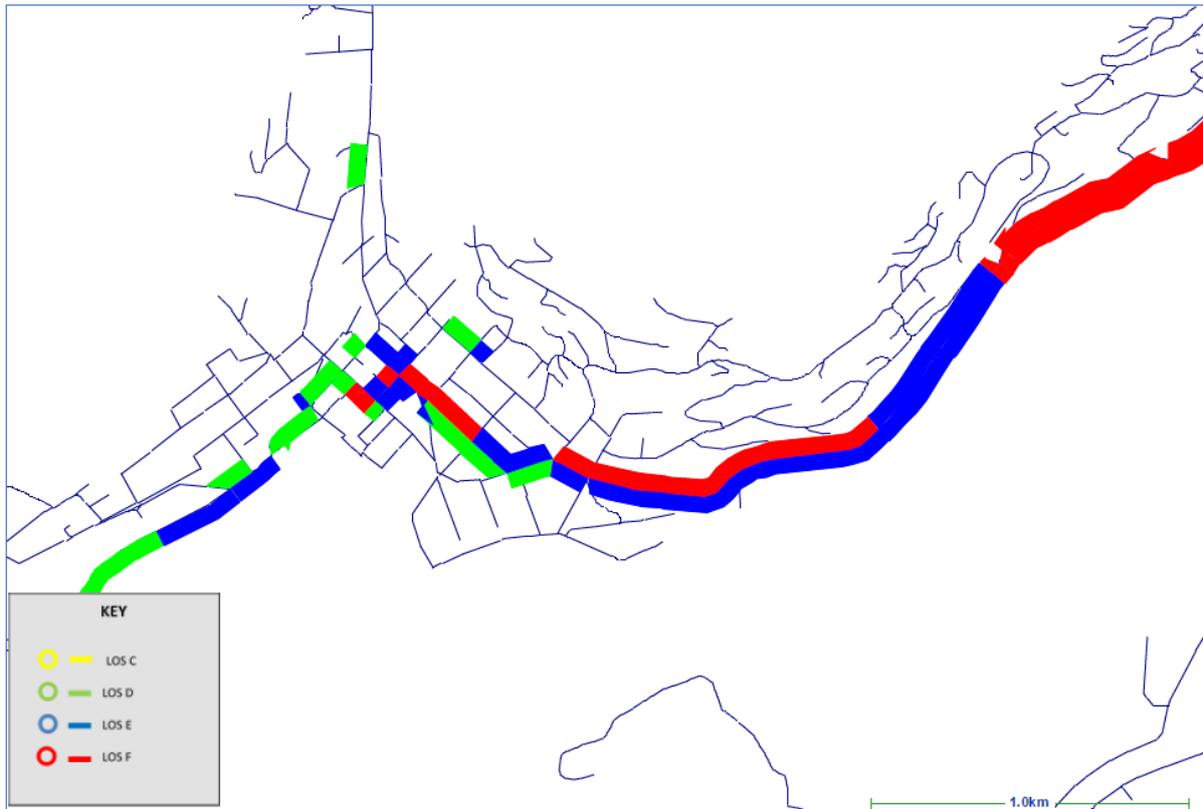


Figure 15: 2045 level of service plots under a do minimum scenario (no new arterials) - PM peak

5.1.4 Trip predictability and variability

Travel time survey data collected between December 2016 and July 2017 by Richard Young from Blip track demonstrates the variability and predictability of Queenstown travel routes by month as shown below. The key routes in the context of the Town Centre Masterplan work are the Stanley Street to Esplanade (orange) and Esplanade to Stanley Street (light blue) corridors.

Findings for Dublin St to Stanley St (the yellow plot):

- Dec/Jan average trips measured across each hour varied in time by up to 6 times slower than free flow (this meant the travel time varied significantly along that route).
- May trips varied in length by up to 2 times (twice as long as free flow).
- February and July trips vary by up to 4 times.
- Across the whole period the Predictability was that 9 out of 10 trips would be completed with a delay above the expected travel time by 65% -85%.

Findings for One Mile Roundabout to Stanley St (the light blue plot)

- Dec/Jan average trips measured across each hour varied in time by up to 3 times slower than free flow.
- February to July trips varied in length by up to 2 times (twice as long as free flow).
- Across the whole period the Predictability was that 9 out of 10 trips would be completed with a delay above the expected travel time of 75% -95%.

Findings summary:

- All routes into and out of Queenstown show low predictability – the travel time journeys at any time compared to what would be expected at that time.
- The Two key routes into Queenstown show high variability as well with travel time variability across the day exceeding 6 times longer than free flow from Dublin Street.

- Within the hour, travel time can vary by up to 90 percent longer than predicted.

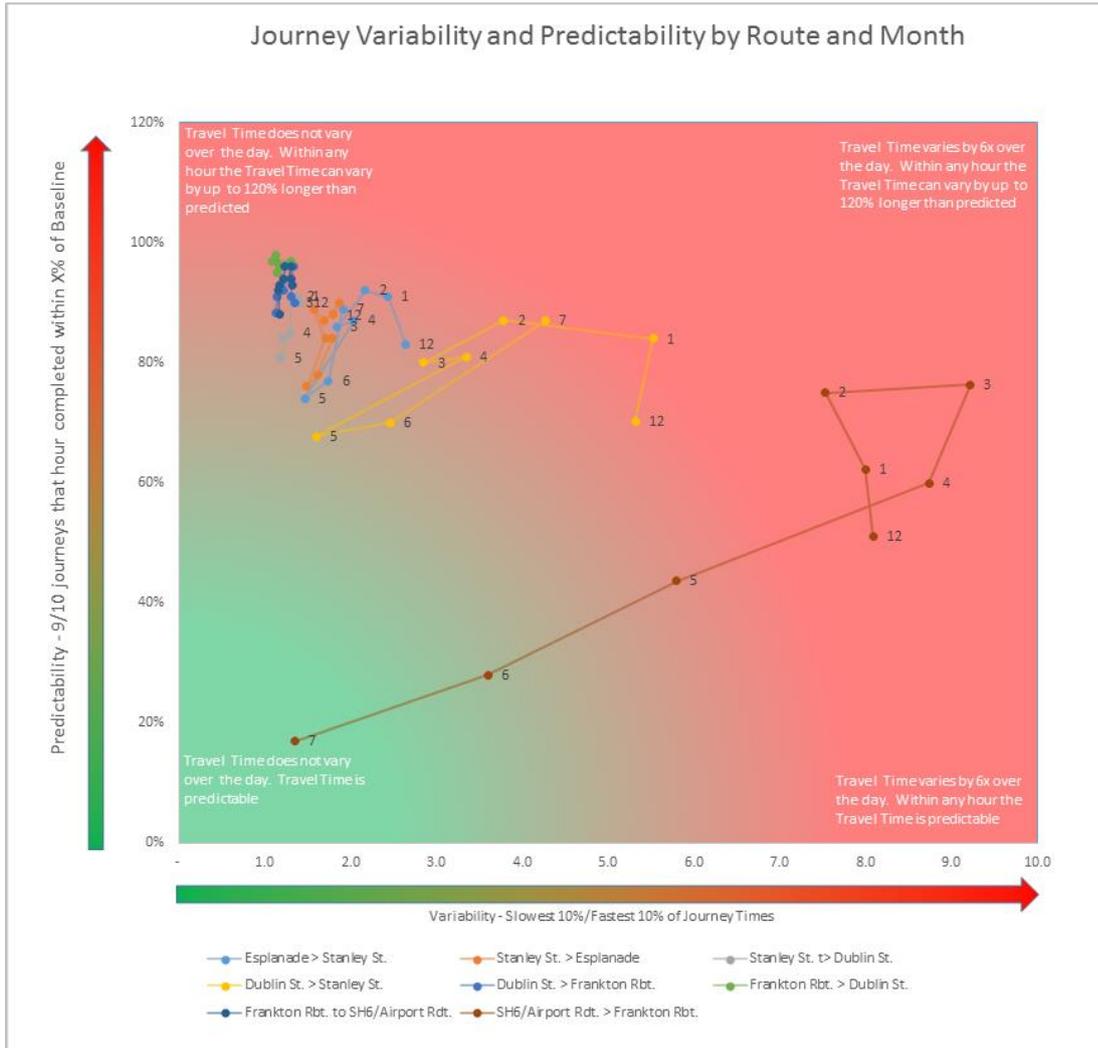


Figure 16: Journey variability and predictability by route and month

5.1.5 Current travel time reliability

Commercial GPS data is a valuable data source to monitor network performance on the Queenstown network. Evidence of travel time reliability was analysed using TomTom data sourced from the NZ Transport Agency historical data portal in the development of the Queenstown Integrated Transport Programme Business Case (QITPBC).

The 15th, 50th and 85th percentile travel times for evening peak week day trips between Lake Esplanade and State Highway 6/6A in March and December 2016 are presented below for each direction. These figures demonstrate the range of travel times during the 4pm - 6pm evening peak which is extensive (5-7-minute range) in both directions and worsens between the March 2016 and December 2016 surveys.

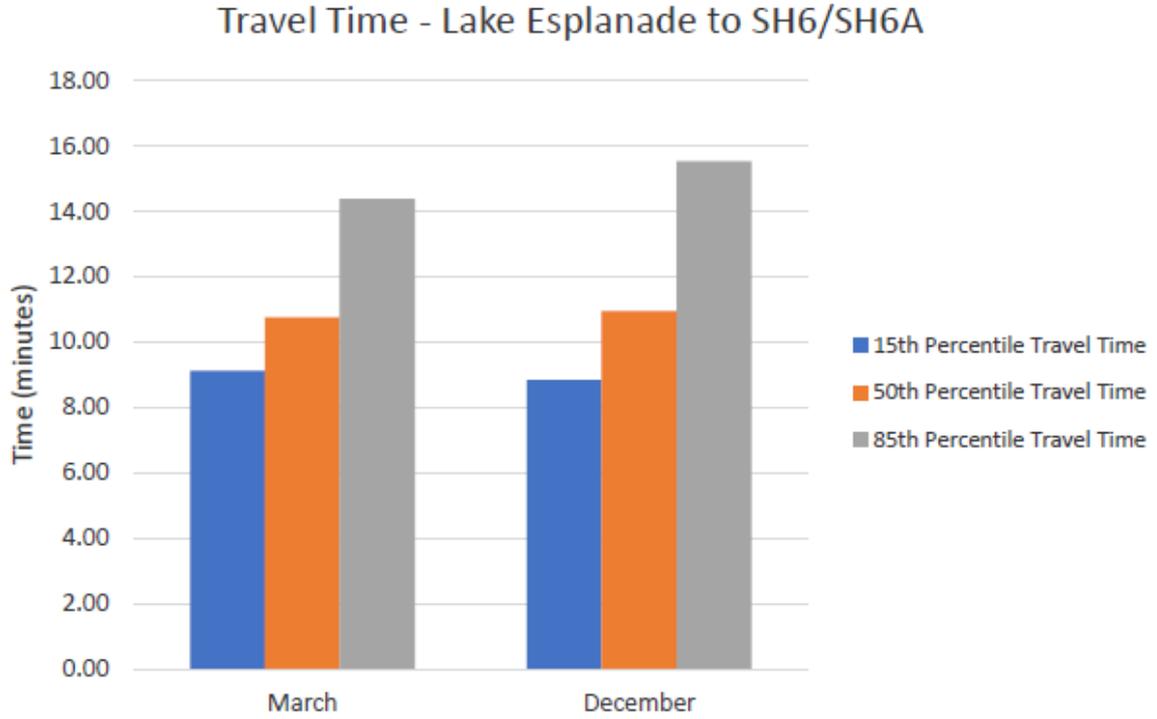


Figure 17: 2016 observed travel times from Lake Esplanade to SH6/SH6A

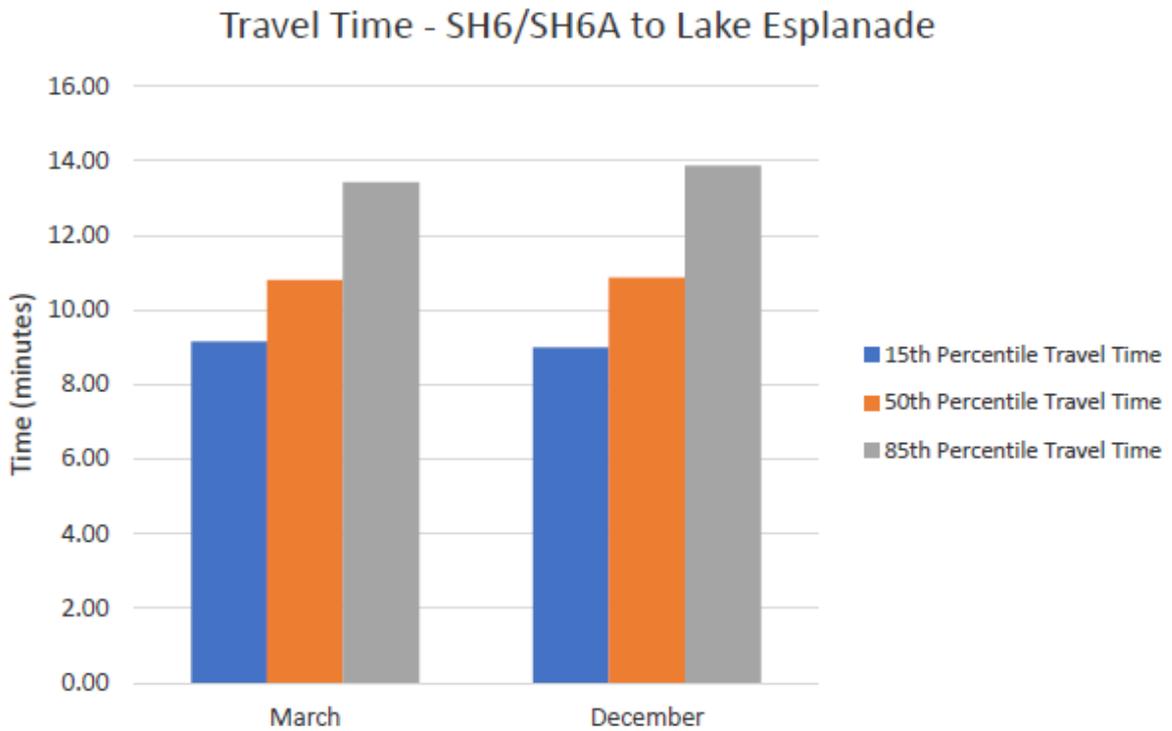


Figure 18: 2016 observed travel times from SH6/SH6A to Lake Esplanade

5.1.6 Bus Patronage

The patronage forecast model that AECOM developed from the Wakatipu Public Transport Detailed Business Case shows a predicted significant increase in patronage over the next five years, with numbers more than doubling in the first two years and then a slower but continued increase as the services become more reliable, efficient, convenient and affordable in relation to private car use.

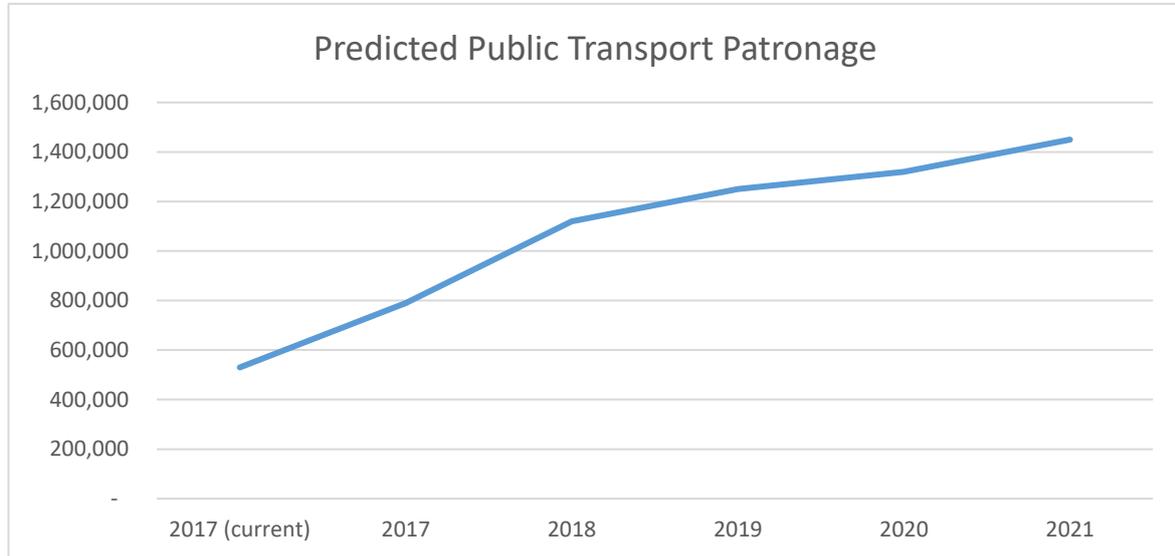


Figure 19: Predicted public transport patronage

5.2 Modal Split

Problem Statement (from ILM):

‘Public Transport’s inability to compete with the car is contributing to traffic congestion in the Wakatipu Basin’

The goal of 20% diversion from private vehicle to alternative modes (public transport, walking, cycling) has not been achieved to date.

5.2.1 General

There is minimal evidence to show that initiatives to encourage the use of alternative modes of transport to the car have been successful. The goal of 20% diversion from private vehicle to alternative modes (public transport, walking, cycling) has not been achieved to date.

The chart below shows the current modal split for travel to work in Queenstown.

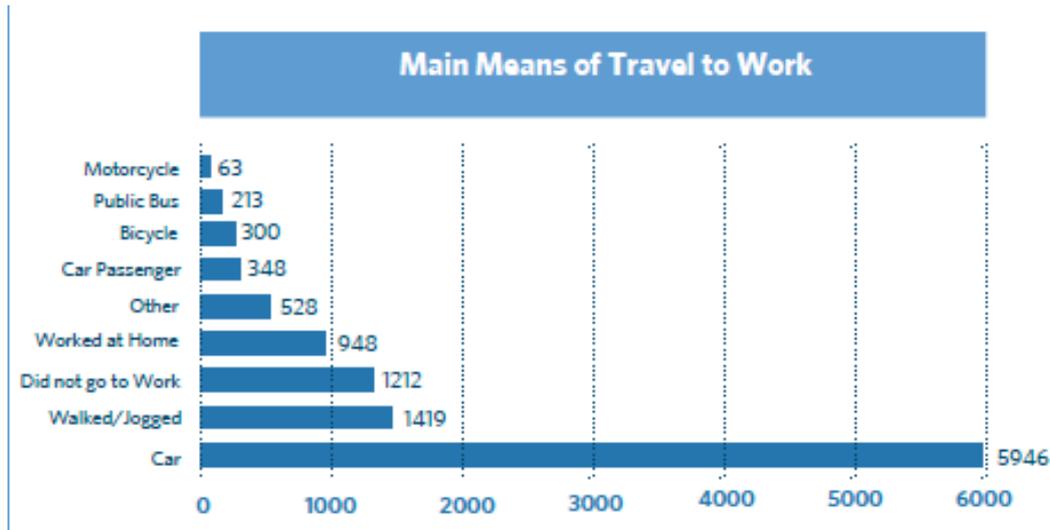


Figure 20: Current modal split for travel to work in Queenstown
(Source: QITPBC Summary Document, May 2017)

5.2.2 Annual Modal Split Survey

MWH undertakes an annual survey on modal split. The 2017 report concluded that “...the overall proportions of the differing modes of travel remains consistent, with only minor variations from previous years”.¹

Key findings from the report:

- There is a 12% increase in inbound traffic across all modes when compared with the previous three years, which is in line with the traffic data trend since the survey began in 2009.
- Cyclist volume dropped by 30% when compared with the previous three years, with a proportional modal decrease of 7%.
- Pedestrian traffic dropped by 4% when compared with the previous 3 years.
- The report is evidence that travel demand management initiatives have not delivered the desired results.

The information in the table below is taken from the MWH report and shows the variation in mode for each year (over the same four-hour period). It includes all inbound survey locations (Gorge Road, Frankton Road and Lake Esplanade).

¹ Section 2.1.1 Summary of Results - 'Queenstown Modal Split Traffic Surveys 2017, MWH Stantec April 2017

Table 14: Queenstown Traffic Survey – Modal Split, Overall Proportion of Vehicles by Year

Location	Time Period	Car	Heavy Vehicle	Taxi	Coach	Bus	Pedestrian	Cyclist
All in-bound	2017	80%	3%	2%	3%	0.6%	11%	0.6%
	Time Period	Car			Bus		Pedestrian	Cyclist
	2016	83%			2%		14%	1%
	2015	84%			2%		13%	1%
	2014	86%			2%		11%	1%
	2013	84%			2%		13%	1%
	2012	86%			2%		11%	1%
	2011	90%			2%		8%	1%
	2010	84%			2%		13%	1%
	2009	84%			3%		12%	2%

5.3 Projected future demand by mode

Forecasts of future demand by mode has been undertaken for the SH6A corridor to inform the proposals for district and regional transport. The forecast has been prepared using a transportation model which includes land use growth forecasts for the two modelled years of 2025 and 2045 developed by Rationale consultants and approved by QLDC for planning purposes. The future road network for these future years includes current infrastructure which is under construction within the District such as the Kawarau Falls Bridge replacement but includes no improvements within the town centre other than local roading connections to provide access to the Lakeview site.

Public transport provision includes the changes recently proposed as part of the Wakatipu Basin Public Transport Detailed Business Case (DBC), and includes changes in routes, service frequency and the introduction of a \$2 (or \$5 for cash) flat fare.

The projected trend in demand shown below has informed the timescales suggested for the proposed improvements. The graphic below demonstrates this demand and highlights that a mass rapid transit solution may be required from 2040 onwards.

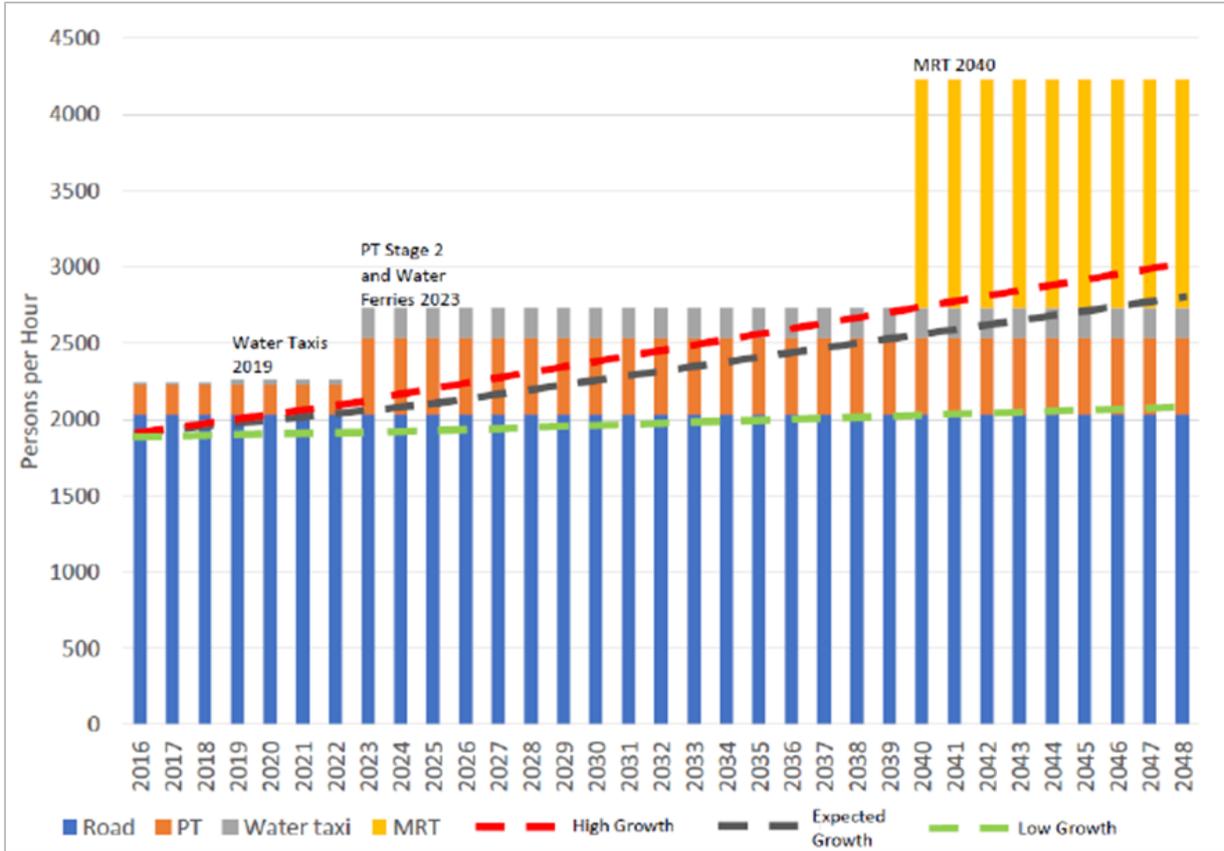


Figure 21: Projected Future Demand by Mode (Sourced from the Queenstown Masterplan Public and Passenger Transport Requirements report produced by Beca)

5.3.1 People movements by corridor

The delivery of the QITPBC recommended programme focuses on increasing the throughput of people on key corridors into and out of Queenstown town centre. The impact of programme implementation on mode share over future years and is shown graphically below. This demonstrates the total car occupants are held relatively constant while growth in person movement demand is expected to be met by increased uptake of alternative modes.

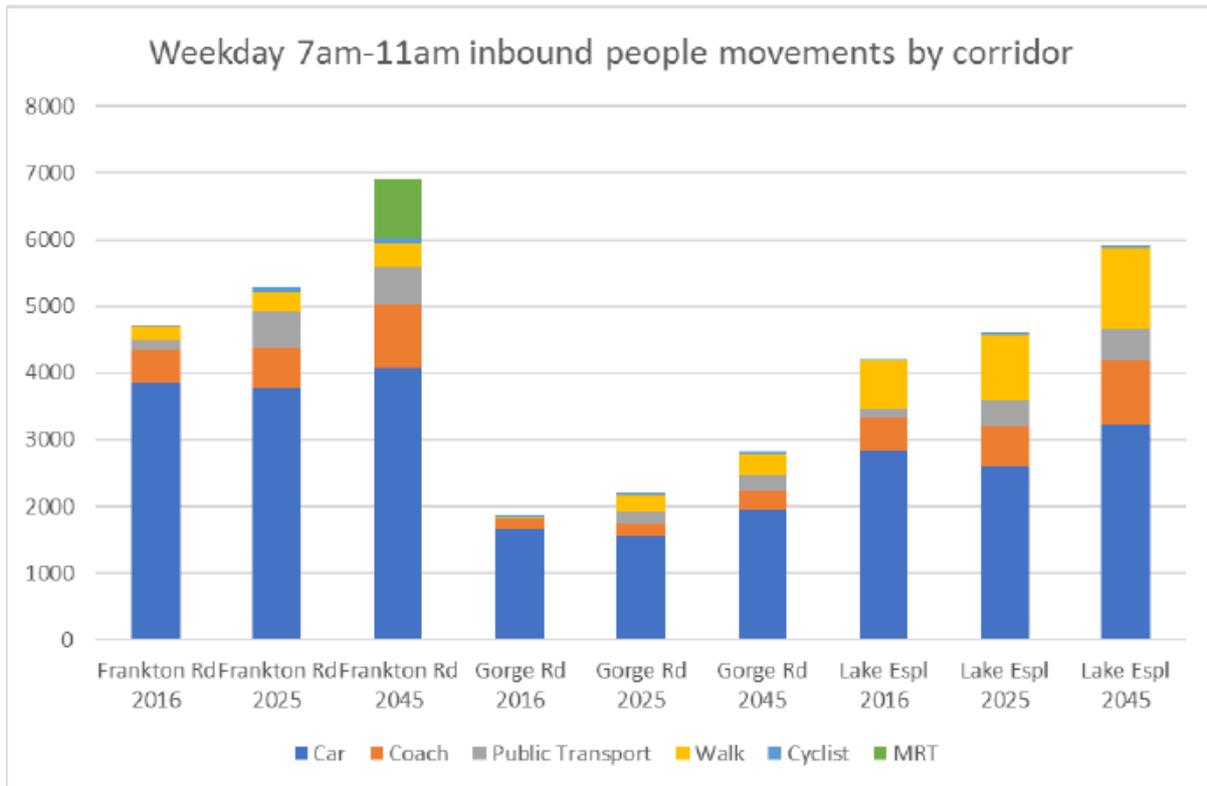


Figure 22: Morning peak people movements by corridor and mode in 2016, 2025 and 2045

5.4 Land Use Change

The masterplan will allow growth as well as diversity of activities within the town centre.

Any growth and consequent change in land-use will have an impact on the transport network and the need to provide for public and passenger transport.

Plan Change 50 (PC50) is already providing for growth in the town centre and potential projects such as the Gorge Road Special Housing area, hotel development, proposed new convention centre, Skyline Enterprises expansion, further development of ski fields and walking tracks, as well as capacity increases of the airport all need to be considered.

Other considerations include:

- Several hotel developments that are at different stages of planning and construction.
- Expansion of the Skyline gondola facilities including extending the upper and lower terminals, and restaurant.
- Future land sale / lease of part of the Lakeview for accommodation and mixed-use development.
- Proposed hot pools attraction on part of the Lakeview site.
- Project Connect and civic facilities.

Problem Statement (from ILM):

‘Public Transport’s inability to compete with the car is contributing to traffic congestion in the Wakatipu Basin’

Parking, traffic and transport are continually identified as areas requiring improvement. Surveys suggest that residents, commuters and visitors would use public transport if the services were improved, which would help reduce congestion.

In response to existing housing shortages and affordability, the Gorge Road Special Housing Area provides for development of predominantly seasonal workers' accommodation units. It is anticipated that approximately 2,000 units will be built comprising 1, 2 and 3 bedroom units.

QLDC, as part of being compliant to the new National Policy Statement on Urban Development Capacity (2016), is required to undertake a **Future Development Strategy** to guide the next 20 years of growth in the district. This will be an update to the 2007 Growth Management Strategy. This strategy could emphasise further the importance of intensifying around the existing growth nodes that are well supported by existing and future public transport service and facilities.

5.5 Public and Passenger User Survey

QLDC recently approached 57 user groups operating in the Queenstown Town Centre with a survey delivered via direct email. While less than 40% responded, they were from a good cross section of users.

Reponses are summarised below (full summary report included as Appendix 5).

Table 15: Survey questions and answers

Question	Response
What are the main issues facing your organisation in operating passenger transport services and managing demand in terms of transport infrastructure?	56%: Congestion and being unable to stick to timetables 31.25%: Availability of suitable bus parking/loading zones and enforcement of existing. 6.25%: Pricing and facilities 6.25%: Lack of usable jetties
Would you like to have your pick up and drop off facilities in a combined public and passenger transport facility?	62.5% of respondents did not support a combined facility: <ul style="list-style-type: none"> • Many operators provide a pick-up service • A centralised location may become too busy, creating conflicts between users 31.25% of respondents supported a combined facility – convenient with a better experience for all users
How important is it that the pick-up and drop off facility is close to your business point of sale?	43.75%: very important e.g. to pick up and drop off equipment. 56.25%: not important if appropriate alternative available.
Would you be prepared to pay for improved on/off street facilities and accept a reduction in on-street car parking to allow better passenger transport facilities to be provided?	31.25%: Yes – pedestrianisation important. 50%: No – would have to pass costs onto customers.
What public and passenger transport facilities do you require to operate your service in the future?	Themes from open ended responses include: <ul style="list-style-type: none"> • More accessible bus stops or drop off / pick up location. • Better coach parking options. • Take focus off cars and buses (multi-modal). • Covered jetties and access to water taxis.
Other comments / feedback	
<ul style="list-style-type: none"> • Congestion is a significant issue; particularly through the CBD. • Operators are generally predicting significant growth which will impact demand. • Growth is limited to capacity. • Many tourism operators pick up from where customers are staying. 	

Question	Response
	<ul style="list-style-type: none"> Improved pick up locations are important but need to enforce the use of those point.

5.6 Resident and Visitor Surveys

5.6.1 2016 QLDC Annual Ratepayers and Residents Survey

The July 2016 Queenstown Lakes District Ratepayers and Residents Survey identified roading, parking and transport as being the top priority in terms of areas requiring improvement as shown in the graph below,

However, it should be noted that the current survey is not sufficiently detailed to specifically assess satisfaction within the town centre.

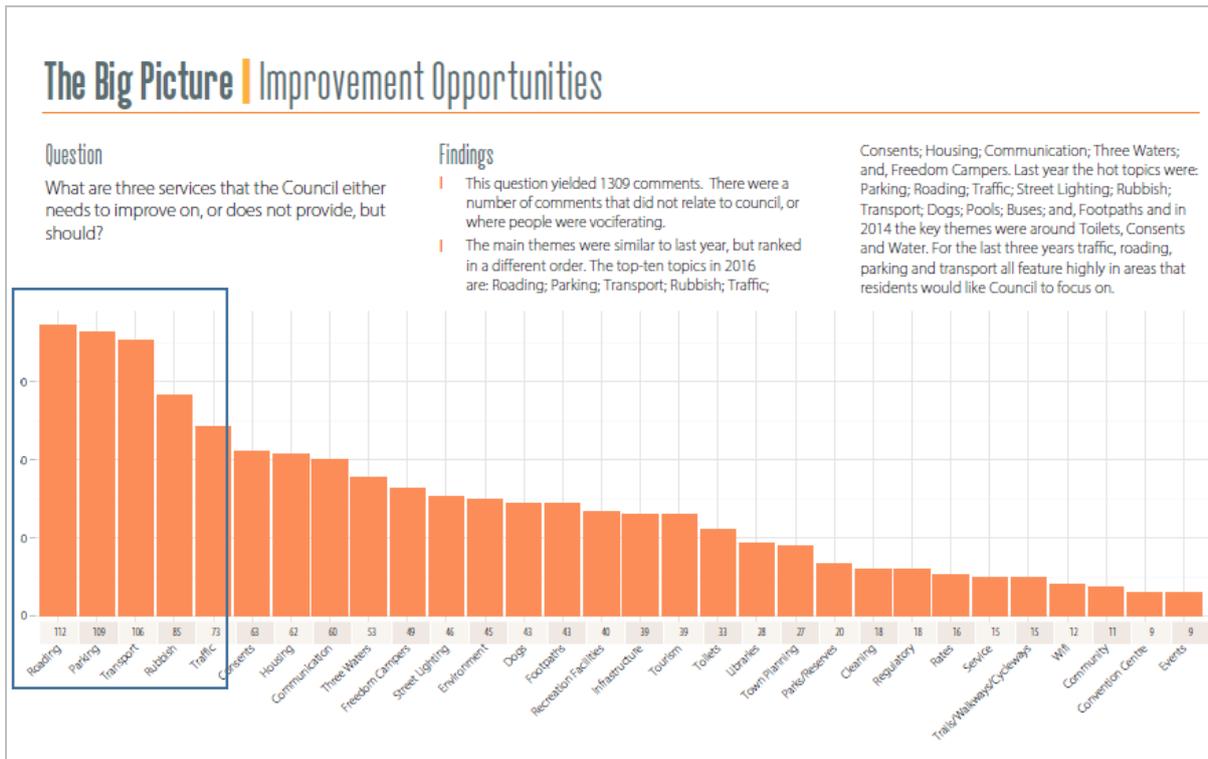


Figure 23: The Big Picture – Improvement Opportunities – ‘Queenstown Lakes District Ratepayers and Residents Survey 2016’

The report stated ‘Transport, roading and parking comments featured strongly. These three categories seemed to link to a high-level concern about the region’s ability to cope with the high volume of visitors, short-term workers and residents who all need to move about in vehicles and park somewhere. Transport comments were largely focused on public transport (e.g. buses/shuttles) and park ‘n’ ride options given limited parking space for private residents’ in Queenstown and Wanaka. There were also a handful of requests to resume domestic flights into Wanaka.’

Specific to public and passenger transport, issues raised included:

- Provision and frequency of public transport – Frankton/Wanaka /Airport.
- Cost of public transport.
- Park and ride.
- Restriction of cars within the town centre.
- Need for clear/coherent transport strategy/plan.
- Use of public transport to ease congestion and remove poor drivers (unfamiliar with roads).
- Improvement of transport system (improve flow of traffic).

- Promotion and facilitation of public transport and commuter cycling.
- Public transport vs parking provisions.
- Extent of flights/services from Queenstown/Wanaka Airports.
- Use of other forms of passenger transport such as mini-vans.

5.6.2 Wakatipu Basin Public Transport Programme Business Case – Residents & Visitor Surveys 2015²

Key findings from the survey

Survey results imply that public transport services are not up to the standard required, either in terms of reliability or journey time. In addition, the results support the problem of congestion being an issue, and the majority of residents, commuters and visitors would use public transport if the services were improved which would help reduce congestion.

72 percent of residents and 35 percent of visitors surveyed strongly agreed or agreed that they would use public transport if it was cheaper. These results support the perception that fares are too expensive, higher than the average person is willing to pay.

Residents

Over 80% of respondents use private car as the mode of travel to work, to school, for recreation and for general errands.

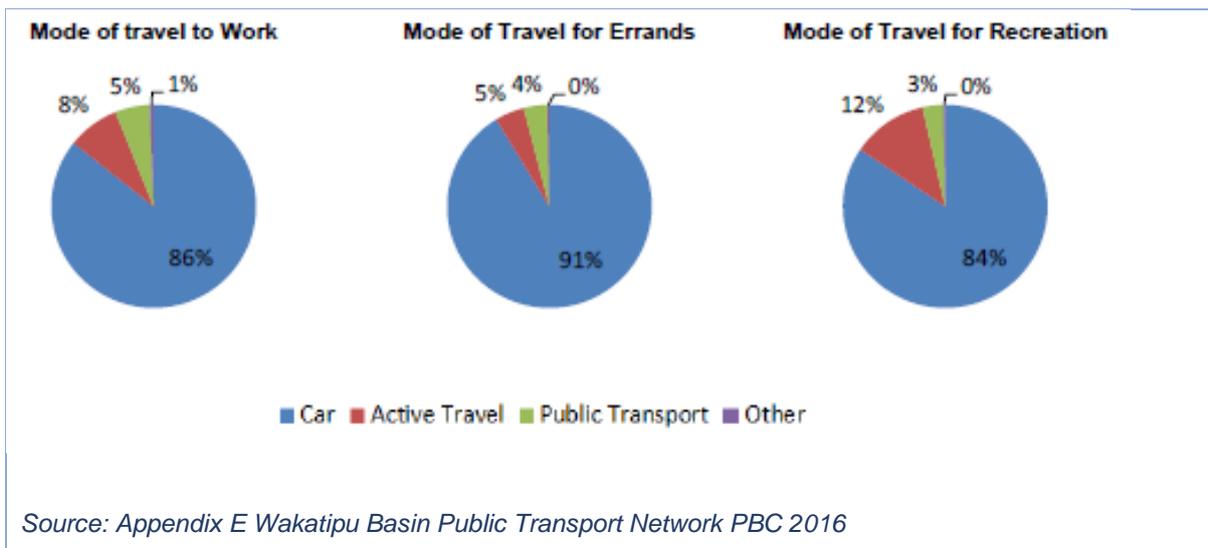


Figure 24: Mode of travel to work

76% of residents surveyed said they did not use public transport regularly.

Respondents who do not use public transport were asked (from a range of responses), what would make them use public transport. Respondents stated that they would use public transport:

- 72% - if it was cheaper
- 66% - if it was more reliable
- 66% - if it helped improve traffic congestion
- 53% - if the journey was quicker
- 55% - if it helped the environment (liveability)
- 51% - if it had priority over cars.

² ORC Wakatipu Basin Public Transport Network PBC Appendix E March 2016

Visitors

(66 respondents - International and domestic travellers).

63% of those surveyed did not use public transport while in Queenstown – the two key reasons being:

- it did not get them where they need to go
- they would use more public transport in the Queenstown area if it cost less.

41% of the visitors arrived by plane and 40% of visitors used their own transport.

5.6.3 Visitor Insights Programme, Visitor Experience, Queenstown Q3 2016

A recent report '*Visitor Insights Programme, Visitor Experience, Queenstown Q3 2016*' produced by Angus and Associates for Destination Queenstown includes information on criteria such as reasons for travel, destinations and activities undertaken as well as visitor ratings/feedback.

The survey states '*Visitors are disappointed however with the availability of parking and the traffic flow around Queenstown. There are opportunities to boost visitor satisfaction with improvements to both traffic and carparking and also local transport options and services*'.

As shown in the image below, other than traffic and parking, 'local transport options and services' has the lowest satisfaction rating for all aspects of their experience.

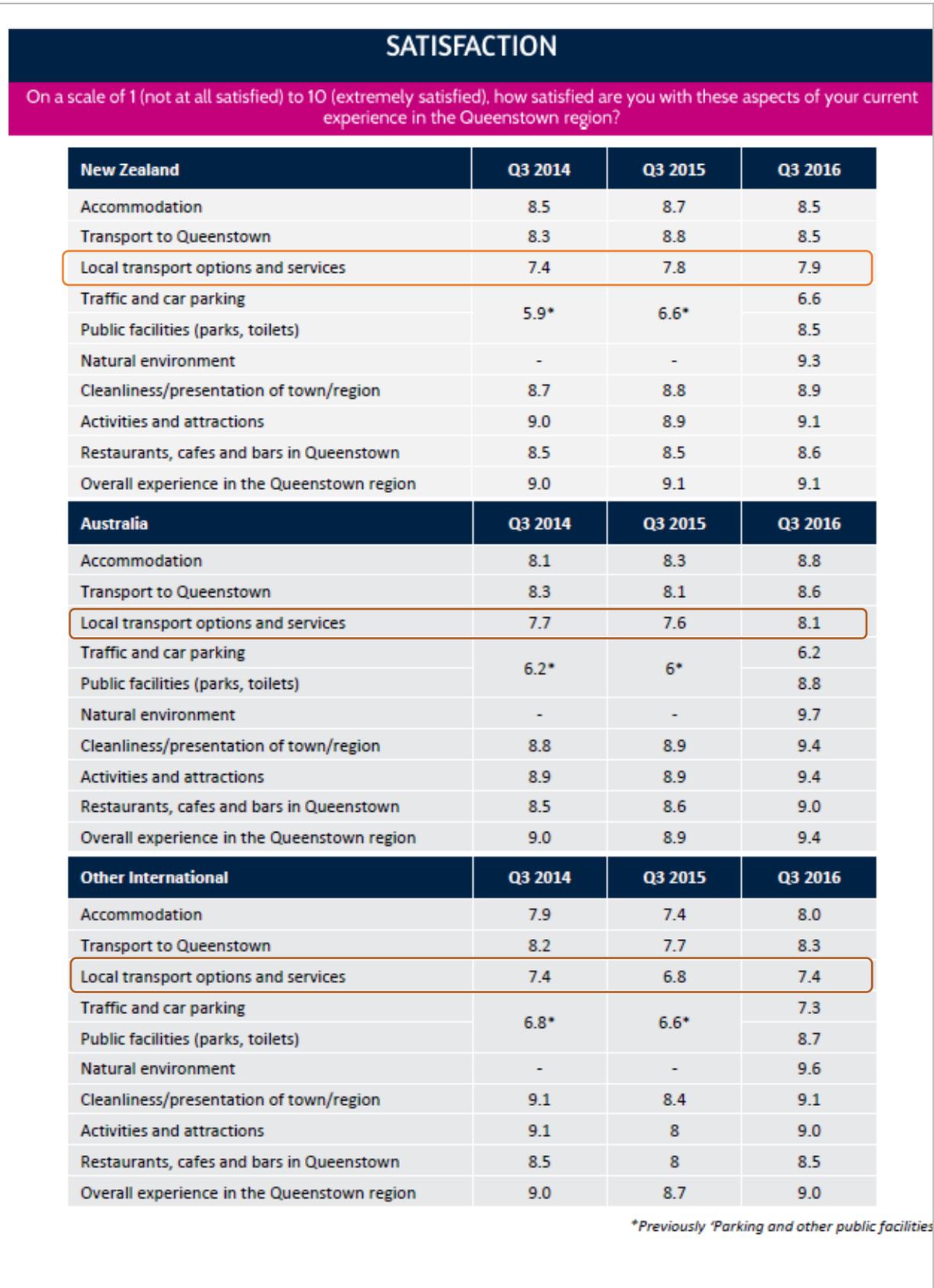


Figure 25: Visitor Insights Programme responses

5.6.4 Qrious

Using cell phone information, Qrious can track the movement of people to provide an insight of the behaviour of visitors and locals visiting Queenstown and to profile those visitors. They were commissioned to analyse the attendance of the Queenstown CBD for the two years from March 2015.

Some of the key findings are given below:

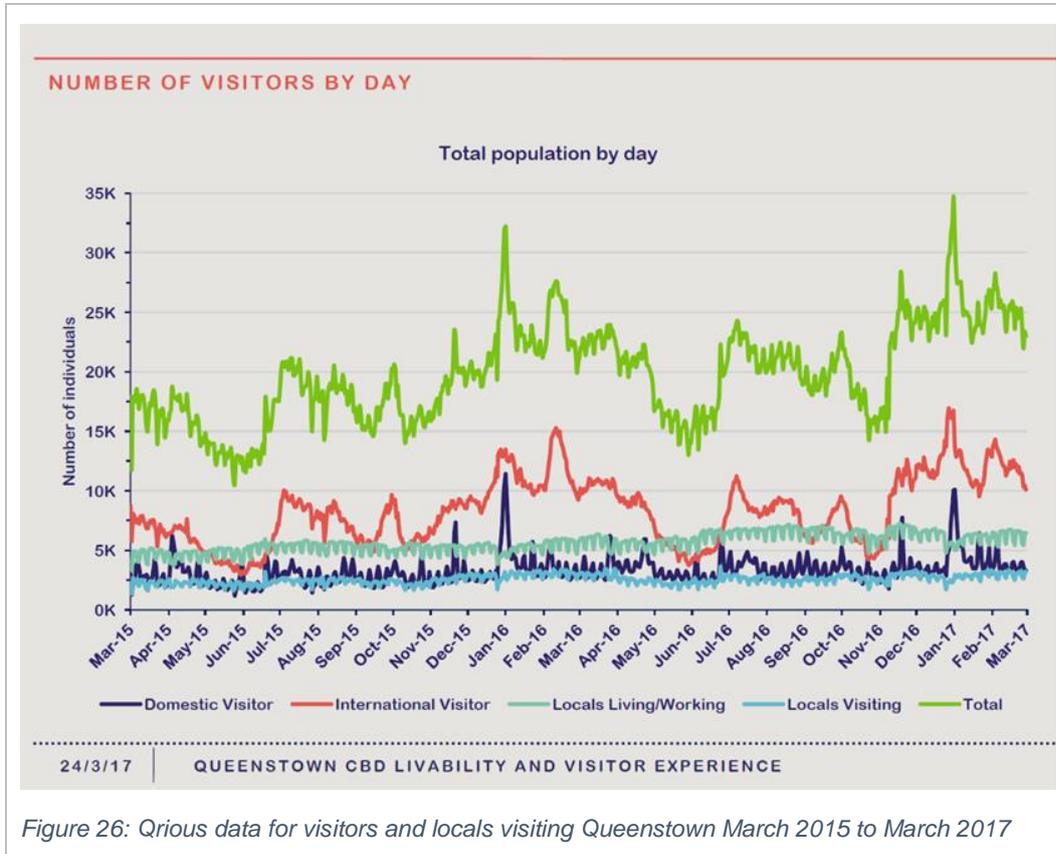


Figure 26: Qrious data for visitors and locals visiting Queenstown March 2015 to March 2017

- Total visitor numbers are increasing for regional and international visitors but are remaining static for locals visiting. With an increasing population, this means that, as a proportion, less locals are visiting the town centre.
- More international visitors travelled to Queenstown than domestic.
- International visitors are more seasonal than domestic visitors.
- The number of people living and working in the CBD has increased since June 2016.
- Locals that don't work or live in the area visit it more in summer compared to winter.
- International visitors spend more time in the CBD than domestic visitors.
- More than 60% of locals visit the CBD more than three times per month with approx. 10% visiting less than twice per month.
- Around 60% of locals living or working in the CBD spend at least six hours in the CBD per stay with approximately 20% spending less than two hours.

These figures suggest that traffic will increase with consequent increased congestion if alternative modes, including public and passenger transport patronage levels are not improved.

5.6.5 ThinkPlace

ThinkPlace has completed a customer insight study (initially for the QITPBC but then reassessed specific to the town centre) through in-depth conversations with residents and businesses. Quotes from the conversations were broken into broad topic areas such as parking, traffic flow, pedestrians, precincts, multi-modal options, cultural and civic facilities, activation of spaces and futuristic innovations.

Some of the key issues identified that relate to or impact on public and passenger transport facilities can be summarised as:

- **Growth** – Some locals feel that visitor growth may ‘eventually make the town a victim of its own success’ due to congestion and overcrowding.
- **Congestion** – There is a general resignation and frustration that the Council has spent many years talking about innovative solutions to transport and congestion problems but has not implemented them with traffic conditions worsening.
- **Parking** – Insufficient parking, parking costs, time-restrictive parking options, and campervan parking were all listed as frustrations with residential areas becoming increasingly ‘clogged up’ and parking buildings at full capacity for large parts of the peak tourist seasons.
- **Facilities** – Locals do not want to deal with congestion and perceived parking problems, preferring to use facilities located in out-of-town hubs and so not visiting the town centre.
- **Public Transport** – Many commuters find that using their cars to travel into the town centre is cheaper and more convenient and rarely use public or passenger transport. There is no incentive to use public transport which is considered expensive, unreliable and not convenient.

Encouraging the use of public transport will address a number of these issues.

5.7 Park and Ride Survey 2016

Problem Statement (from ILM):

‘Public Transport’s inability to compete with the car is contributing to traffic congestion in the Wakatipu Basin’

It is acknowledged that ‘park and ride’ will not suit everyone. However, a well-managed and utilised park and ride scheme will reduce the volume of traffic entering the town centre and consequently relieve pressure on parking facilities and help reduce congestion.

QLDC undertook a Park and Ride Survey in 2016 to which there were 428 respondents from across the district. The aim of the survey was primarily to determine the need for a park and ride facility. As outlined in section 2.3.6, the key points include: appropriate locations for facilities to best address potential demand and to service access to other transport links, a wide range of operating hours and high frequency of shuttles for a park and ride and competitive pricing.

1.

5.8 Initial Masterplan Engagement Results

Problem Statement (from ILM):

‘Public Transport’s inability to compete with the car is contributing to traffic congestion in the Wakatipu Basin’

Community engagement continues to raise parking, congestion and public transport as areas that could be improved.

In March 2017, QLDC conducted several community engagement events and encouraged feedback across a wide variety of mediums including an online survey.

136 people responded to the survey on peoples’ perceptions of what they liked about the town centre and what they think could be better.

The most common theme for what could be better was more parking options for long-term and short-term stays. 65% of respondents said their main problem with the town centre is lack of parking options.

Other themes included:

- **Traffic congestion** with 57% of respondents saying that traffic congestion heading into and around town was an issue.
- **Cheaper and more efficient public transport options**, with 23% of respondents commenting on public transport and suggesting a ferry service.

Below is a graphic of the other improvements suggested in the online survey feedback:

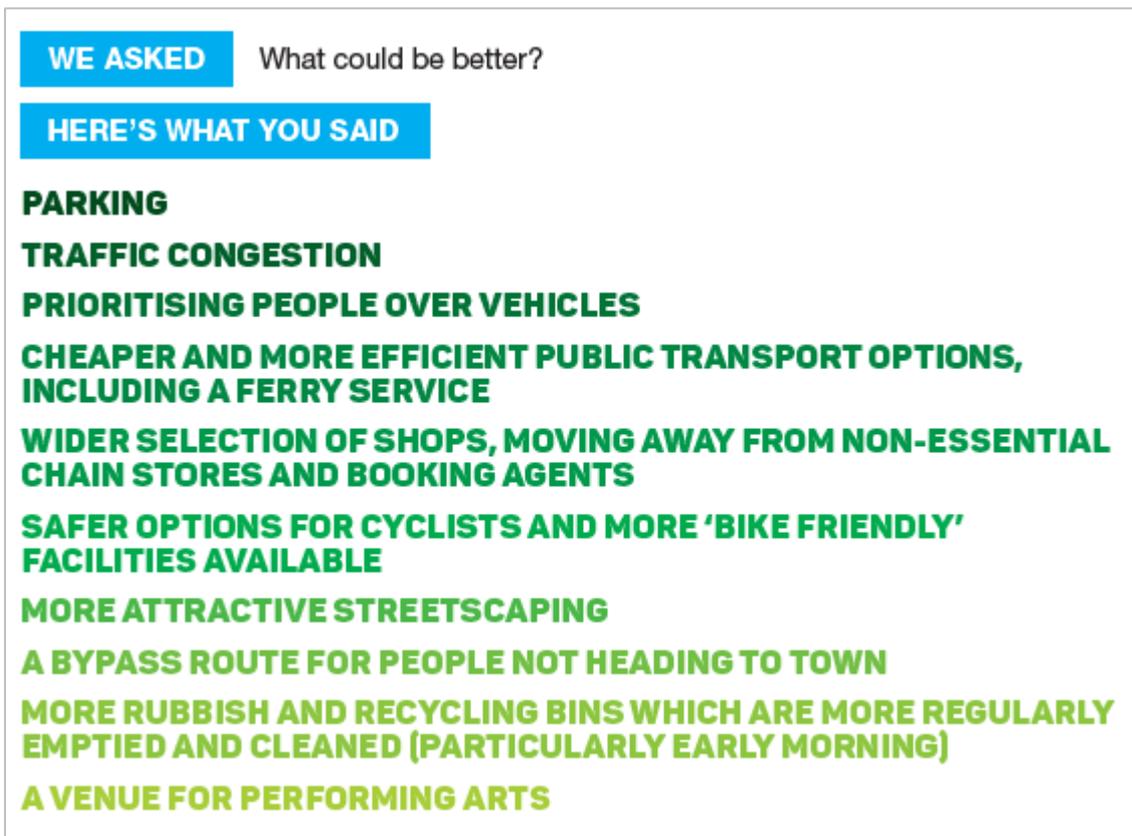


Figure 27: Masterplan Initial Engagement Online Survey - What could be better?

Improving public and passenger transport facilities to increase patronage would address several of the issues identified in the survey

- Demand for parking could be disincentivised, i.e. removal of all free parking within a 5-10-minute walk from the town centre core to encourage alternative mode choice.
- Less congestion for alternative modes with bus priority measures including dedicated lanes and better connected, improved, and safer walking and cycling facilities.

5.9 Masterplan preferred option engagement

In July and August 2017, QLDC ran a 4-week engagement campaign aimed at educating the community on the work done to date and to gain feedback on the options selected. This campaign gained some very positive feedback across the programme, including some very encouraging demonstration of desire to use more public transport. A snapshot of the feedback on public and passenger transport is shown below.

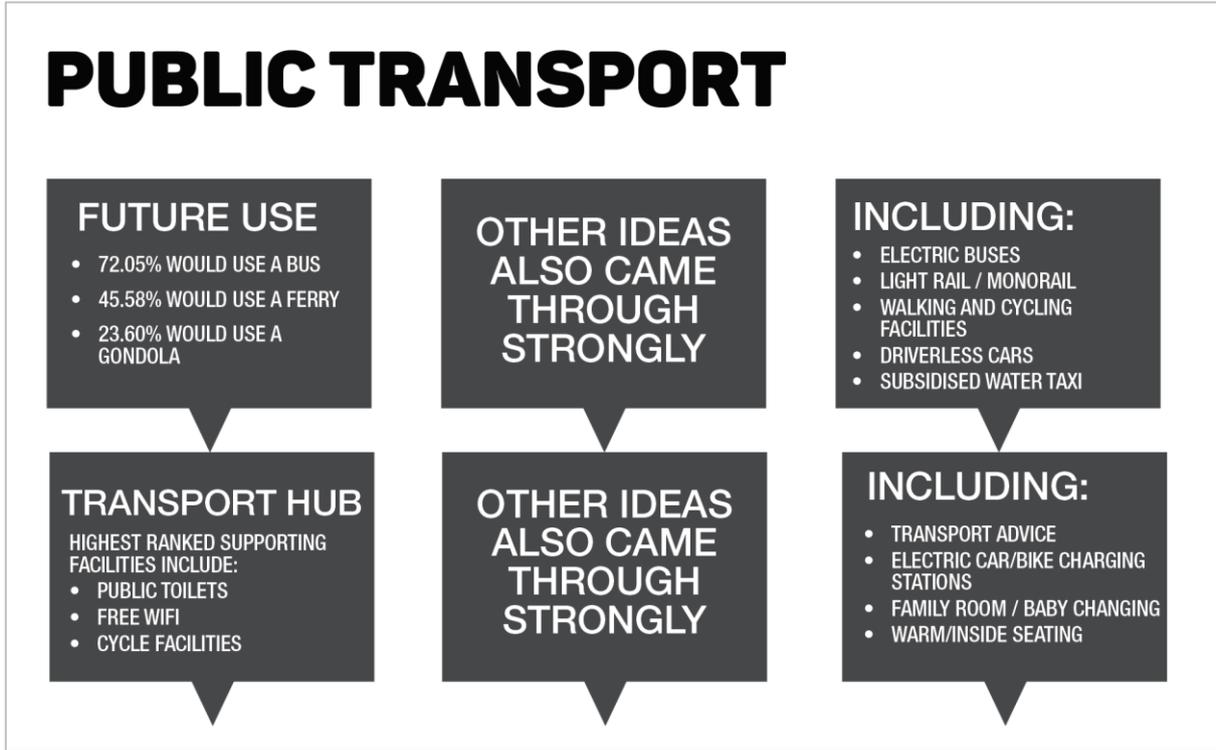


Figure 28: A summary of feedback on P&PT options

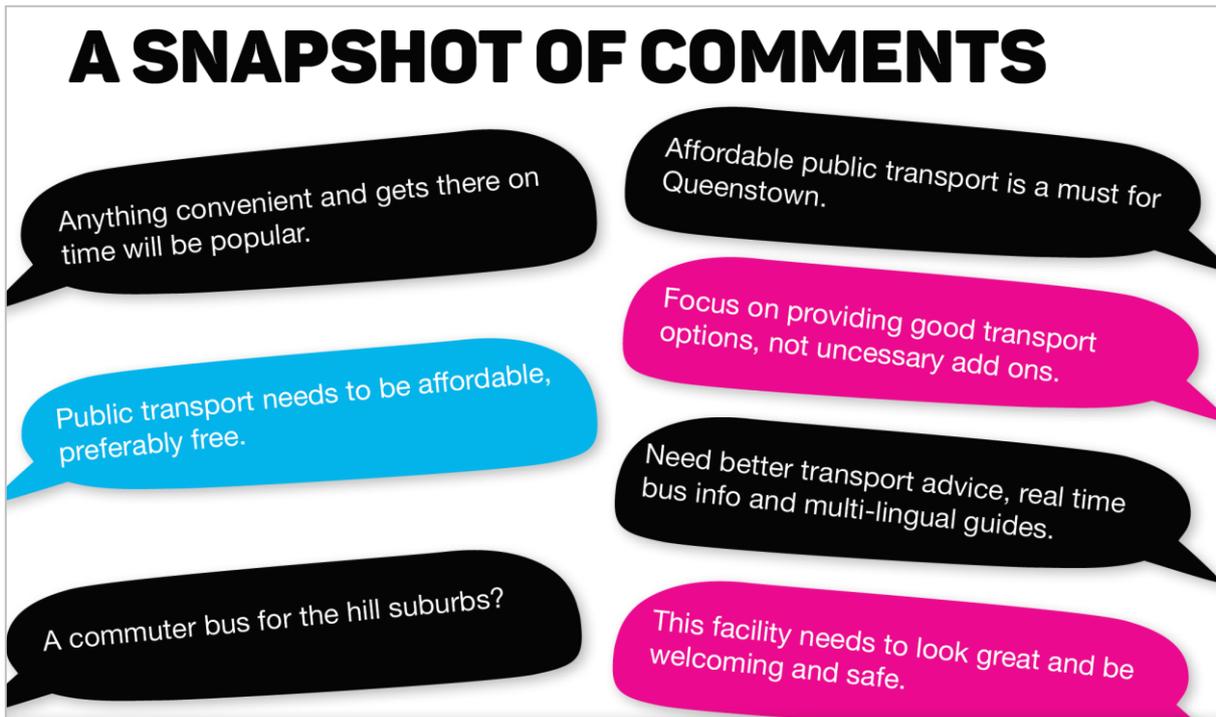


Figure 29: A snapshot of P&PT comments

5.10 Queenstown Airport growth forecasts

Queenstown Airport Corporation has recently released a Masterplan options document outlining plans for the future and expected growth levels. As the major gateway to the lower South Island and the key access to one New Zealand’s most marketed regions, the airport plays a very significant role. In line with the ongoing visitor growth expected for the district, QAC is expecting consistent growth in passenger movements, as shown below.

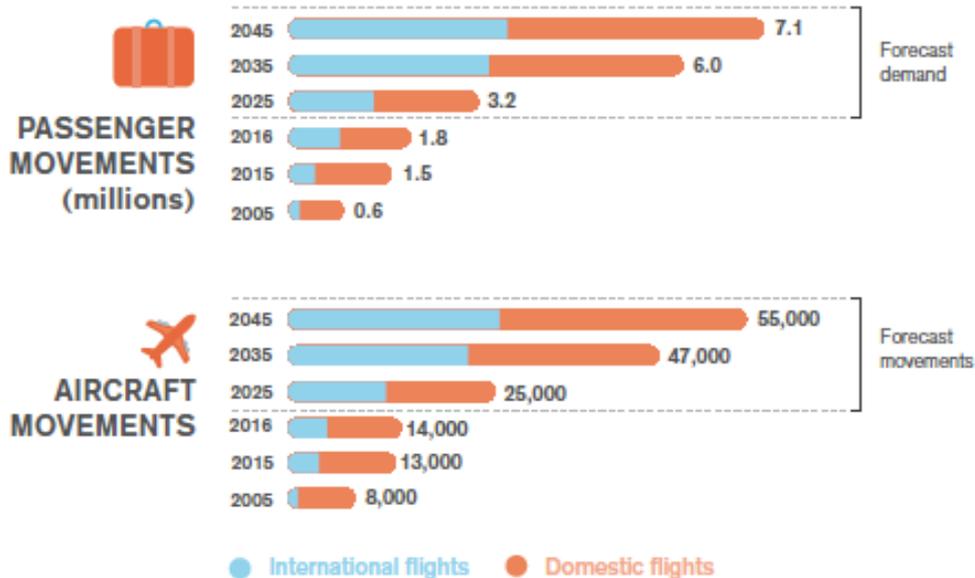


Figure 30: Passenger and aircraft movement forecasts for Queenstown Airport
Source: Queenstown Airport Masterplan Options, August 2017

The Masterplan options document also recognises the need for infrastructure growth in the district to help accommodate the level of growth expected, as shown below. The need for a regional Masterplan has been discussed in a briefing with QAC staff and should be investigated further in the Detailed Business Case.

DESTINATION INFRASTRUCTURE

- Current visitor and worker accommodation and transport issues need to be addressed.
- Regional infrastructure needs to keep pace with forecast population and visitor growth.
- A long-term master plan for the district is a critical success factor and needs to be developed in a collaborative way.

Figure 31: A snapshot of the regional infrastructure requirements as noted by QAC in the Masterplan Options document.
(Source: Queenstown Airport Masterplan Options, August 2017)

5.10.1 What this means for parking in Queenstown Town Centre

Queenstown Airport is home to a large and dynamic rental car operation that is responding to growing demand from visitors. Whereas many international groups used to have a preference for coach travel around New Zealand, there has been a recent trend towards fly and drive holidays.

This has resulted in **one third of arriving passengers using rental cars to explore the region**. Many of these visitors want to visit Queenstown town centre and that means they need parking. Today many visitors cannot find a park when they go to the town centre as they have been filled by commuters earlier in the day (see the evidence and modelling sections). This has a negative effect on their experience and impression of the town centre and this may impact their flow on tourism activities across the region. While it is encouraging to see a park and ride service introduced recently near the airport, changes need to be made to provide available parking for visitors and to encourage use of public or passenger services to access the town centre.

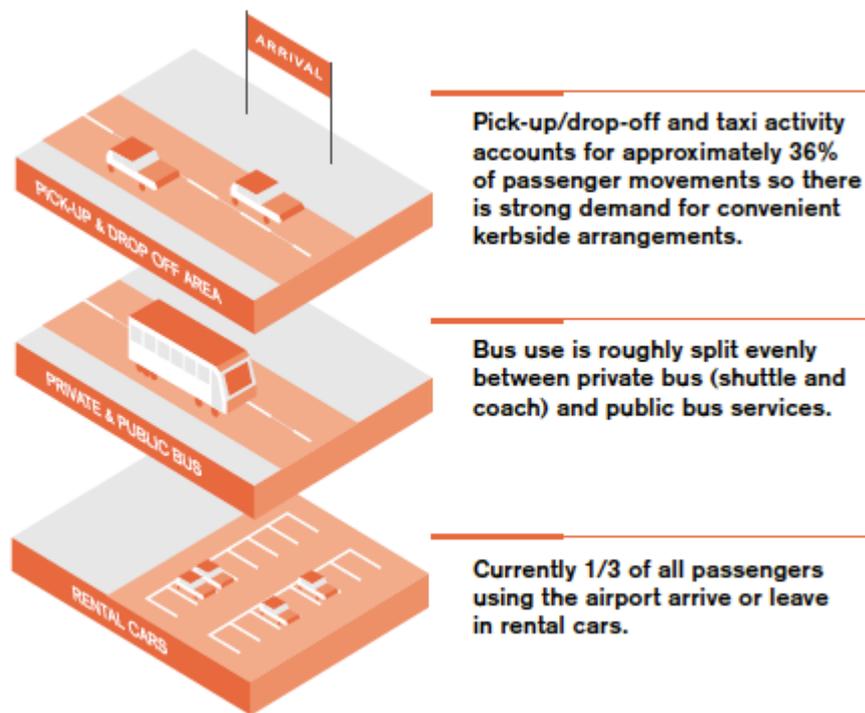


Figure 32: A snapshot of ground transport use for visitors at Queenstown Airport
(Source: Queenstown Airport Masterplan Options, August 2017)

6 Activity development

6.1 Geographical & Environmental Context

6.1.1 Areas of focus and influence

The focus area of this IBC is the Queenstown town centre. However, the full extent of P&PT provisions that service the town centre are considered. The roading corridor in and out of Queenstown is constrained through the topography and this influences the way that access can be improved. There is not room for substantial widening or new alternative alignments, so the need to shift people out of cars and into public, passenger or active transport is a big driver for change in this district.

It is acknowledged that this programme also has an interest and influence in transport allocation across the whole district. Given the programme has key objectives around reducing congestion, improved efficiency and improved town centre experiences, the solution needs to utilise a wider view that helps to inform and engage motorists earlier in their trip to Queenstown.

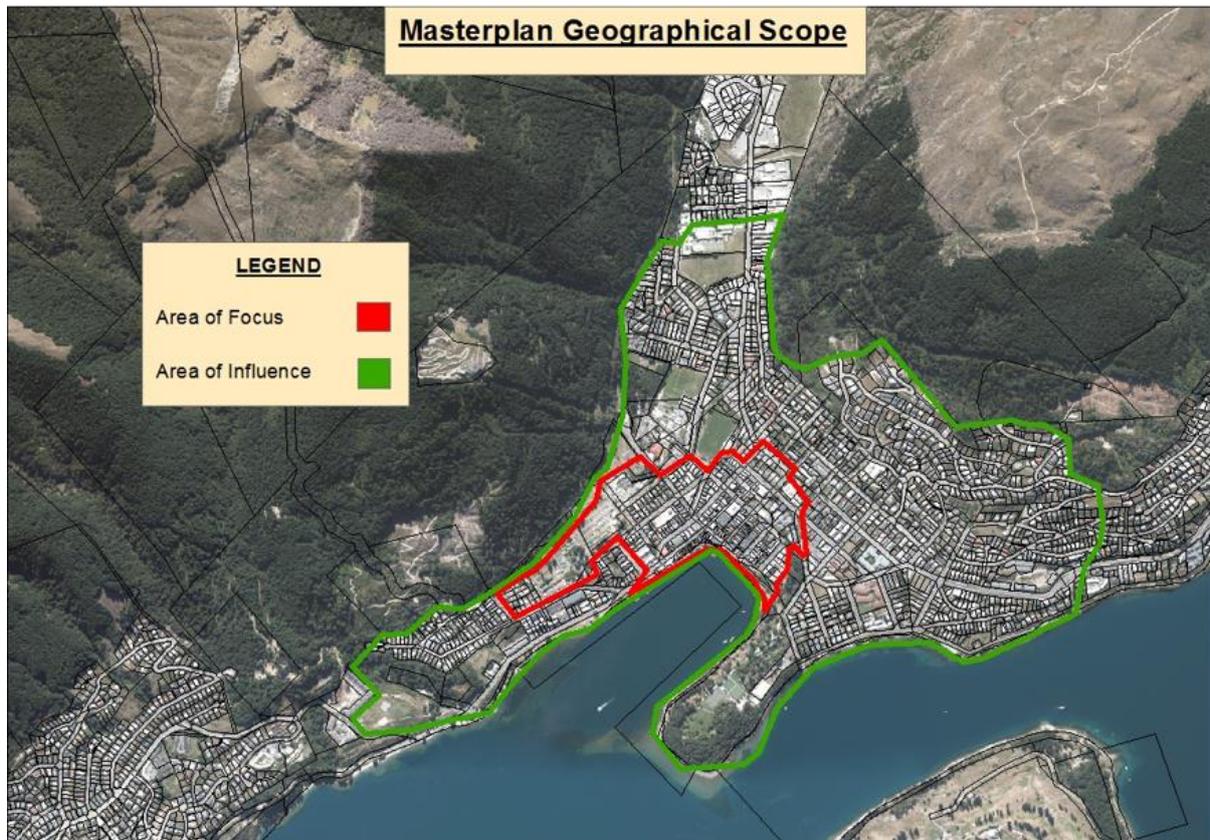


Figure 33: Masterplan Geographical Scope

6.1.2 Spatial Framework impact on P&PT

As part of the masterplan, a spatial framework is being created that will show the significant spatial moves and the integration of key transport projects. The map below shows some of the initial thinking around the public realm moves in relation to the Masterplan transport projects.



Figure 34: The preferred masterplan option demonstrating the coordination of activities through the spatial framework

6.1.3 Social Context

The 2017 Queenstown Integrated Programme Business Case provided a useful social snapshot of the Queenstown area that is relevant to this programme.

“Queenstown is one of New Zealand’s premier tourist destinations offering a diverse mix of commercial, civic, cultural, entertainment and sporting activities to both international and domestic visitors. The residential and tourism growth in Queenstown (shown in the strategic case) is placing strain on existing infrastructure, particularly housing”.

Source: 2017 Queenstown Integrated Programme Business Case.

Statistics New Zealand applies a scale of 1 to 10 to depict levels of social-economic deprivation. A value of 10 indicates that the meshblock is in the most deprived 10 percent of areas in New Zealand, according to the NZDep2013 scores.

The map below illustrates the level of deprivation in the Queenstown area by census meshblock, with a small area of high deprivation in the south west of Queenstown, while most of the study area has a deprivation level between 2 and 6. The deprivation scores are based on nine different dimensions as outlined in the diagram below.

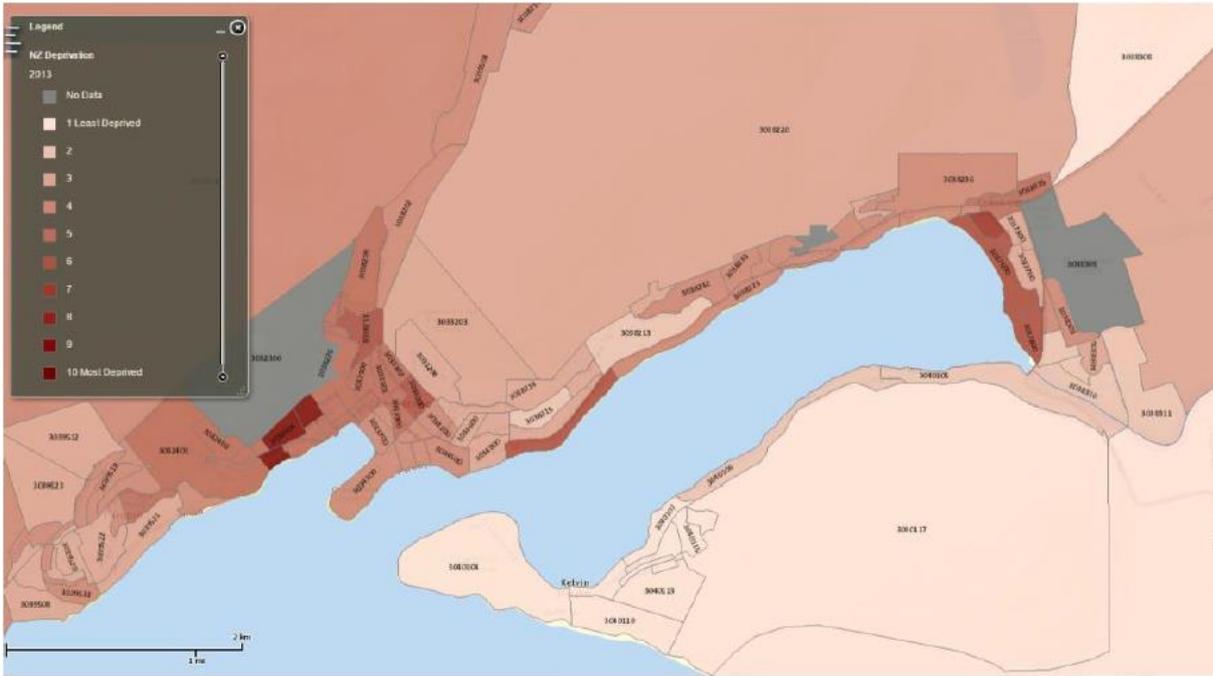


Figure 35: Level of Deprivation in Queenstown

The median income for people in this district has not kept pace with the local price of living, which creates growing social pressures. Despite the growing wealth in the area, the district has a significant proportion of people on wages that are lower than the national average. The table below shows the latest display of this comparison from the Infometrics economic profile for the district (sourced from the QLDC website).

Mean annual earnings in Queenstown-Lakes District and New Zealand (2016)

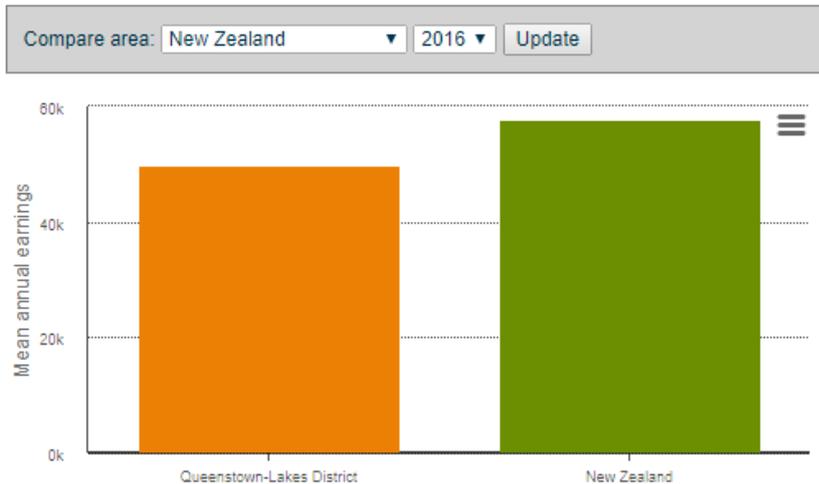


Figure 36: Mean annual earnings in Queenstown Lakes District
(Source – Queenstown Lakes District Economic Profile:
<https://ecoprofile.infometrics.co.nz/queenstown-lakes+district>)

This imbalance needs to be considered in the context of living costs derived from residential properties. Notably, the proportion of income dedicated to residential property costs (renting or purchasing) for people in this district far exceeds the national average due to climbing property prices and a potential lack of adequate supply. The table below demonstrates the rental affordability index for the region as collated by

Infometrics. This index presents the ratio of the average weekly rent to average weekly earnings. A higher ratio, therefore, suggests that average rents cost a greater multiple of typical incomes, which indicates lower rental affordability.

Rental affordability index (2016)

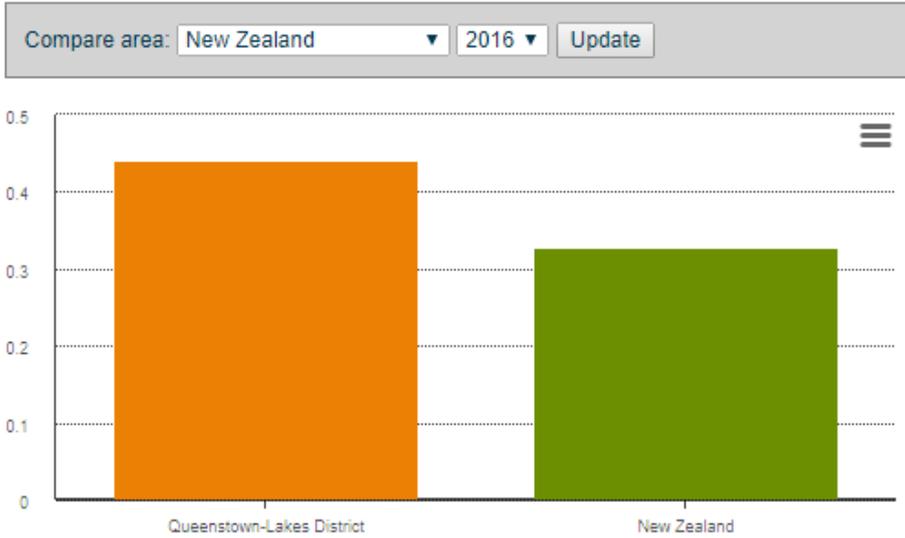


Figure 37: Rental affordability index for the district
(Source – Queenstown Lakes District Economic Profile:
<https://ecoprofile.infometrics.co.nz/queenstown-lakes+district>)

population

Total population

34,700

Usually resident persons

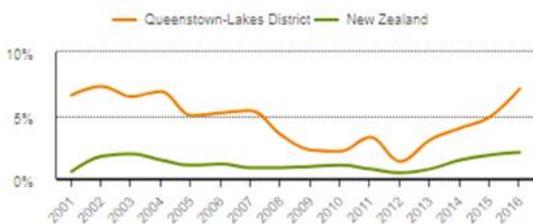
0.7%

of national total

Population growth Annual average % change

	2016	Last 10 years
QUEENSTOWN-LAKES DISTRICT	7.1%	3.7%
NEW ZEALAND	2.1%	1.2%

Population growth:



standard of living

Mean annual earnings 2016

\$49,780

Queenstown-Lakes District

\$57,780

New Zealand

Annual earnings growth Annual average % change

	2016	Last 10 years
QUEENSTOWN-LAKES DISTRICT	4.9%	3.3%
NEW ZEALAND	3.1%	3.4%

Housing affordability (higher is less affordable)

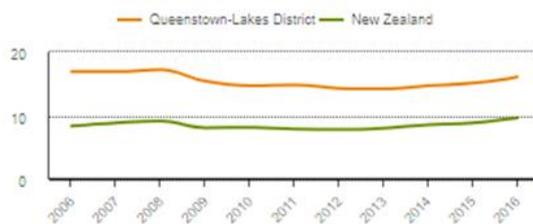


Figure 38: Population growth and standard of living for the district

Source – Queenstown Lakes District Economic Profile:
<https://ecoprofile.infometrics.co.nz/queenstown-lakes+district>

This affordability situation also needs to be considered in the context of growth in the district, the pressure this puts on infrastructure and services, and what this means for local infrastructure funding. In addition to having a disproportionate level of residents to visitors (1 to 38), much of the resident base and local workforce have low levels of disposable income (demonstrated through a standard of living index shown above).

This situation manifests in other areas, such as transport choices. Due to the lack of attractive and competitive transport options (as shown in the evidence), the private vehicle is the main form of transport for all, including the low-income earners in the services industry. This reliance causes congestion at peak times and the parking search circulation as this workforce looks for cheap and free public parking.

An improved public and passenger transport programme stands to provide significant social benefit in Queenstown. As shown in the ILM discussions, much of the investment value stems from improving access to the town centre and reducing the impacts of the private vehicle as part of a wider collection of strategic interventions in the Queenstown Town Centre Masterplan.

6.2 Economic context

Queenstown’s town centre offers a host of attractions for visitors and forms a gateway to planned journeys and experiences through the region and beyond. Therefore, the ability for the town centre to shape formative impressions of New Zealand and the region for visitors, is immense.

Queenstown is a significant player in the New Zealand tourism industry due to its ability to attract a significant proportion of the nation’s tourist expenditure.

Monthly regional tourism estimates from the Ministry of Business Innovation and Employment (MBIE) found that the annual tourism expenditure exceeded \$2 billion in Queenstown in the year to October 2016. Queenstown is third to Christchurch and Auckland for international visitor value and represents 13% of the national total.

The table below illustrates Queenstown’s relative importance as a tourist destination from both a domestic and international perspective. The strong performance in international numbers demonstrates the value that Queenstown holds as a gateway to other regions and the rest of the country.

Table 16: Queenstown’s relative importance as a tourist destination

(Source – <http://www.mbie.govt.nz/info-services/sectors-industries/tourism/documents-image-library/key-tourism-statistics.pdf>)

RTO (\$millions)	Domestic	International	Total	Market Share
Auckland	3,498	3,987	7,485	29%
Christchurch	1,255	918	2,173	8%
Queenstown	681	1,434	2,115	8%
Wellington	1,344	692	2,026	8%
Waikato	1,060	336	1,396	5%

Economic performance (measured by GDP) in Queenstown and the Wakatipu Basin is growing at a significantly higher rate than the New Zealand average and measured \$1,299 billion in the year to March 2016; up 9.9% from a year earlier. New Zealand's GDP increased by 2.5% over the same period.

Economic growth in Queenstown and the Wakatipu Basin averaged 4.4% pa over the last 10 years compared with an average of 1.8% pa in the national economy.

GDP growth

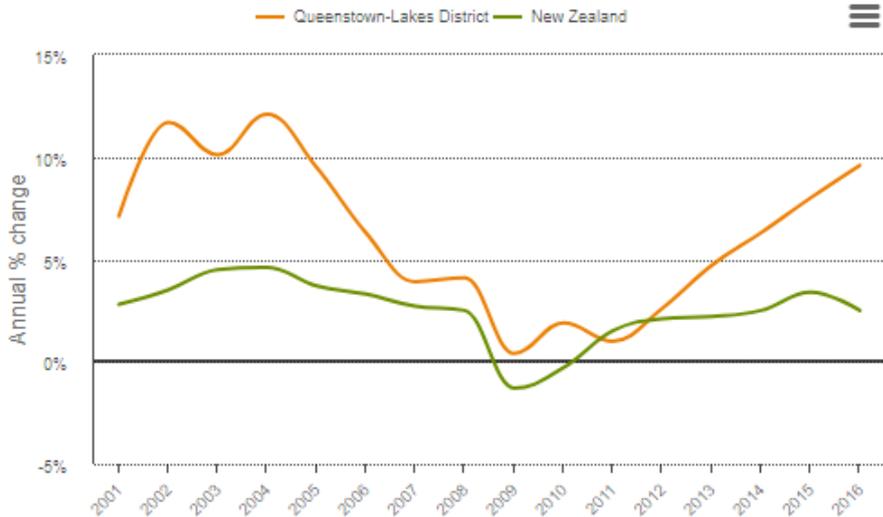


Figure 39: Economic Performance of the district compared to New Zealand
(Source - <https://ecoprofile.infometrics.co.nz/queenstown-lakes%2bdistrict/Gdp>)

6.2.1 The impact of congestion

The analysis completed in the Queenstown Integrated Transport Programme Business Case demonstrates that the cost of congestion in Queenstown is significant and is forecast to grow considerably. This calculation has been completed using the Queenstown Lakes District Transportation Model. Like this programme, it includes the future forecast years of 2025 and 2045.

“Analysis of two key model outputs has been undertaken being vehicle operating costs and the value of time using the NZ Transport Agency Economic Evaluation Manual procedures. Costs have been calculated by estimating the travel time and vehicle operating costs when there is no congestion present and comparing this to the base model congestion taking into account the traffic demand by time of day and network operating conditions.

The resultant annualised total costs of congestion demonstrate that the base year economic cost of congestion of \$35 million is expected more than double in the next 30 years.”

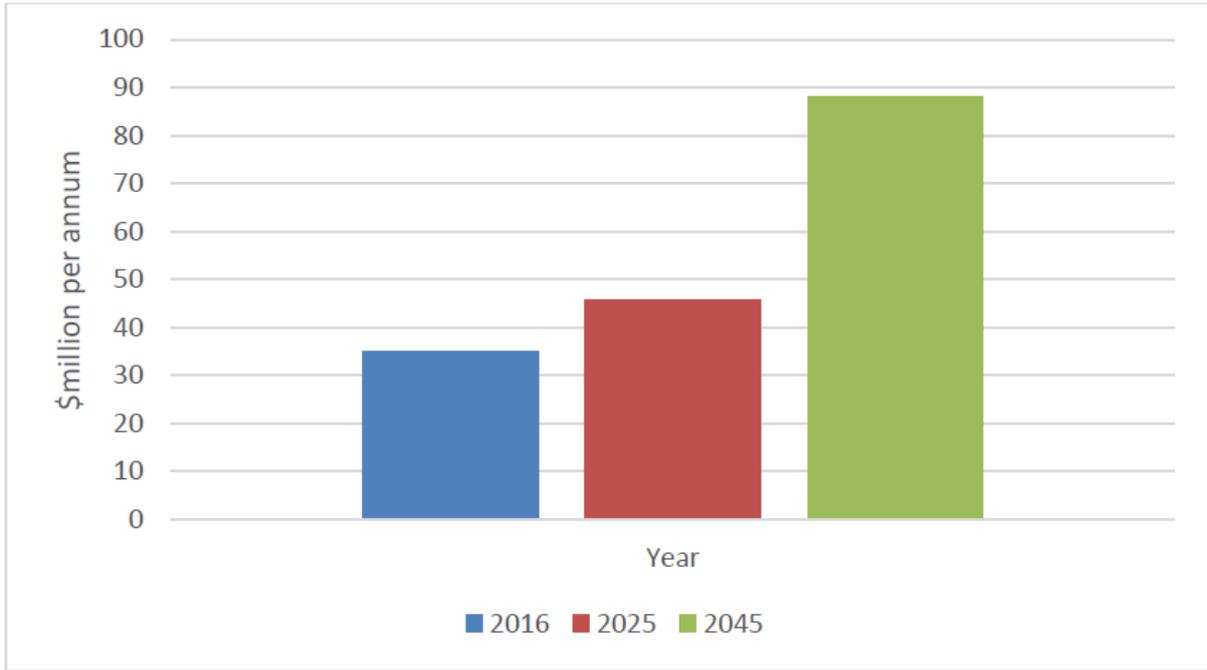


Figure 40: The cost of congestion in Queenstown Commercial context

Parking provision and management, alongside transport in general, play a huge role in supporting and maintaining the local, regional and national economy, while also meeting the needs of the growing local population.

6.3 Supporting sustainable growth

Over the last 15 years, many planning studies and reports completed around transport and parking and transport have provided guidance for the Queenstown Town Centre and the wider Wakatipu Basin.

A significant shift to note in these reports is the better understanding of supply levels and the way they relate to an efficient transport network and an attractive and people-friendly town centre.

In the Queenstown Transportation and Parking Strategy Study of 2004, the recommendation was to enable growth through developing more capacity and supporting an upswing in demand. The down side of this approach is the way it encourages reliance upon a single mode, the private vehicle. The flow on effect of this approach is the detracting from the town centre public spaces due to the focus on facilitating cars and parking as opposed to public transport use and walking within the centre. This strategy also may not have envisaged that such a large component of the congestion experienced around the town centre is attributable to motorists looking for a park, often not successfully.

Throughout the Queenstown Masterplan programme, the user experience has been prioritised through achieving a mix of congestion reduction, network efficiency, improved public realm and provision of adequate supply. This approach enables fresh thinking around how demand, supply and mode choices can be managed to deliver a better result for the Town Centre.

This IBC, as part of the wider masterplan programme, investigates how understanding and managing key elements like road capacity, parking supply and public transport capacity can take pressure off the town centre and encourage changed transport behaviours. Appropriate supply also sends signals to people coming in to use the carparks on the outside of town before jumping on the prioritised bus/ferry or gondola service.

The diagram below demonstrates how parking, public transport and private vehicle travel can be considered and managed to enable a more balanced mix within the town centre. The key item to note in this diagram is the need for car travel to stabilise while other modes are used to accommodate growth, notably public transport, coach, cycling/walking and ultimately a mass transit solution (shown in green). The mass transit solution is not yet identified but it may include a gondola or light rail service (for example).

Growth and movement

Frankton Road Corridor People Movements by Mode

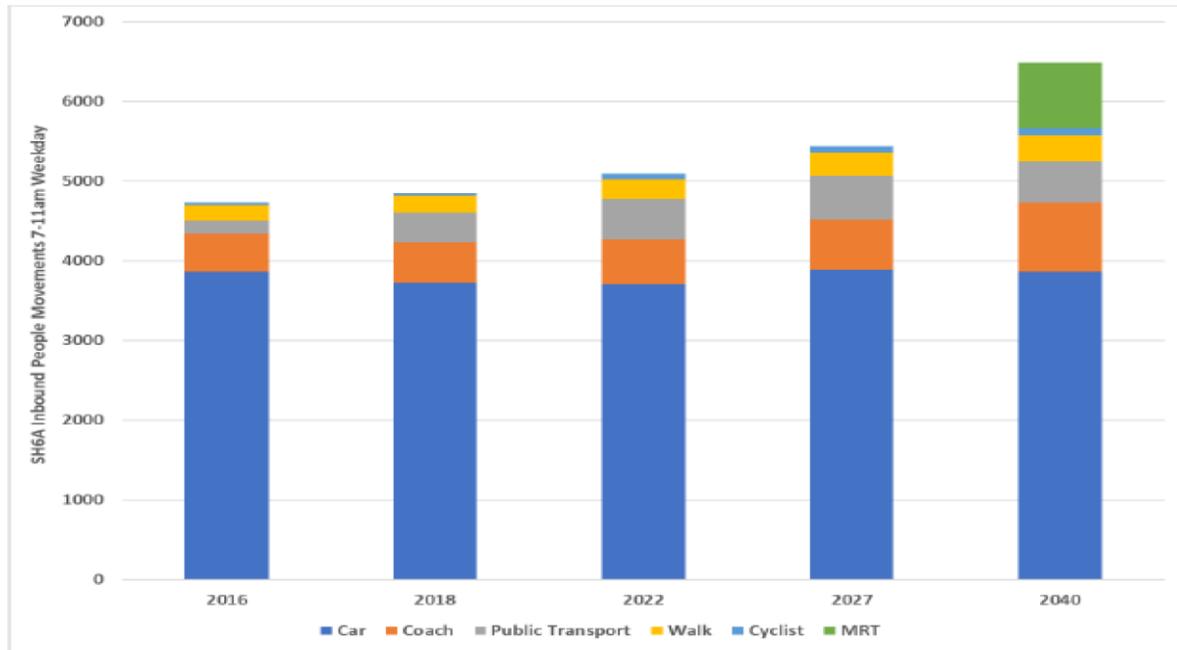


Figure 41: A breakdown of inbound traffic on Frankton road by trip type.
(Source: Queenstown Town Centre Transport Modelling 2017)

7 Options development and assessment

7.1 The option development process

Building on the work completed to establish the ILM, Rationale and Beca worked with project stakeholders to guide the development of longlist programme options. Each programme was described in terms of intervention inclusions in preparation for evaluation through a Multi Criteria Analysis (MCA).

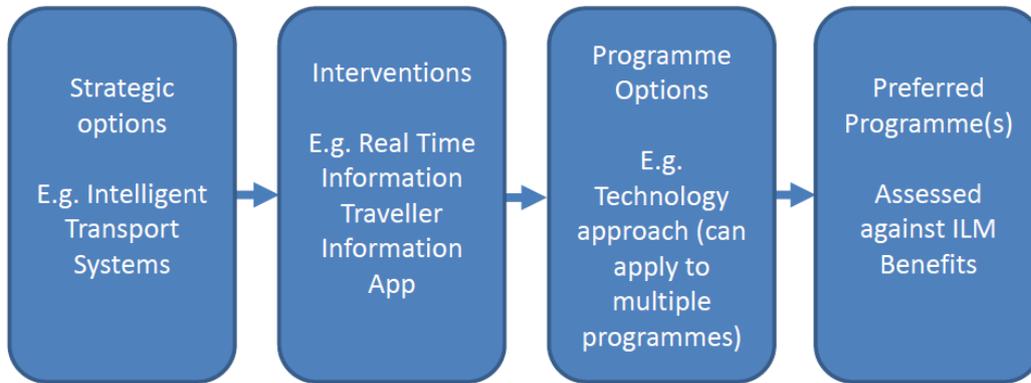


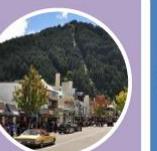
Figure 42: Option development and assessment process

7.2 Strategic options

A range of strategic options were created to group together the activities that could be used to address the problems. These options provided context for the workshop discussions around interventions and programme options in addition to stakeholder briefings, where the project team could demonstrate the scope of what was being considered.

Table 17: Explanation of strategic options

Strategic Option	Description	Imagery used in workshop discussions			
Accessibility planning	Use and provision of tools to inform the user and network development.	 <p>Maps</p>		 <p>Network Planning - Network Operating Plan</p>	
Marketing communications	User-targeted information aimed at demonstrating the value of public and passenger transport as a viable alternative to the private car.	 <p>Tourist Information</p>	 <p>Free Maps</p>	 <p>Website</p>	 <p>Airport/Hotel Marketing</p>
Intelligent transport systems	Introduction of intelligent transport systems to inform users through an integrated set of outputs, such as apps, signage and smart card ticketing. This arrangement helps users to fully understand their choices while providing the system operators with meaningful data on use and requirements.	 <p>Real Time Information</p>	 <p>Traveller Information Systems - Apps</p>	 <p>Mobility as a Service</p>	 <p>Integrated Smart Ticketing (Go Card)</p>

Strategic Option	Description	Imagery used in workshop discussions					
Ancillary services	Provision or enhancement of ancillary services to support public and passenger transport use. These services aim to enhance the experience with a focus on convenience, safety and integration.	 <p>Ticketing Services/Retail Integration</p>	 <p>Toilets/Safety/Build Quality/Wifi</p>	 <p>Bike Parking Services</p>	 <p>Proximity to: - Taxis - Intercity Services Tourism Transport Operations</p>	 <p>Bag Services</p>	
Bus stop infrastructure	These options consider where new or upgraded facilities may be located and how they can form part of the solution.	 <p>Infrastructure - Use Existing Camp Street</p>	 <p>Infrastructure - Multiple on street sites</p>	 <p>Infrastructure - Upgrade Camp Street (4 Bays)</p>	 <p>Infrastructure - New On Street - Stanley St. (6 Bays)</p>	 <p>Infrastructure - New On Street with PT & Ped Priority</p>	 <p>Infrastructure - New Off Street</p>
Bus priority	Priority measures provide an opportunity for PT to operate more efficiently than cars, therefore improving their attractiveness.	 <p>Bus Priority Pre New Arterials - Stanley Street</p>  <p>Bus Priority Post New Arterials - Network Upgrades</p>  <p>Exclusive/Priority Access</p>					

Strategic Option	Description	Imagery used in workshop discussions
<p>Tourist operator/passenger transport</p>	<p>Tourist focused interventions that aim to improve the offering to this group through better connected services and more efficient arrangements.</p>	
<p>Alternative public transport</p>	<p>These interventions include passenger transport options that can play a big role in taking the pressure off the roadways as the principle means for transport in the district.</p>	

7.3 The need and location for a new interchange

As shown in the Queenstown Town Centre Masterplan Passenger Transport Requirements document compiled by Beca, one of the early requirements agreed by the team and stakeholders was the need for a new interchange to meet the needs of growth, improve operations and to better position public and passenger transport services in the town centre. The content below from the Beca report and the supporting MCA shows how a range of town centre location options were considered and then fed into the subsequent programme option development.

The frequency of the Frankton Road bus service will need to increase to a six-minute service by 2025. The services to Fernhill and Arthurs Point are unlikely to increase to this level of frequency. This means that as patronage and service frequencies grow, some services between Frankton and Queenstown will not continue on to Arthurs Point or Fernhill, but load and return to Frankton, on a schedule. This is a key development that will require an increase in bus stop capacity from four bays to six bays at some time between around 2020 and 2025 (depending on service growth). The number of stops proposed to be provided in QTC is as requested by Otago Regional Council (ORC).

Camp Street could be extended to from the proposed interim four bays, but this would require the removal existing Goods Vehicle Loading Zones. This would have a significant impact on surrounding businesses on Camp Street and Beach Street. However, the biggest issue is this bus exiting via Ballarat Street could experience significant delays, especially during the PM peak period, which would be exacerbated during in the peak season.

7.3.1 Interchange location options

As there is unlikely to be sufficient room to provide six stops on Camp Street, and because buses are anticipated to experience increasing delays egressing Camp Street due to increasing traffic congestion in QTC, alternative locations were considered in the town centre. These included developing a new interchange at the following on-street locations:

- Stanley Street - between Shotover Street and Ballarat Street
- Stanley Street - between Ballarat Street and Beetham Street
- Athol Street - between Shotover Street and Ballarat Street (incorporating the existing Inter-city coach service stops)
- Shotover Street – between Stanley Street and Athol Street
- Shotover Street – between Athol Street and Camp Street
- Shotover Street – between Camp Street and Rees Street
- Shotover Street – between Rees Street and Beach Street
- Shotover Street between Stanley and Henry Street
- Camp Street – between Shotover Street and Memorial Street
- Coronation Drive – between Stanley Street and High Top/Frankton Road
- Man Street (between Camp Street and Brecon Street).

The following off-street locations were also considered:

- A site north of Stanley Street, bounded by Gorge Road, Henry Street and Ballarat Street
- Recreation Ground car park (off Memorial Street and Isle Street).

These potential locations are shown in the diagrams below.

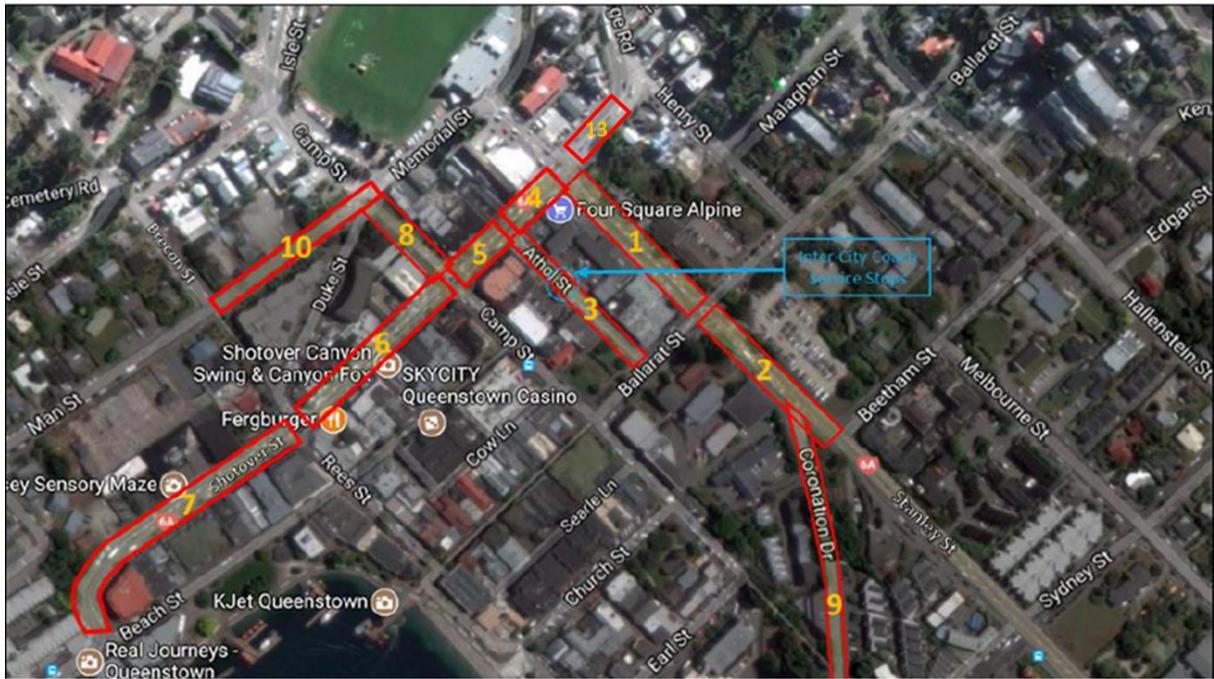


Figure 43: On street interchange locations considered



Figure 44: Off street options

7.3.2 Assessment of Environmental Effects (AEE)

QLDC engaged Beca to undertake an AEE to inform the decision making around the site selection for the PT Hub and the supporting Ancillary Building. This assessment applied the following methodology.

Having regard to the context and need to consider all potential effects of the options, Beca has assessed the effects against the following criteria:

- Construction Impacts
- Safety
- Heritage
- Cultural
- Urban Design
- Landscape
- Natural environment
- Social
- Human Health
- Property
- Transport System Integration
- Economy

Beca has used the criteria described above to assess each of the options. Firstly, each option has been given a score from + 3 to – 3 using the following from the draft guidance: To accompany each score is a brief explanation, which provides rationale for the score.

Effects criteria	Scoring (score after mitigation)
Significant adverse effect	-3
Moderate / major adverse effect	-2
Minor adverse effect	-1
Neutral / no change	0
Minor positive effect	1
Moderate / major positive effect	2
Significant positive effect	3

The draft assessment of effects was presented to staff from QLDC at a workshop. The purpose of the workshop was twofold:

1. To enable staff from Council to have input to the assessment and to have a sense of ownership of the document that they will take up to Council as part of the IBCs for approval; and
2. To test Beca’s assessment with the project team and experts in Council.

The full assessment of all the options for the PT Hub and Ancillary Building are shown in the full report in Appendix 16.

With regards to the PT Hub location, the following high-level observations apply:

- The best rating option was number 1, New interchange at an on-street location - Stanley Street, between Shotover Street and Ballarat Street.
- Options 8 and 10 rated significant adverse effects due to potential traffic conflicts and a lack of adequate space.
- Option 11 also included a perceived significant adverse effect due to the loss of play centre, art centre and other community facilities. Loss of opportunity for civic campus on the same site.

The ratings applied in this spreadsheet informed the wider discussion and comparison of options through the treasury MCA tools used for this project. This assessment will be built upon during the detailed business case, as shortlisted options are retested, and consenting applications are developed where required.

7.3.3 Location evaluation

In addition to the AEE assessment of each potential PT Hub location, each site was rated against project investment objectives, business needs and common risks. The results of this evaluation are shown in the commentary and the MCA shown below.

The use of any section of Shotover Street for a bus terminal facility was not progressed due to the large demand for on-street parking and loading facilities.

Athol Street is too constrained to accommodate the required number of spaces under its one-way arrangement. The existing car parking ingress and egress points would need to be closed effectively removing the car parking.

The Coronation Drive option was not progressed as it would be difficult to construct the necessary width in the constrained road boundary, impact on trees and property access, and is also considered to be too remote from the city centre to be an effective public transport hub. There is also not enough room to provide the necessary Transport Hub passenger facilities (toilet, baggage storage, kiosk, waiting area, etc.).

The Upper Shotover Street option between Stanley and Henry Streets was discounted for the following reasons:

- it was further away from future ferry wharf locations
- it was seen as creating traffic disruption issues in construction and operation
- there doesn't seem to be enough room for 6 bus stops on Shotover St, particularly as the road is curved at its northern end
- buses turning left into Shotover from Henry looks to be constrained
- it would seem hard to maintain access to existing kerbside properties, and will probably require removal of parking from one side of Henry and Ballarat to accommodate buses at this location
- all of these elements are expected to create significant costs
- access to this site could be difficult following the completion of the new arterial roads, particularly the Henry to Man Street section.

Man Street was discounted as the road is currently too narrow and would require widening on both sides of the road to provide sufficient width. Existing property access on the northern side would make locating bus bays difficult, and is likely to be required to form the proposed new arterial road. Also, there is no place to construct the necessary Transport Hub passenger facilities.

Consideration was given to a dispersed bus interchange facility, but this is not recommended as it is important that bus users can interchange between services conveniently and legibly. The preferred way forward is the on-street option selected to develop a new Public Transport interchange on Stanley Street, between Shotover Street and Ballarat Street.

The MCA below demonstrates how these locations were rated against the benefits, business needs and risks to identify preferred options for inclusion in the long list of programmes.

Option 1 provides the best overall solution, followed by option 11 (which was noted to have some access and operational challenges around getting in and out of the off-street facility). Many options were dismissed due to their inability to meet the desired capacity and operational requirements and their impact on town centre operations - such as tourism operations on Shotover Street. It was noted that option 1 is reliant upon the new arterials being opened.

A new mid-block signalised pedestrian crossing was selected as the preferred to be created in the middle of this stretch of Stanley Street to allow for passengers to get to both sides of the road, safely. The intersection of Stanley Street-Memorial Street-Gorge Road-Shotover Street will be signalised and expanded.

Prior to this stretch of Stanley Street, towards the east of Beetham Street up to Frankton Road, bus priority measures including bus lanes are proposed to help improve service reliability and bus journey times, particularly those commuting between Frankton and Queenstown town centre.

Figure 45: PT Hub Location MCA evaluation

TEMPLATE 2														Investor: QLDC Facilitator: Edward Guy Initial Workshop: May 2017 Version No.: 1.0 Last Modified by: Ben Smith			
Town Centre Public Transport Hub Location Options																	
			Programme options														
			Option 0 (expansion of current site)	Option 1 between Ballarat and Shotover Street (with Passenger transport elements between Ballarat and Betham)	Option 2 between Ballarat and Betham Street	Option 3 Athol Street - between Shotover Street and Ballarat Street (incorporating the existing Inter-city coach)	Option 4 Shotover Street - between Stanley Street and Athol Street	Option 5 Shotover Street - between Athol Street and Camp Street	Option 6 Shotover Street - between Camp and Rees Street	Option 7 Shotover Street - between Rees and Beach Street	Option 8 Camp Street - between Shotover Street and Memorial Street	Option 9 Coronation Drive - between Stanley Street and High Top/Frankton Road	Option 10 Man Street (between Camp and Brecon Street)	Option 11 OFF-STREET: A site north of Stanley Street, bounded by Gorge Road, Henry Street and Ballarat Street	Option 12 OFF-STREET: Recreation Ground car park (off Memorial Street and Isle Street).	Option 13 Shotover Street between Henry and Stanley Street	
Outcome: Network Performance & Capability			Relative Importance of objective	16%	75%	40%	17%	10%	10%	10%	10%	15%	15%	15%	66%	12%	15%
Investment Objective 1	More Efficient Passenger and Public Transport. KPI1: Travel Time Reliability KPI2: Passenger Access KPI3: Town Centre Throughput	45%	10%	80%	40%	20%	10%	10%	10%	10%	20%	15%	15%	60%	15%	15%	
Investment Objective 2	Liveability and Visitor Experience. KPI1: Visitor Experience KPI2: Liveability KPI3: User Experience	55%	20%	70%	40%	15%	10%	10%	10%	10%	10%	15%	15%	70%	10%	15%	
Business Needs/Considerations																	
Integrated transport - connectivity with other transport options																	
Promote travel demand management measures																	
Accessibility for commercial activity																	
Promotes accessibility for each user type																	
Enhanced environment																	
Quality and security																	
Contributing to masterplan vision																	
Meeting the needs of growth																	
Affordability																	
PT Specific Business Needs																	
Tourism passenger pick/drop-off																	
Assessment of environmental effects																	
Risks																	
Technical																	
Operational																	
Financial																	
Stakeholder/Public																	
Environmental																	
Safety																	
Economic																	
Accessibility & Social Inclusion																	
Cost of being Disrupted																	
Dis-benefits																	
Disrupting town centre operations (public & private)																	
Ranking																	
1-3				1	3									2			
Overall Assessment:																	
Option 1 provides the best overall solution, followed by option 11 (which was noted to have some access and operational challenges). Many options were dismissed due to their inability to meet the desired capacity and operational requirements and their impact on town centre operations - such as tourism operations on Shotover Street. It was noted that option 1 is reliant upon the new arterials being opened.																	
Recommendation:																	
Options 1 and 11 represent the preferred way forward, with option 0 to be carried forward as the status quo for comparison.																	

7.4 PT Hub Ancillary Building site selection

In addition to selecting a preferred site for the public transport hub, a number of locations have been considered for the supporting ancillary services building. This building is aimed at provided amenities and facilities to enhance the public transport experience. Based on the preferred way forward including a PT Hub on Stanley Street, a list of nearby potential ancillary building sites has been identified. Each site needs to be analysed and evaluated as part of the Detailed Business Case. The potential site options include:

- Status quo – no hub and facility.
- Development of a building within the road reserve.
- On the north side of Stanley Street – between Shotover and Ballarat.
- On the south side of Stanley Street – between Shotover and Ballarat.
- On the north side of Stanley Street between Ballarat and Betham.
- On the south side of Stanley Street between Ballarat and Betham.

While no preferred ancillary building site has been selected at this stage, the AEE assessment shown in Appendix 16 will help guide the decision making in the detailed business case.

7.5 Long list programme development

Using the strategic context provided by the relevant plans and priorities and the body of supporting evidence, a set of workshops was used to develop a long list of programme options that could address the agreed problems. With the investment objectives in mind, a collaborative approach was used to table all the possible interventions before developing a set of longlist programmes for the project team and stakeholder groups to discuss and refine.

7.6 The do-minimum and do minimum plus (demand and productivity focus)

The do minimum option was considered as the least level of investment to achieve a minimum level of service. Utilising a productivity focus, the do minimum option includes:

- improved accessibility planning
- marketing communications, including free maps, tourist targeted information, targeted website information and airport/hotel information
- intelligent transport systems aimed at informing users, including real time signage, traveller apps, mobility as a service and integrated ticketing (go card)
- improved taxi stands with good proximity to PT facilities, tourist operator ad hoc pick up and drop off
- wharves/terminals for waterborne public transport.

Using the MCA to analyse the “do minimum” option has demonstrated that this approach cannot deliver as required against the investment objectives. This option also rated poorly unacceptable level against the business needs, while also presenting a reasonably high level of risk. The current and planned allocation for public transport facilities under the do minimum (and without the proposed changes to arterials and parking) will struggle to meet the forecast bus numbers and will not be able to compete with the private vehicle. The current two bay Camp Street will not be able to support the expected demand and while four bays will be applied in this area, this will have limited durability.

Under the current arrangements, passenger transport operations can be ad hoc and have the potential to cause anxiety and unplanned traffic behaviours. A level of frustration can arise for tourism operators who have less allocated spaces than chartered services as they strive to pick up people close to their outlets. This activity creates a buzz in town and is great for the user as they need to go into the town centre, so it should be embraced as part of a better organised system. A regulatory system is not currently set up for this and loading zones could be changed to accommodate it. This type of change is proposed to occur in most of the other programmes.

7.6.1 The long list

Seven programme options were developed (including the do-minimum), with 45 intervention types captured and grouped together under strategic themes and perceived investment levels. The number of interventions listed demonstrates the breadth of considerations created by QLDC, Rationale and Beca in partnership with the project stakeholders.

This long list was tested with wider the programme advisory group and then with Queenstown District councillors as part of the programme and business case development process (see Appendix 3).

The agreed long list is shown below.

Table 18: The long list of options

#	Programme name	Description
0	Do minimum	This option builds only slightly on the status quo to include maps and marketing communications, alongside the existing rollout of smart ticketing.
1	Do minimum + (demand and productivity focus).	Utilising a demand and productivity focus, this option included enhanced accessibility planning, marketing communications, intelligent transport systems, better integration with taxis and tourist operators plus the introduction/enhancement of alternate passenger transport modes such as gondola and water taxi. Integration with waterborne public transport is also included in this programme.
2	Multiple on Street Bus Stop Facilities + Dedicated Tourist/Passenger Transport on Street Facilities.	This programme includes multiple on street facilities (Camp, Athol, Shotover, Stanley and Memorial Streets), dedicated tourist and passenger transport on street facilities plus the planning, communications and its actions included in programme 1. Integration with waterborne public transport is also included in this programme.
3	Upgrade Existing Facility - Camp Street (4 Bays) + Dedicated Tourist/Passenger Transport on Street Facilities.	This programme explores the merits of upgrading the current camp street facility to 4 bays, combined with dedicated tourist and passenger transport on street facilities plus the planning, communications and its actions included in programme 1. Integration with waterborne public transport is also included in this programme.
4	New on Street Facility- Stanley Street (6 Bays) + Dedicated Tourist/Passenger Transport on Street Facilities.	This programme groups together a new on street facility on Stanley Street with dedicated tourist and passenger transport on street facilities plus the planning, communications and its actions included in programme 1. Integration with waterborne public transport is also included in this programme.
5	On Street - Focus/Reduced Traffic (Stanley Street) + Dedicated Tourist/Passenger Transport on Street Facilities.	This programme builds on option 4 and adds reduced traffic and ancillary services such as ticketing, CPTED, attractive build quality and taxi proximity. It also includes dedicated tourist and passenger transport on street facilities plus the planning, communications and its actions included in programme 1. Integration with waterborne public transport is also included in this programme.
6	Off Street - Focus (Dedicated Facility) + Dedicated Tourist/Passenger Transport off Street Facilities integrated with buses.	This programme explores the benefit of locating a new facility off Stanley street in addition to a full suite of ancillary services and the dedicated tourist and passenger transport on street facilities plus the planning, communications and ITS actions included in programme 1. Integration with waterborne public transport is also included in this programme.
7	On street PT Hub plus a dedicated off-street passenger transport facility and cumulative supporting elements from previous options.	This programme includes both the on and off-street facilities plus previously included interventions around accessibility planning, communications, ITS and ancillary services.

The seven new programmes (plus the do minimum) are shown below in the NZTA programme development template. This was used to compare and contrast the programme inclusions.

Strategic Response			Programme Options							
Strategic Alternatives	Strategic Options	Intervention options	Programme 0	Programme 1	Programme 2	Programme 3	Programme 4	Programme 5	Programme 6	Programme 7
			Do Min	Do Min - Demand and Productivity Focus	Multiple on Street Bus Stop Facilities + Dedicated Tourist/Passenger Transport on Street Facilities.	Upgrade Existing Facility - Camp Street (4 Bays) + Dedicated Tourist/Passenger Transport on Street Facilities.	New On Street Facility - Stanley Street (6 Bays) + Dedicated Tourist/Passenger Transport on Street Facilities without new arterials.	On Street - Focus/Reduced Traffic (Stanley Street) + Dedicated Tourist/Passenger Transport on Street Facilities with new arterials.	Off Street - Focus (Dedicated Facility) + Dedicated Tourist/Passenger Transport off Street Facilities integrated with buses.	On Street - Public Transport Hub (Stanley Street) + Dedicated Tourist/Passenger Transport Off Street Facilities with new arterials.
IMPROVED LIVEABILITY and VISITOR EXPERIENCE										
	Business Cases	Public and Passenger Transport Business Cases	/	/	/	/	/	/	/	/
	Accessibility Planning	Maps Network Planning - Network Operating Plan	/	/	/	/	/	/	/	/
	Marketing and Communications	Tourist Information Website Development - Public and Passenger Transport Free Maps - Public and Passenger Transport Workplace/School Travel Plans - Low - Public and Passenger Transport Banner Development - Public and Passenger Transport Leaflet Development - Public and Passenger Transport	/	/	/	/	/	/	/	/
	Intelligent Transport Systems	Real Time Information - Signage Real Time Information - Information Traveller Information Systems - Apps Mobility as a Service Integrated Smart Ticketing (Go Card)	/	/	/	/	/	/	/	/
	Ancillary Services	Ticketing Services Retail Integration Toilets Crime Prevention Through Environmental Design (CPTED) Attractive Build Quality WiFi Bike Parking Services Proximity to taxis Proximity to Intercity Services Proximity to Tourism Transport Operators Bag Services		/	/	/	/	/	/	/
MORE EFFICIENT PUBLIC TRANSPORT										
	Reduce Congestion - Supply	Infrastructure - Use Existing Camp Street Infrastructure - Multiple on street sites Camp Street Athol Street Shotover Street Stanley Street Memorial Street Infrastructure - Upgrade Camp Street (4 Bays) Infrastructure - New On Street - Stanley St. (6 Bays) Public Transport Facility - On Street (Stanley St) (Land Acquisition) Public Transport Facility - On Street (Stanley St) Stanley St - Shotover to Ballarat (Bus Interchange) - Widen Footpath Infrastructure - New On Street with PT & Ped Priority Infrastructure - New Off Street PT Facility - Off Street (Stanley St Site) Pt Facility - Off Street (Stanley St) (Land Acquisition - Private) Pt Facility - Off Street (Stanley St) (Land Acquisition - QLDC)	/	/	/	/	/	/	/	/
	Bus Priority	Bus Priority Pre New Arterials - Stanley Street Bus Priority Stanley Street Bus Priority Post New Arterials - Network Upgrades Exclusive/Priority Access			/	/	/	/	/	/
	Tourist Operator/Passenger Transport	Improved Taxi Stands - Proximity to PT Facilities Tourist Operator - Ad hoc pick-up/drop off. Tourist Operator - Dedicated on street facilities Tourist Operator - Integrated with buses. Tourist Operator - Camp Street Post PT Use - Repurpose. Tourist Operator - Off Street Dedicated Facility	/	/	/	/	/	/	/	/
	Integration with non bus modes.	Public Transport by Water Taxi Wharves/Terminals - Waterborne Passenger Transport Ferry Warf - Queenstown Ferry Warf - Park St Ferry Warf - K Falls Ferry Warf - Grove Lane Ferry Warf - Kelvin Heights Public Transport Dedicated Corridor (Ferry) Waterborne Public Transport (Greater than 22 Seat) Public Transport Dedicated Corridor (Gondola) Gondola Terminal		/	/	/	/	/	/	/

Figure 46: Long list programme components

7.7 Assessment of options

In keeping with the NZTA business case option development approach, a Multi-Criteria Analysis (MCA) was then created to capture and evaluate the options so that a short list could be taken through to the detailed analysis stage.

The MCA provided a mechanism to compare and rate each option against the following items:

- Performance against the investment objectives
- Performance against the business needs
- Performance against agreed programme risks
- Cost and delivery time for each option (cost details were not confirmed at the MCA stage)

The evaluation results are shown below. From this process, the project team and the stakeholders were able to identify a shortlist of options, along with a preferred option for testing with the stakeholder groups. The shortlisted options were numbers 1, 5 and 6.

Queenstown Lakes District Council Town Centre Public and Passenger Transport Facilities			Investor: QLDC Facilitator: Edward Guy Initial Workshop: 28/03/2017 Version No.: 4.0 Last Modified by: Ben Smith 30/11/17							
			Programme options							
			1	2	3	4	5	6	7	8
			Programme 0	Programme 1	Programme 2	Programme 3	Programme 4	Programme 5	Programme 6	Programme 7
Outcome: Network Performance & Capability										
			Do Min	Do Min - Demand and Productivity Focus	Multiple on Street Bus Stop Facilities + Dedicated Tourist/Passenger Transport on Street Facilities.	Upgrade Existing Facility - Camp Street (4 Bays) + Dedicated Tourist/Passenger Transport on Street Facilities.	New On Street Facility - Stanley Street (6 Bays) + Dedicated Tourist/Passenger Transport on Street Facilities without new arterials.	On Street - Focus/Reduced Traffic (Stanley Street) + Dedicated Tourist/Passenger Transport on Street Facilities with new arterials.	Off Street - Focus (Dedicated Facility) + Dedicated Tourist/Passenger Transport off Street Facilities integrated with buses.	On Street - Public Transport Hub (Stanley Street) + Dedicated Tourist/Passenger Transport Off Street Facilities with new arterials.
Relative Importance of objective			What is achievable if implemented	18%	18%	30%	40%	56%	70%	100%
Investment Objective 2	Objective 2 - Liveability and Visitor Experience. KPI1: Visitor Experience KPI2: Liveability KPI3: User Experience	55%	5%	20%	20%	30%	40%	60%	70%	100%
Investment Objective 1	Objective 1 - More Efficient Passenger and Public Transport. KPI1: Travel Time Reliability KPI2: Passenger Access KPI3: Town Centre Throughput	45%	5%	15%	15%	30%	40%	50%	70%	100%
Cost										
Technology (\$)			\$ 120 k - \$ 156 k	\$ 120 k - \$ 156 k	\$ 120 k - \$ 156 k	\$ 120 k - \$ 156 k	\$ 120 k - \$ 156 k	\$ 120 k - \$ 156 k	\$ 120 k - \$ 156 k	\$ 120 k - \$ 156 k
Stanley St Interchange (\$)			\$ 0 m	\$ 0 m	\$ 3 m - \$ 4 m	\$ 3 m - \$ 4 m	\$ 17 m - \$ 25 m	\$ 17 m - \$ 25 m	\$ 10 m - \$ 16 m	\$ 24 m - \$ 37 m
Public Ferry Warves (\$)			\$ 0 m	\$ 5 m - \$ 6 m	\$ 5 m - \$ 6 m	\$ 5 m - \$ 6 m	\$ 5 m - \$ 6 m	\$ 5 m - \$ 6 m	\$ 5 m - \$ 6 m	\$ 5 m - \$ 6 m
Land (\$)			\$ 0 m	\$ 0 m	\$ 0 m	\$ 0 m	\$ 6 m	\$ 6 m	\$ 27 m	\$ 32 m
Total Capital (\$)			\$ 1 m	\$ 5 m - \$ 6 m	\$ 7 m - \$ 10 m	\$ 7 m - \$ 10 m	\$ 26 m - \$ 37 m	\$ 26 m - \$ 37 m	\$ 41 m - \$ 48 m	\$ 61 m - \$ 74 m
Operational costs if significant (Range)				\$0-1m	\$0-1m	\$0-1m	\$0-1m	\$0-1m	\$1-5m	\$1-5m
Time										
(Range)				0-6 months	6-12 months	6-12 months	12-24 months	12-36 months	24-48 months	24-60 months
Business Needs/Considerations										
Integrated transport - connectivity with other transport options			M	L	M	M	M	M	H	H
Promote travel demand management measures			L	L	L	L	L	M	H	H
Accessibility for commercial activity			L	L	L	L	L	M	M	M
Promotes accessibility for each user type			L	L	M	M	M	M	H	H
Enhanced environment			L	Negative	L	L	M	M	L	H
Quality and security			L	Negative	L	L	M	M	H	H
Contributing to masterplan vision			L	L	L	L	M	M	H	H
Meeting the needs of growth			L	L	L	L	M	H	H	H
PT Specific Business Needs										
Tourism passenger pick/drop-off			L	L	L	L	L	H	L	L
Risks										
Technical			M	M	M	M	M	M	H	H
Operational			M	M	M	M	M	M	H	H
Financial			L	L	L	L	L	M	H	H
Stakeholder/Public			L	M	M	H	H	H	H	H
Environmental			L	L	L	L	L	L	H	H
Safety			L	L	L	L	L	L	L	L
Economic			L	L	L	L	M	M	M	H
Accessibility & Social Inclusion			H	M	M	M	L	L	L	L
Cost of being Disrupted			L	L	L	L	M	M	M	H
Dis-benefits										
Disrupting town centre operations (public & private)			L	H	L	L	L	L	NA	NA
Ranking										
1-3						3	1	2		
Overall Assessment:			Programme 5 is the preferred option. Assessment only produced a 1st and 2nd ranking. Programme 4 was the most likely ranked 3rd, however a new facility operating within the existing Stanley Street arterial traffic has been deemed impractical.							
Recommendation:			Technology will be a strong component of any programme. Work is already underway on many technology initiatives. The preferred way forward is to build the Camp Street 4 bay facility initially. It is anticipated that this will have a short term life (2 years). The next move is to Stanley Street under programme 5. This programme requires the new arterials to be constructed prior. Stanley Street will have high bus priority, strong pedestrian connectivity and integration with other transport modes. The on street Stanley Street option is less expensive than the off street option in Programme 6. Furthermore bus public transport has the potential to be disrupted and Programme 5 is more easily adapted, with less cost, should this occur. The off-street option will also have a much larger property impact.							

Figure 47: MCA evaluation

7.8 Shortlisted options

The MCA evaluation process allowed the project team to refine the programme options down from a long list of nine to a shortlist of three programmes. The focus then turned to detailed analysis of the three programmes in a way that would provide an understanding of the best performing and therefore, preferred programme.

The shortlisted options were programmes 1 (do minimum), 5 and 6. They are described in the table below.

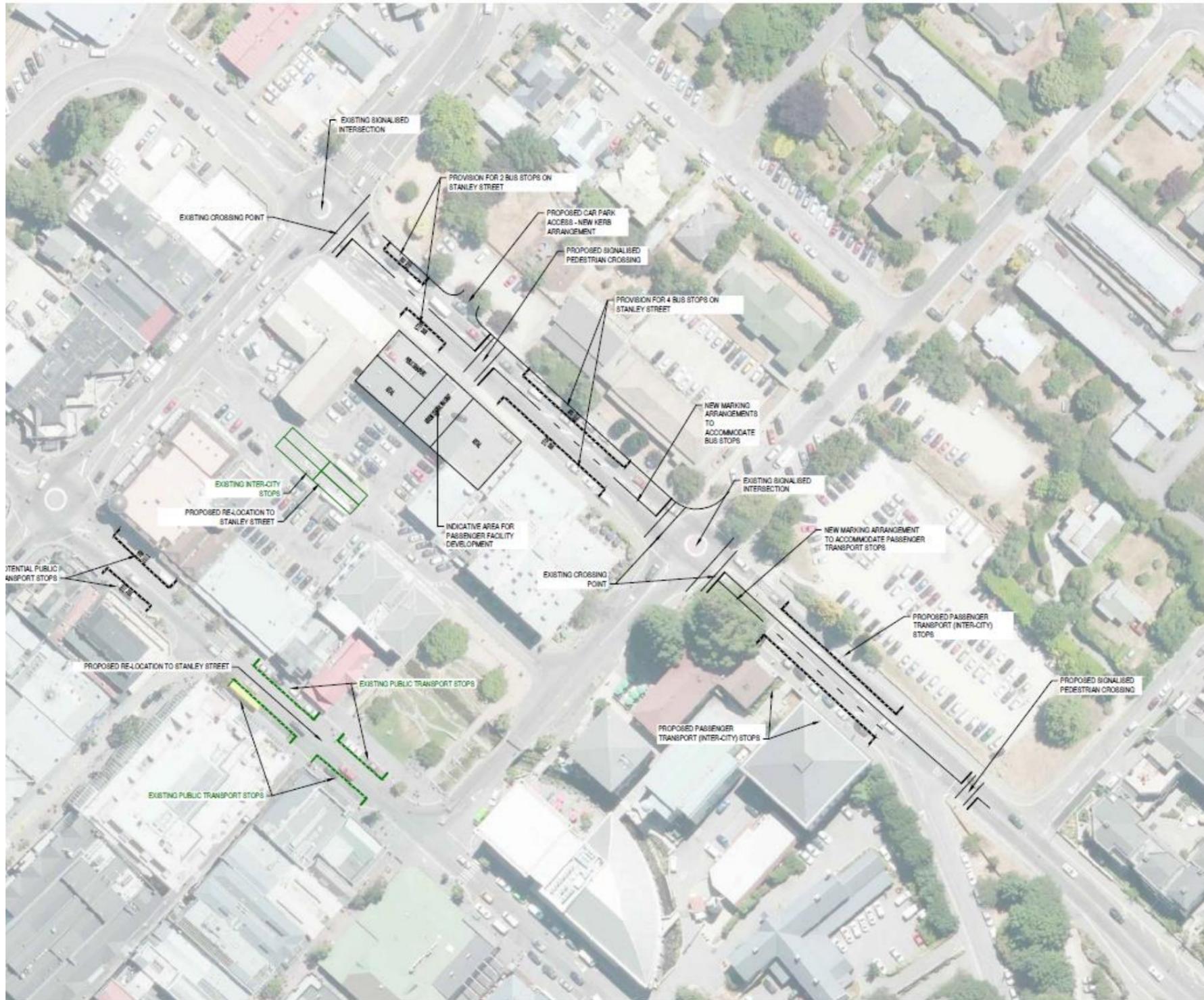
Table 19: Shortlisted options

#	Title	Description
1	Do minimum – demand and productivity focus.	<p>The do minimum option utilised a demand and productivity focus and included the following interventions:</p> <ul style="list-style-type: none"> improved accessibility planning through maps and a more informed network operating plan marketing communications, including free maps, tourist targeted information, targeted website information and airport/hotel information intelligent transport systems aimed at informing users, including real time signage, traveller apps, mobility as a service and integrated ticketing (go card) improved taxi stands with good proximity to PT facilities, tourist operator ad hoc pick up and drop off provision for wharves/terminals for waterborne public transport.
5	On Street - Focus/Reduced Traffic (Stanley Street) + Dedicated Tourist/Passenger Transport on Street Facilities.	<p>As shown in the MCA programme outline, this programme includes a new on Street facility on Stanley Street with reduced traffic and a dedicated tourist and passenger Transport facilities. This programme also includes the following interventions:</p> <ul style="list-style-type: none"> improved accessibility planning through maps and a more informed network operating plan. marketing communications to enhance experiences and attract users to public and passenger transport services, including free maps, tourist targeted information, targeted website information and airport/hotel information. intelligent transport systems aimed at informing users, including real time signage, traveller apps, mobility as a service and integrated ticketing (go card) improved ancillary service provision to support enhance the public transport offering through the following interventions: <ul style="list-style-type: none"> Ticketing services upgrades. Crime prevention through environmental design (CPTED). Attractive build quality of the facility. Good proximity to taxis. improved taxi stands with good proximity to PT facilities, tourist operator ad hoc pick up and drop off provision for wharves/terminals for waterborne public transport and dedicated corridors for water and air (Gondola) public transport.
6	Off Street - Focus (Dedicated Facility) + Dedicated Tourist/Passenger Transport off Street Facilities integrated with buses.	<p>Off Street - Focus (Dedicated Facility) + Dedicated Tourist/Passenger Transport off Street Facilities integrated with buses. This programme also includes the following interventions:</p> <ul style="list-style-type: none"> improved accessibility planning through maps and a more informed network operating plan. marketing communications to enhance experiences and attract users to public and passenger transport services, including free maps, tourist targeted information, targeted website information and airport/hotel information. intelligent transport systems aimed at informing users, including real time signage, traveller apps, mobility as a service and integrated ticketing (go card)

#	Title	Description
		<ul style="list-style-type: none"> • improved ancillary service provision to support enhance the public transport offering through the following interventions: <ul style="list-style-type: none"> ○ Ticketing services upgrades. ○ Retail integration. ○ New toilets on site. ○ WIFI. ○ Bike parking facilities. ○ Bag services. ○ Close proximity to intercity and tourism transport operations. ○ Attractive build quality of the facility. ○ Good proximity to taxis. • improved taxi stands with good proximity to PT facilities, tourist operator dedicated pick up and drop off and integration with buses • provision for wharves/terminals for waterborne public transport and dedicated corridors for water and air (Gondola) public transport. <p>This programme can deliver more ancillary and integration features given it has a dedicated off-street space where a number of functions can be hosted within the area.</p>

Programme 5: On-Street Option

Figure 48: The design for the on-street option and related changes

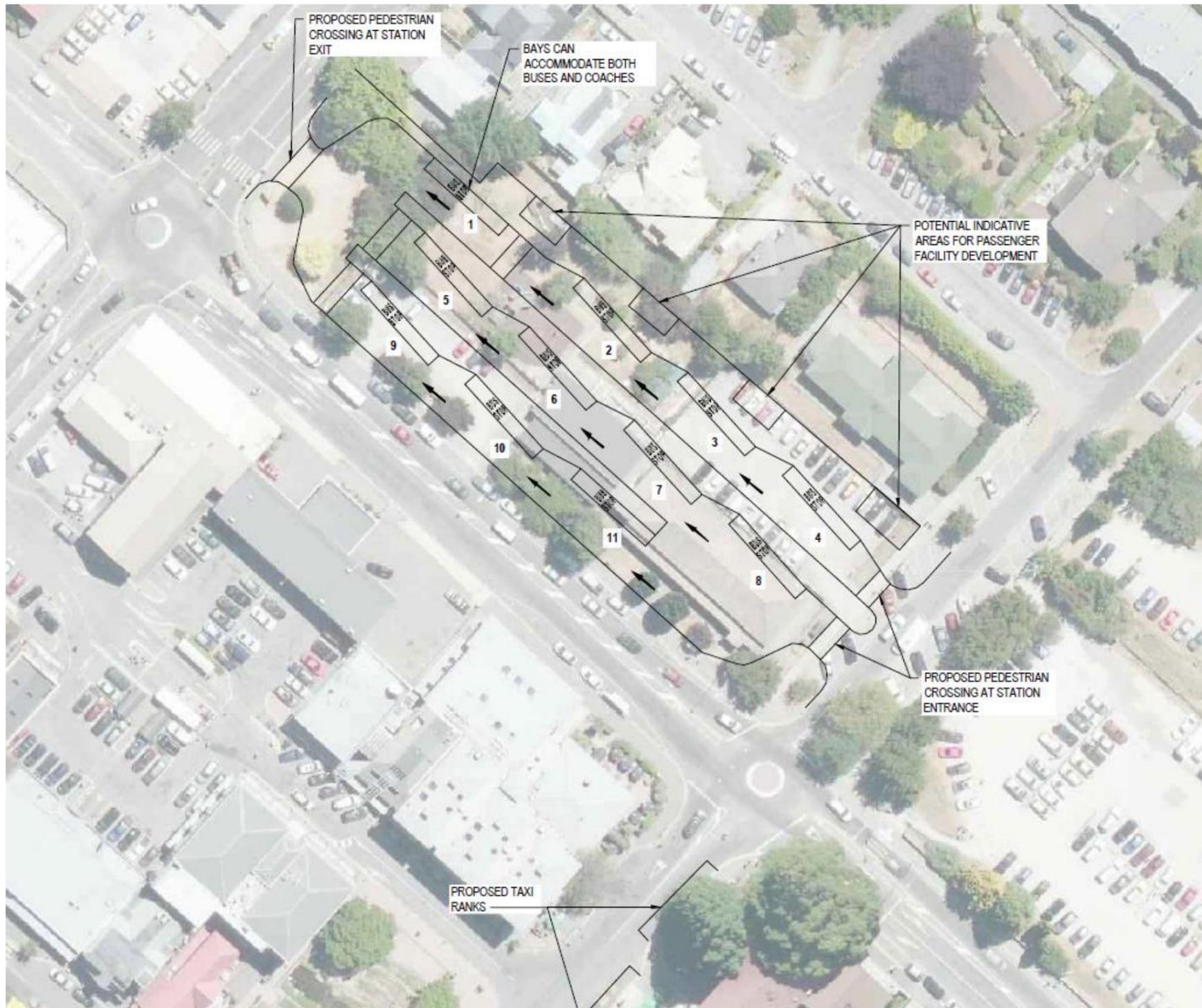


Commentary on this option:

- It's located next to the proposed community/cultural heart of the town centre.
- It creates a sense of arrival to the town centre.
- The location provides for a dedicated public transport corridor, allowing flexibility to future proof public transport facilities. For example: easy access to the lake for potential water-based transport or up Turner Street for a potential gondola to the airport.
- Easy walking distance into the town centre.
- It retains the existing street network and site access.
- Less acquisition is required, making it significantly cheaper
- It will help to activate the town centre fringe, providing opportunities for growth and diversity.
- It will be easily integrated with walking and cycling initiatives.

Programme 6: Off-Street Option

Figure 49: The off-street design



Commentary on this option:

- It's located within the proposed community/cultural heart of the town centre.
- Easy walking distance into the town centre.
- It can deliver more ancillary (such as bike parking and toilets) and integration features (such as close proximity to intercity and tourist operator buses) given it has a dedicated off-street space where a number of functions can be hosted within the area.
- It will be significantly more expensive to establish due to the required land acquisition.
- This acquisition may create a significant lead time as ownership matters are progressed.
- It locates interchange on strategically significant site (compromises other uses as part of a proposed Community Heart).
- Its access compromises the amenity of adjacent Stanley Street (east) site and Ballarat Street.
- This option was not seen as operationally efficient due to the challenge of getting buses in and out of the interchange and the impact this could have on adjacent intersections.
- This area may create a safety risk to be managed at night.

7.8.1 Rating of shortlisted options against desired benefits/objectives

This analysis demonstrates how the shortlisted options performed against the investment objectives. This analysis demonstrates how programmes 5 and 6 have a clear advantage over programme 1 and programme 6 has the highest perceived potential to deliver the required changes. While programme 6 led in this evaluation, it was later marked down due to operational, safety and cost concerns.

Table 20: performance against ILM benefits

Objective/benefit	KPIs	Programme 1	Programme 5	Programme 6
More Efficient Passenger and Public Transport	KPI 1: Travel Time Reliability KPI 2: Passenger Access KPI 3: Town Centre Throughput	20%	60%	70%
Improved Liveability and Visitor Experience	KPI 1: Visitor Experience KPI 2: Liveability KPI 3: User Experience	15%	50%	70%
Summary of ability to deliver against the objectives		18%	56%	70%

7.8.2 Assumed delivery time

The table below demonstrates the assumed time required to deliver the shortlisted programmes. In this case, programme 5 demonstrates an ability to move more quickly into implementation. The expected expansion of the Camp Street facility provides a buffer of two years (based on the assumption that it would meet demand for this period). Therefore, it makes sense to adopt a programme that allows for a shorter lead time and less disruption. This option can also be prepared with lesser impact to enable a smooth transition while still meeting the required levels of service. The key dependency to consider in this instance is the proposed change to the town centre arterials (from Stanley Street to Melbourne and Henry Streets), which is required to allow this space in Stanley Street to be redeveloped to support a new public transport facility. This means the on-street facility may indeed take longer to deliver.

Note: The detailed business case will need to identify how QLDC can bridge between the expected life of Camp Street and delivery of the new PT Facility. This may involve phasing development programmes in parallel to ensure this timing can be achieved.

Table 21: Shortlist delivery timeframe comparisons

	Programme 1	Programme 5	Programme 6
Assumed delivery period	0-6 months	12-36 months (following or in line with the later part of delivering the new arterials).	24-48 months (following the acquisition of the land).

7.8.3 Rating of shortlist options against business needs

Rating against the agreed business needs demonstrated that programmes 5 and 6 perform strongly, with 6 rating higher in this area. This higher rating is attributable to the off-street facility having a greater level of control over the space it occupies, the improved environment, a high-quality development and the ability to integrate other types of buses in the same space (Coach and other passenger services). While it would come with a greater level of investment, the off-street facility also has more capacity for growth and a greater contribution to the masterplan vision, except if it occupies Community Heart space. As noted in the technical report completed by Beca (Appendix 8), closer analysis of the off-street facility has highlighted potential operational impacts on nearby intersections. This is highlighted in the evaluation of options against common

risks below. Recent discussions have confirmed that the off-street site for programme 6 may be considered for high priority future community and cultural facilities and this is a key consideration for the closer evaluation of these options in the Detailed Business Case.

Table 22: Rating of shortlist options against business needs

Business needs	Programme 1	Programme 5	Programme 6
Integrated transport - connectivity with other transport options	M	M	H
Promote travel demand management measures	L	M	H
Accessibility for commercial activity	L	M	M
Promotes accessibility for each user type	L	M	H
Enhanced environment	L	M	L
Quality and security	L	M	H
Contributing to masterplan vision	L	M	H
Meeting the needs of growth	L	H	H
Tourism passenger pick/drop-off	L	H	L

7.8.4 Risk assessment of shortlisted options

The MCA analysis allows for comparison of the programme options against common strategic risk types. This analysis shows how programme 6 may introduce a higher level of risk based upon the increased difficulty in developing an off-street facility compared to the smaller level of change required to develop an on-street facility. The off-street option also creates a higher risk profile in the technical, operational, financial and disruption categories. Part of this risk comes from the way this option may impact on the operations of the nearby intersection (turning across these areas to access the site) and the way this may impact on pedestrian movements. It is also worth noting the high level of risk that the do minimum option creates around accessibility and social inclusion. Further detail on risk assessment for both the masterplan and the P&PT preferred programme are included in Appendix 5.

Table 23: Risk assessment of shortlist options

Risk type	Programme 1	Programme 5	Programme 6
Technical	M	M	H
Operational	M	M	H
Financial	L	M	H
Stakeholder/Public	L	H	H
Environmental	L	L	H
Safety	M	L	L
Economic	L	M	M
Accessibility & Social Inclusion	H	L	L

Risk type	Programme 1	Programme 5	Programme 6
Impact on Business Community	L	M	M
Cost of being Disrupted	M	M	H

7.8.5 Summary of analysis

The closer comparison of the shortlisted options demonstrates how programmes 5 and 6 both demonstrate strong potential to deliver against the investment objectives. However, due to the more manageable level of investment, better operational outcomes and a better profile, programme 5 was selected as the preferred. This option also provides a level of flexibility in the case of disruption and can also integrate and play a complimentary role to other transit solutions without investing a huge amount in the near future. Similarly, bus public transport has the potential to be disrupted and Programme 5 is more easily adapted, with less cost, should this occur.

Programme 6, as shown below was located off-street in an area bounded by Ballarat Street, Stanley Street and Shotover Street. This bus interchange will be able to cater for eleven (11) bus bays. The entry would be located along Ballarat Street and the exit along Shotover Street.

However, in view of the high cost of land acquisition, the potential safety concerns posed to pedestrians when crossing the Ballarat Street ingress, as well as the potential queue of buses along Ballarat Street spilling over to the Ballarat / Stanley Street junction (while waiting for pedestrians to cross), this option was rated lower. Another factor in this decision was the concern for individual safety in the off-street facility, particularly at night. Local police have emphasised the need to avoid creating areas that may become safety risks at night with the Masterplan project team.



Figure 50: Stanley Street Off-Street Option

8 Preferred Programme

8.1 Programme overview

The preferred way forward is to build the Camp Street 4 bay facility initially. It is anticipated that this will have a short-term life (two years). The next move is to Stanley Street under programme 5. This programme requires at least stage 1 of the new arterials to be constructed prior to its introduction. It is proposed that Stanley Street will be bus only in this area. The DBC will need to use further information from ORC regarding demand levels to inform what interim arrangements can be applied to bridge the gap between the estimated operational life of Camp Street and the commissioning of the new PT facility.

As shown through the evaluation above, programme 5 has been selected as the preferred due to its ability to deliver against the investment objectives while not incurring significant time or cost in delivery. It also demonstrates a flexibility which would allow it to be introduced without causing significant impacts and an ability to adapt to potential future disruption.

Technology will be a strong component of any programme and work is already underway on relevant technology initiatives in partnership with Otago Regional Council and NZTA.

This programme also aligns with the direction provided by the national policy statement for land transport through seeking the best solutions across transport modes, embracing technology to benefit the user and putting the right infrastructure in place to support high growth areas. This GPS also includes a push for improvement in public transport as a means to reduce reliance upon car use. Equally, this programme supports a shift towards sustainable transport modes, which supports the climate change obligations committed to within the New Zealand Local Government Leaders Climate Change Declaration of 2015.

8.2 Programme scope

Table 24: Preferred programme scope

Activity levels	What's included
<p>Core Activities</p>	<p>The preferred programme is a logical set of complimentary activities aimed at producing the best possible outcome against the programme objectives. Key aspects of the programme include:</p> <p>A New transport facility (on-street at Stanley Street) to support an increased level of buses (based on increased services from November 2017) and to demonstrate an attractive alternative to the car. New facilities also play a key role in improving the visitor and resident experiences as they connect with the town centre and the region in a way that demonstrates the benefit of and priority towards public, passenger and active transport in Queenstown. This programme relies upon the arterials being moved (and at least stage 1 delivered) to allow for this dedicated facility and stages 2 and 3 of the new arterial route would ensure it can perform as required.</p> <p>Marketing and Communications to enable better understanding of the transport options, including tourist information, maps, website information, airport and hotel marketing.</p> <p>Intelligent Transport Systems to engage and inform users and network planning through real time signage, apps providing traveller information, mobility as a service (describes a shift away from personally owned modes of transportation and towards mobility solutions that are consumed as a service), integrated smart ticketing (go card).</p> <p>Ancillary service provision to support enhance the public transport offering through the following interventions:</p> <ul style="list-style-type: none"> • Ticketing services upgrades. • Crime prevention through environmental design (CPTED). • Attractive build quality of the facility. <p>Provision for bus priority following the delivery of the upgraded arterial roads.</p>

Activity levels	What's included
	<p>Tourist and passenger transport improvements, including:</p> <ul style="list-style-type: none"> improved and conveniently located taxi stands (proximity to PT facilities) dedicated on street facilities for tourist bus operators re-purposing of camp street after public transport moves into Stanley Street. <p>Integration with non-bus modes through the provision for ferry wharves or terminals and dedicated water and air public transport corridors that are triggered when buses are forecast to reach a certain level. This programme includes a list of options around where the ferry facilities may be located and encourages further investigation into previously identified gondola facilities that connect with the proposed Community Heart and new public transport facilities on Stanley Street. To be considered further at the detailed design stage.</p>
Optional and Desirable Requirements	<p>Requirements that would add value to the preferred programme include:</p> <ul style="list-style-type: none"> Bag services. More bus priority lanes (than those already scoped in the arterials project).
Excluded from scope	<ul style="list-style-type: none"> A multi stop option.

8.3 Detailed programme description

The content below has been sourced from the Public and Passenger Transport Requirements Report provided by Beca to QLDC. This report is attached as Appendix 8.

8.3.1 Proposed public transport stops and interchange

The preferred option (shown below) is to develop a new Public Transport interchange on Stanley Street, between Shotover Street and Ballarat Street. This development is collectively referred to as a 'PT Hub'.

This will allow a total of 6-8 bus bays to be provided (three on each side of the road). This represents an increase in two stops from what is currently proposed to be provided on Camp Street. Route 1 will have 4 stops and Route 2 will have 2 stops. Information from ORC has been limited to date, which is sufficient for the IBC, but as we move into the DBC stage, QLDC will need clear assurance from ORC regarding the level of demand and whether the current preferred option is sufficient through to 2050.

As the frequency of the proposed Sunshine Bay/Fernhill to Remarkables Park service increases to above every 15 minutes, an additional two stops will be needed to avoid the situation whereby more than one bus is waiting at the town centre. This can arise where bus services are running late and/or when passenger boarding times result in delays to services. The number of stops provided in QTC is as requested by Otago Regional Council (ORC).

A new mid-block signalised pedestrian crossing is proposed to be created in the middle of this stretch of Stanley Street to allow for passengers to get to both sides of the road, safely. The intersection of Stanley Street-Memorial Street-Gorge Road-Shotover Street will be signalised and expanded. As such, Coach parking facilities along Camp Street will be removed. Prior to this stretch of Stanley Street, towards the east of Beetham Street up to Frankton Road, bus priority measures including bus lanes are proposed. This will serve to help improve journey times for bus travellers, particularly those commuting between Frankton and Queenstown town centre. Other potential future functions for this facility should be discussed and considered in the DBC, including the opportunity to use this as a pick-up point for luggage going to and from the airport (subject to processing and screening arrangements).

A new Public Transport passenger facility is proposed to be provided at the interchange, on the former petrol station site (i.e. south-west of Stanley Street and alongside the proposed 6-8 bus stops). The scale of the development would be approximately 800 x 200 square metres, and will consist of a Public Transport Interchange, retail spaces and an atrium or central walkway. Other features of the Public Transport Interchange include a bag storage facility, bus arrival and departure information, two accessible toilets, two uni-sex toilets,

one driver toilet, one staff toilet, a staff room, sales area with money handling room and storage, CCTVs and a communications and electrical cupboard. The area will also have to be covered and air-conditioned.

This development also aims to deliver an enhanced public space with the opportunity for use of 'active edges' that encourages mixed use development around the PT Hub that provides a welcome to the town and a thriving Community Heart. As shown in the Commercial Case, this area provides attractive opportunities for the private sector that can encourage further transport oriented development in the future.



Figure 51: An aerial view of the proposed public transport hub

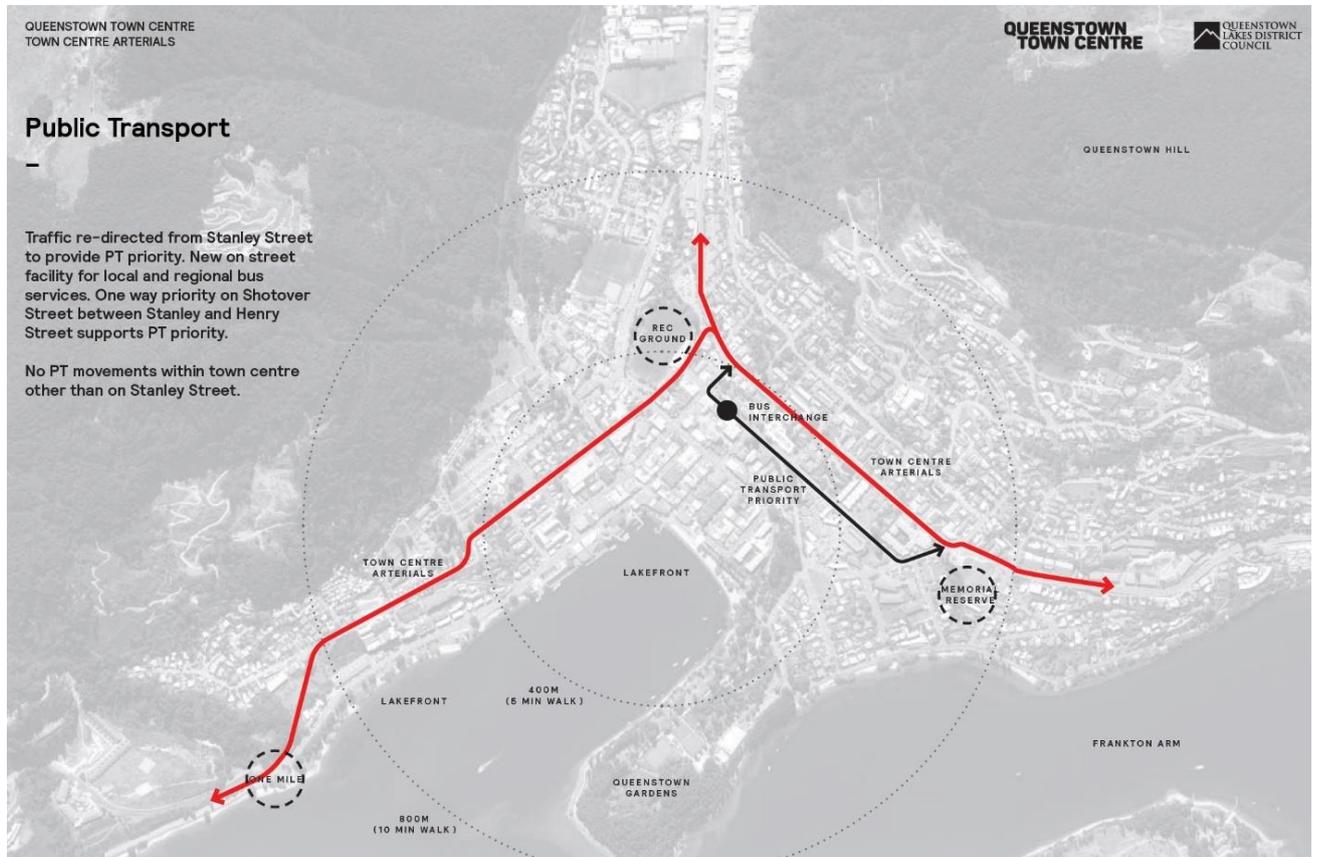


Figure 52: An explanation of priority traffic arrangements around the PT hub

8.3.2 Proposed new passenger transport stops

New allocation includes:

- 2 zones along Shotover Street
- 1 zone along Duke Street.

With the proposed additional stops for Passenger Transport and Goods Services vehicles, a few improvements to the road network are necessary to avoid congestion issues, namely:

- Shotover Street (between Rees/Brecon Street and Camp Street) – expansion of the footpath and providing new marking along the road after the expansion.
- Corner of Duke Street / Brecon Street – Potential re-location of services to allow for better tapering for buses to exit bus bay.

8.3.3 Changes to Coach Parking

Removal of Coach parking facilities along Camp Street to facilitate improvements to adjacent intersection.

8.3.4 Inter-City Bus Stops

Inter-City buses will be re-located to Stanley Street, between Ballarat and Beetham Streets.

8.3.5 Proposals for Taxis

Additional taxi ranks are proposed to support the use of public transport, to cater to more late-night activities and to maximise the use of parking lots.

The following day time taxi facilities are proposed:

- 2 new taxi ranks with three bays along Shotover Street.
- Conversion of existing Public Transport stop and removal of car parks.
- 1 new taxi rank with two bays along Ballarat Street.
- Conversion of existing late-night taxi rank to full-day.

The following late-night taxi facilities are proposed:

- 2 new taxi ranks with 14 bays (seven on each side) along Stanley Street
- usage of the proposed Public Bus Stops for late-night taxi stands will maximise use of slots.



Figure 53: Proposed Taxi Ranks

8.3.6 Loading zones and coach parks

To cater to the increasing number of coaches bringing tourists and long-distance travellers into/out of Queenstown, as well as the increase in goods vehicles to/from Queenstown, it is proposed to increase the number of loading zones in the town. The additional loading zones are shown below.

8.3.7 Proposed passenger and goods transport stops

The following facilities are proposed:

- 3 zones along Shotover Street
- 1 zone along Camp Street.



Figure 54: Proposed new loading zones (passenger and goods services)

8.3.8 Programme diagrams

Concept designs have been created to demonstrate how the programme features will look and feel in the town centre, in addition to providing a quantifiable sense of what has been costed.

The diagrams below show each aspect of the preferred programme, starting with the aerial view of the proposed new Public Transport facilities as it relates to allocated spaces for passenger transport services and pedestrian crossings.

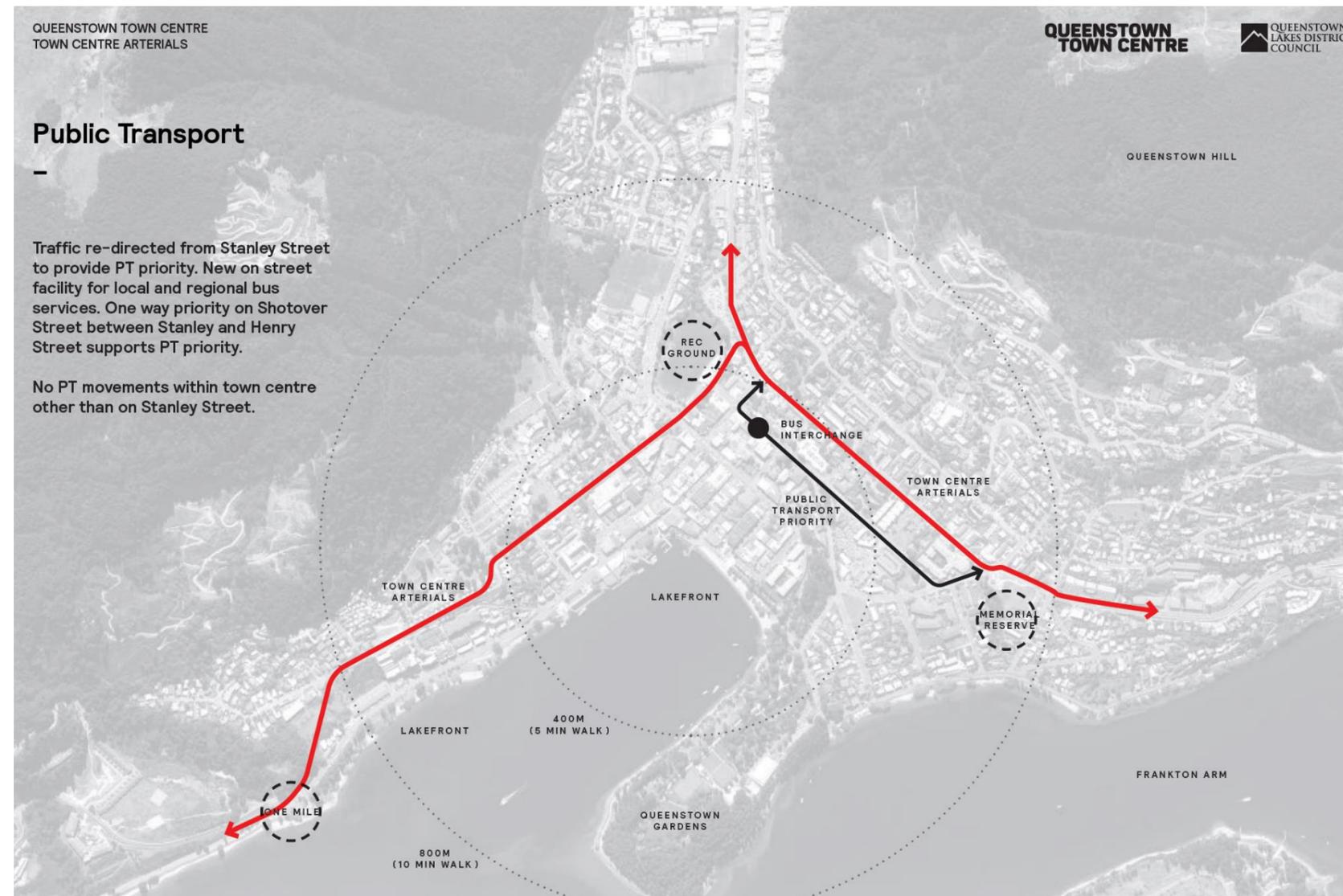


Figure 55: An aerial view of the proposed new public transport facilities and the associated passenger transport stops.

Existing and proposed cross sections of Stanley Street West before and after provision of on street Public Transport facilities.

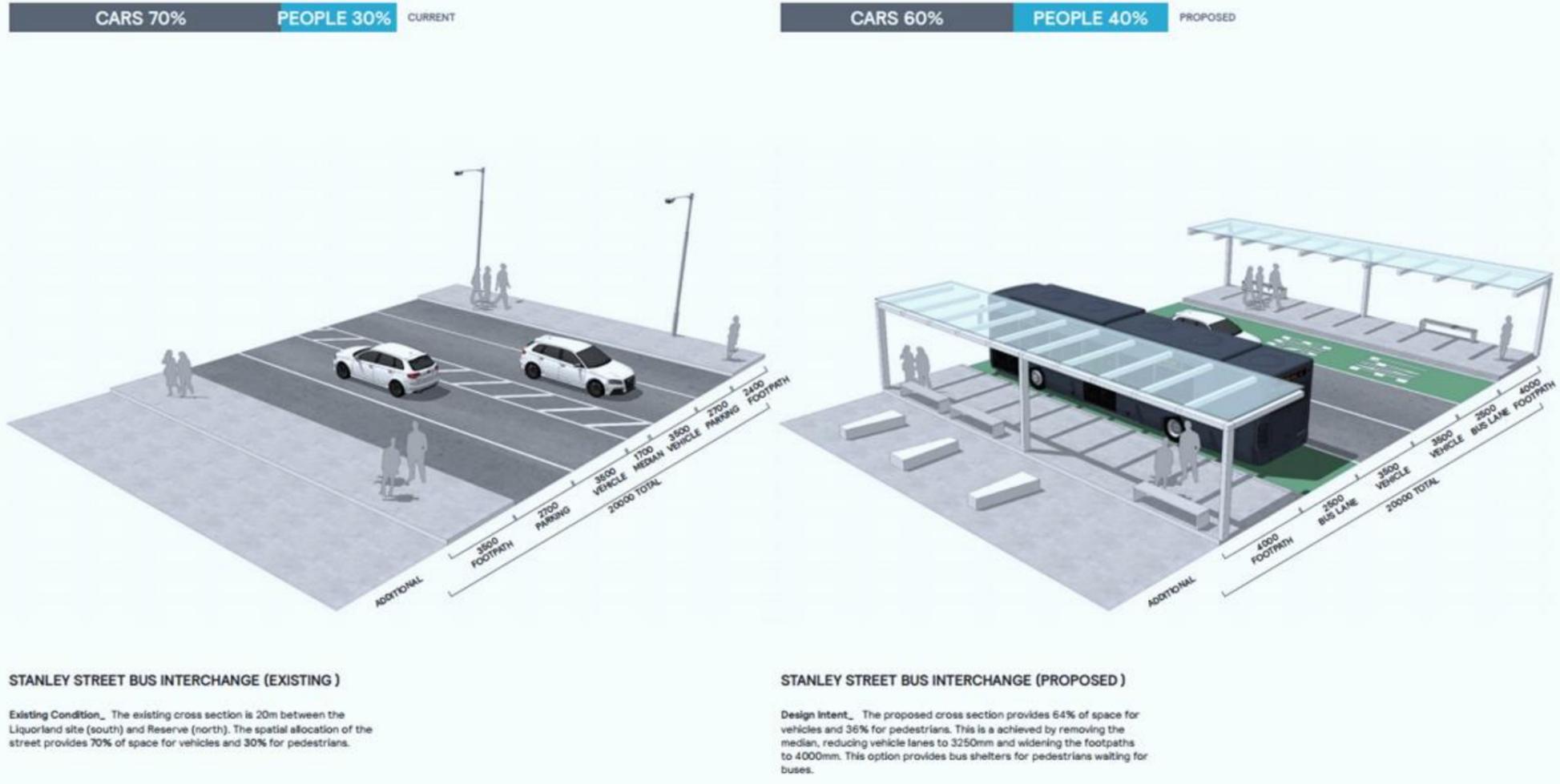


Figure 56: A cross section view of the proposed new public transport facilities with a comparison between the current and future arrangements at this site.

QUEENSTOWN TOWN CENTRE
PUBLIC AND PASSENGER TRANSPORT
CIVIC HEART



Proposed Civic Heart between Henry Street and Stanley Street. Ballarat Street is developed as a shared space. Stanley Street will be a public transport route with a new bus interchange.



Figure 57: A 3D view of the proposed new Public Transport facilities in relation to the development of the Community Heart.



Figure 58: Proposed Stanley Street coach parking space locations



Figure 59: Proposed overnight Coach parking locations



Figure 60: Existing and proposed passenger transport stops and loading zones

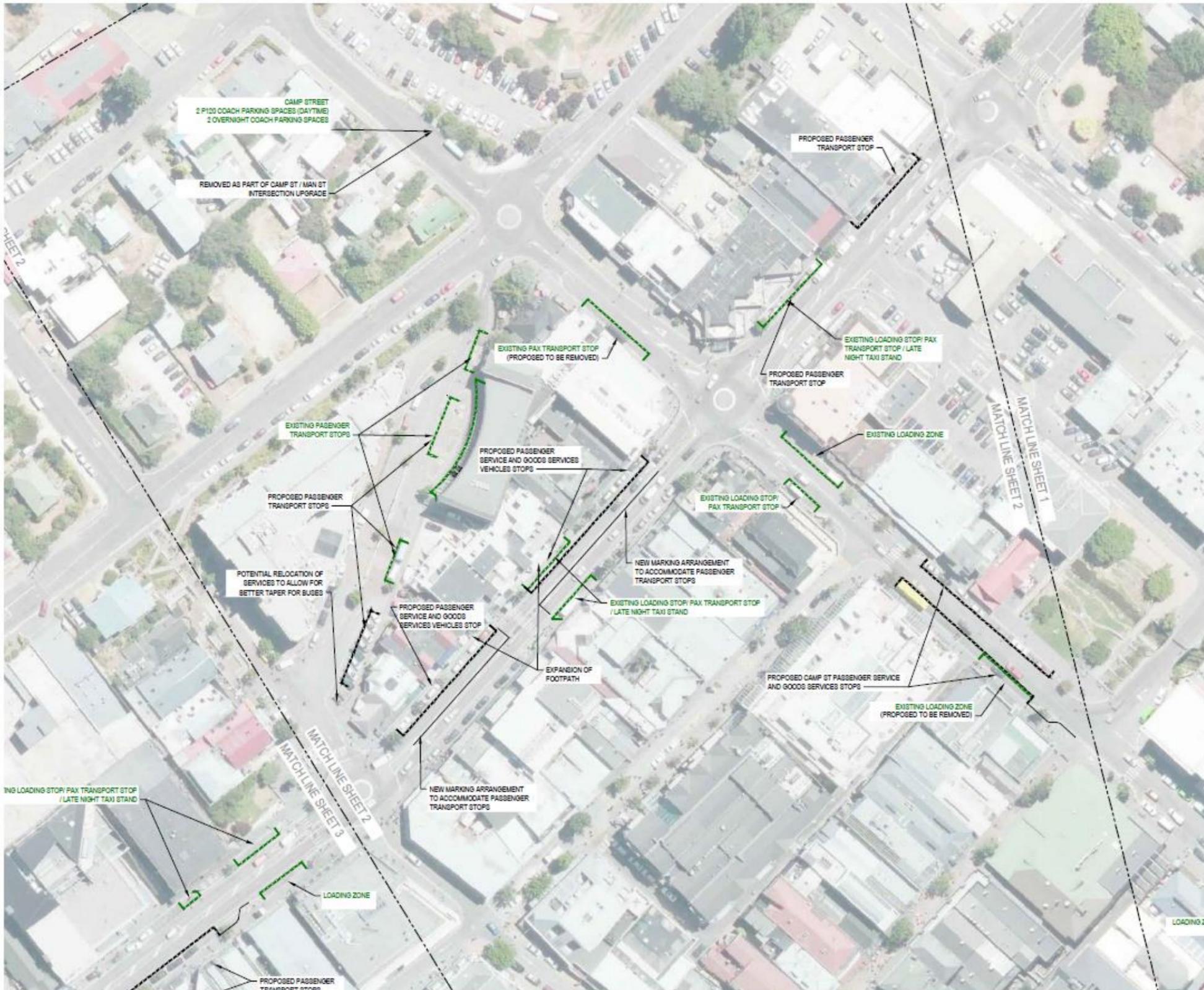


Figure 61: Existing and proposed goods and passenger service stops (part 2)

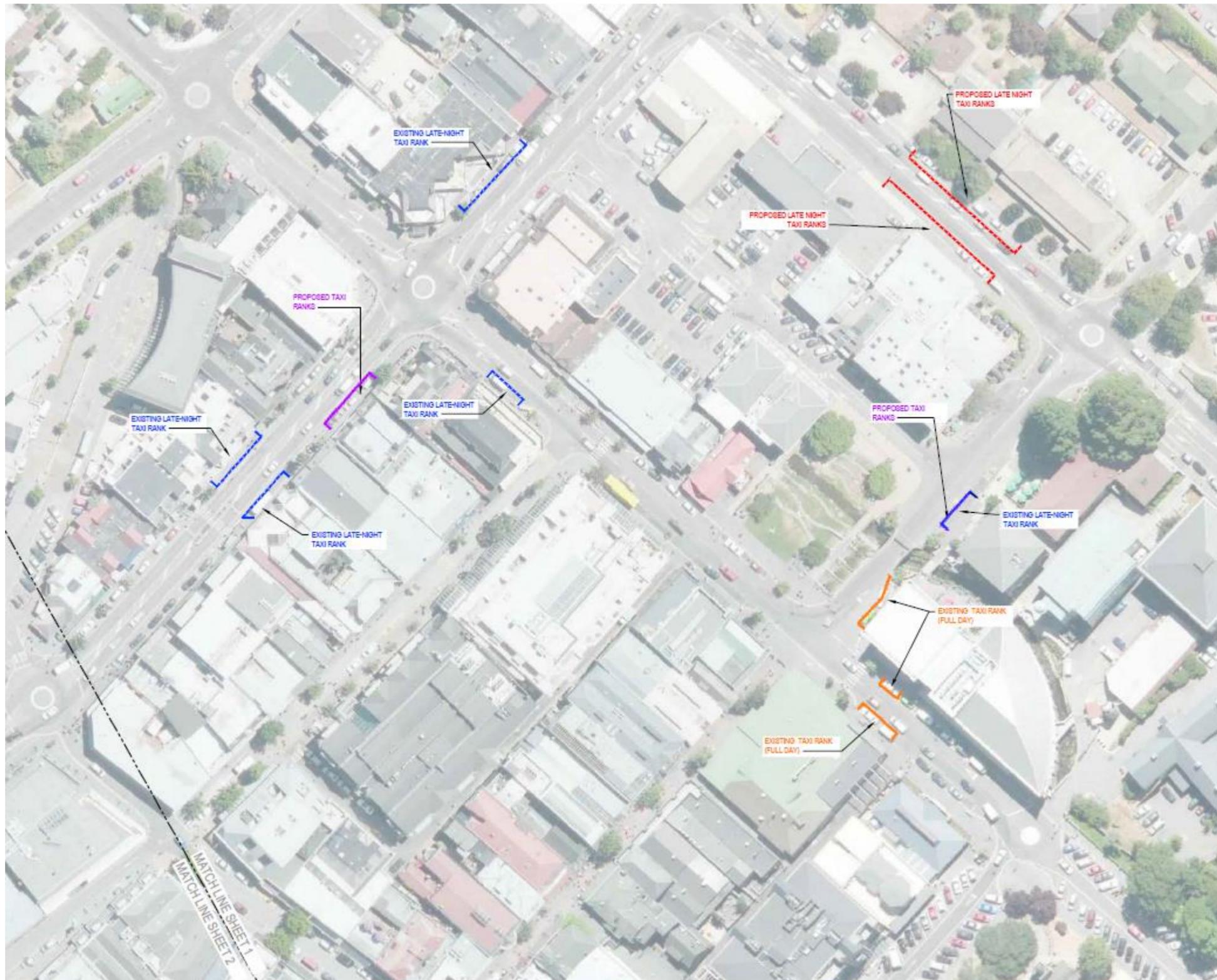


Figure 62: Existing and proposed taxi zone allocation



Figure 63: Existing and proposed taxi zone allocation (part 2)

8.3.9 Waterborne public transport location options

The image below demonstrates the options (A through E) under consideration for improved ferry wharf locations. Ferry public and passenger transport options are being investigated as part of multi-modal considerations to work in an integrated manner with the established public transport services. Given the growth forecasts for Queenstown, multiple modes will need to be utilised to manage the town's transport needs in an efficient manner. Initial specifications for a new ferry wharf are included in Appendix 8. The forecast growth and indicates that QLDC need to proactively develop infrastructure to support public and passenger transport in multiple forms. The benefit of the wharf development currently programmed for 2018/19 is that it can support increased water taxi frequencies in the short term and public ferry services in the long term. It is expected that in the near term the water taxi would start increasing service frequencies in addition to on demand services. There will be a point where a new wharf is required, firstly in Queenstown, then Frankton and so on. In the current schedule, the investment in this part of the programme has been prioritised to develop this form of transport further and take advantage of the more direct service this service can provide to the wider lake catchment. This investment may be deferred to later in the programme to maintain affordability. The locations identified below are placeholders at this stage and should be further analysed and evaluated in the detailed business case. Further guidance will be sought from ORC and NZTA regarding their plans for waterborne public transport as part of the wider network.



Figure 64: Public transport – ferry locations shortlist

8.3.10 Integration with the Masterplan programme

The preferred programme integrates well with the spatial framework that brings together the proposed improvements in arterials, parking and public spaces. The image below shows how the on street public transport facility in Stanley Street is well located to support the Community Heart development, the civic axis, the new parking buildings, enhanced walking and cycling access and general improvements to the town centre spaces.

Figure 65: How the preferred PT facility sits within the masterplan spatial framework



8.4 Programme implementation strategy and trigger points

The P&PT programme proposed shares a 2050 horizon with the overall masterplan and it aligns with the programme currently proposed in the QITPBC. Alongside the proposed arterial, parking and public realm changes, P&PT improvements will play a key role in providing more accessible and enjoyable town centre. The summary below and the supporting schedule diagrams demonstrate how this programme is intended to be delivered as part of an integrated masterplan programme. This written summary and linear schedule has been sourced from the *Public and Passenger Transport Requirements* report provided by Beca to QLDC in August 2017.

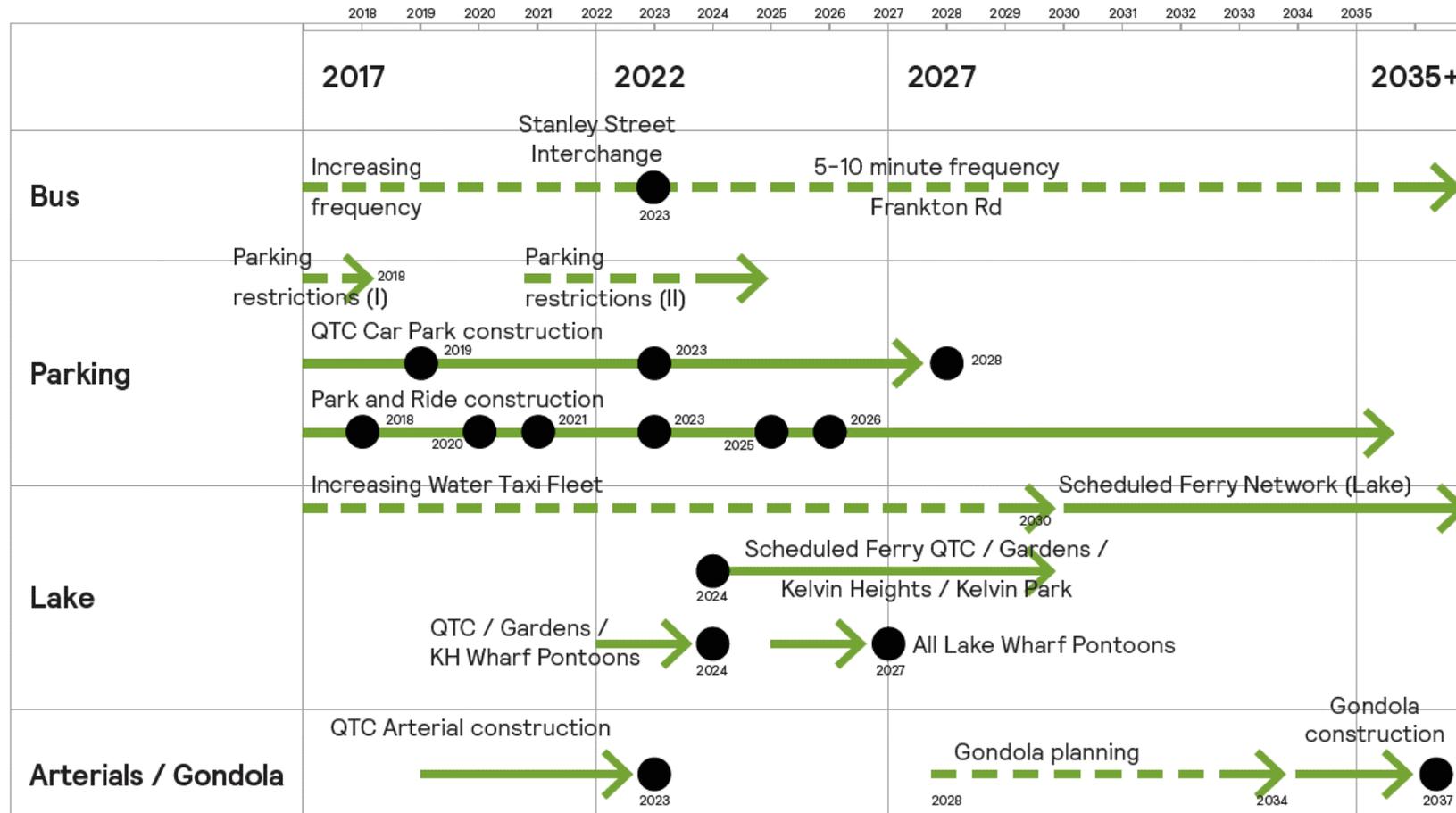


Figure 66: A linear view of proposed implementation schedule for the Queenstown Town Centre Masterplan.

8.4.1 Immediate Plans

Immediate plans to improve public transport relate to the bus service improvements (fares and service frequencies) are anticipated to be implemented later in 2017. A key enabler of the current proposals is to increase the number of bus stops along Camp Street from two to four. This is needed in order to provide a dedicated stop for each of the two planned future cross-city bus routes (in each direction).

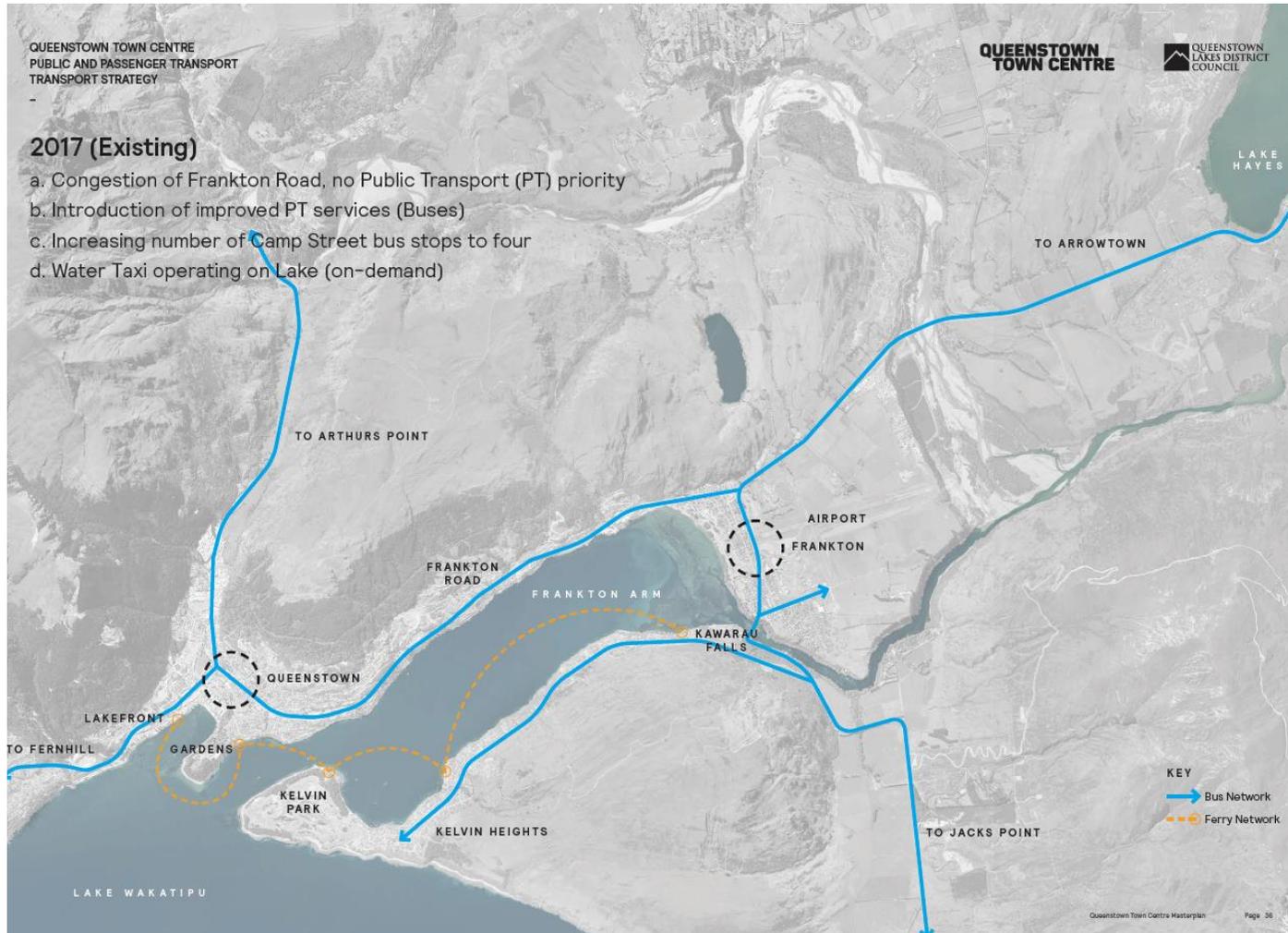


Figure 67: the current situation, including imminent PT changes

8.4.2 Near-term (by 2023)

Bus frequencies are expected to increase from the current proposed levels in order to accommodate increasing demand for public transport arising from increased growth in activity in the region. An increase in bus service frequencies will place additional pressure on bus stop capacity on Camp Street. In order to address this, it is proposed that a new Public Transport interchange is provided on Stanley Street. The interchange will incorporate 6-8 bus stop bays and include passenger facilities in a building between Stanley Street and Athol Street.

The public bus stops at Shotover Street and Camp Street will be re-located.

Bus priority measures along Stanley Street from the Frankton Road entrance will be implemented, with bus lanes and alongside other bus priority measures. In addition, it is recommended that bus priority measures are introduced on Frankton Road by 2023.

As activity increases, and the level of service provided by bus services reduces, we expect that demand for water taxis will increase, particularly to the Kelvin Heights area.

A growth in water taxi fleet and services is expected to meet the increased demand by 2023. During this time, a wharves upgrade programme needs to commence, focused on QTC, the Gardens and Kelvin Heights. An outline of the concepts envisaged for the proposed wharf (pontoon) development is shown in the Beca Report in Appendix 10 and a concept design for the Queenstown Wharf is shown below.



Figure 68: An artist's impression of a Queenstown Wharf

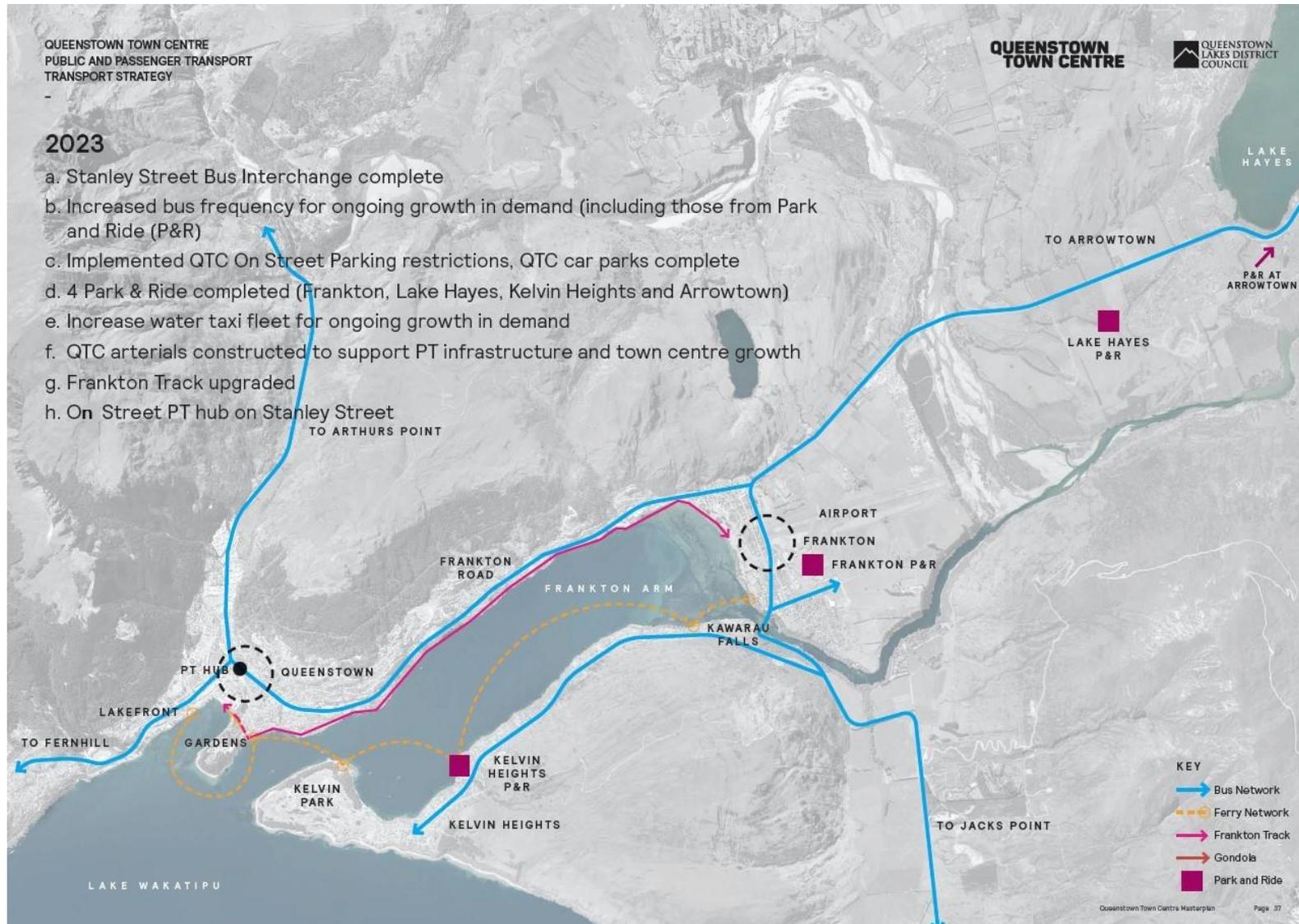


Figure 69: a snapshot of the masterplan transport projects delivery by 2023

8.4.3 Mid-term (2023 – 2035)

Bus frequencies will continue to increase and in areas outside of Queenstown, Park and Ride (P&R) facilities are needed to enable people to drive to and from the bus route, further increasing patronage. Bus services are likely to have been increased to a maximum practical level of frequency by 2025. Consequently, improvements are likely to need to be made to ferry services to cater for further growth. At that stage, there would be double decker buses operating at less than ten-minute headways, potentially in congested traffic. By 2027, all piers within Frankton Arm that are envisaged for scheduled ferry services are recommended to be upgraded to pontoons. A scheduled ferry network/system is expected to be established by 2030. The wharf at Frankton could be improved to incorporate link with the airport. The bus service along Frankton Road is expected to reach capacity around 2035 even with improved ferry services. A gondola could be introduced provide an additional option for travel between Frankton and Queenstown. We recommend the feasibility of this is studied and planning takes place, so that construction could occur for completion in the long-term (around or beyond 2035).

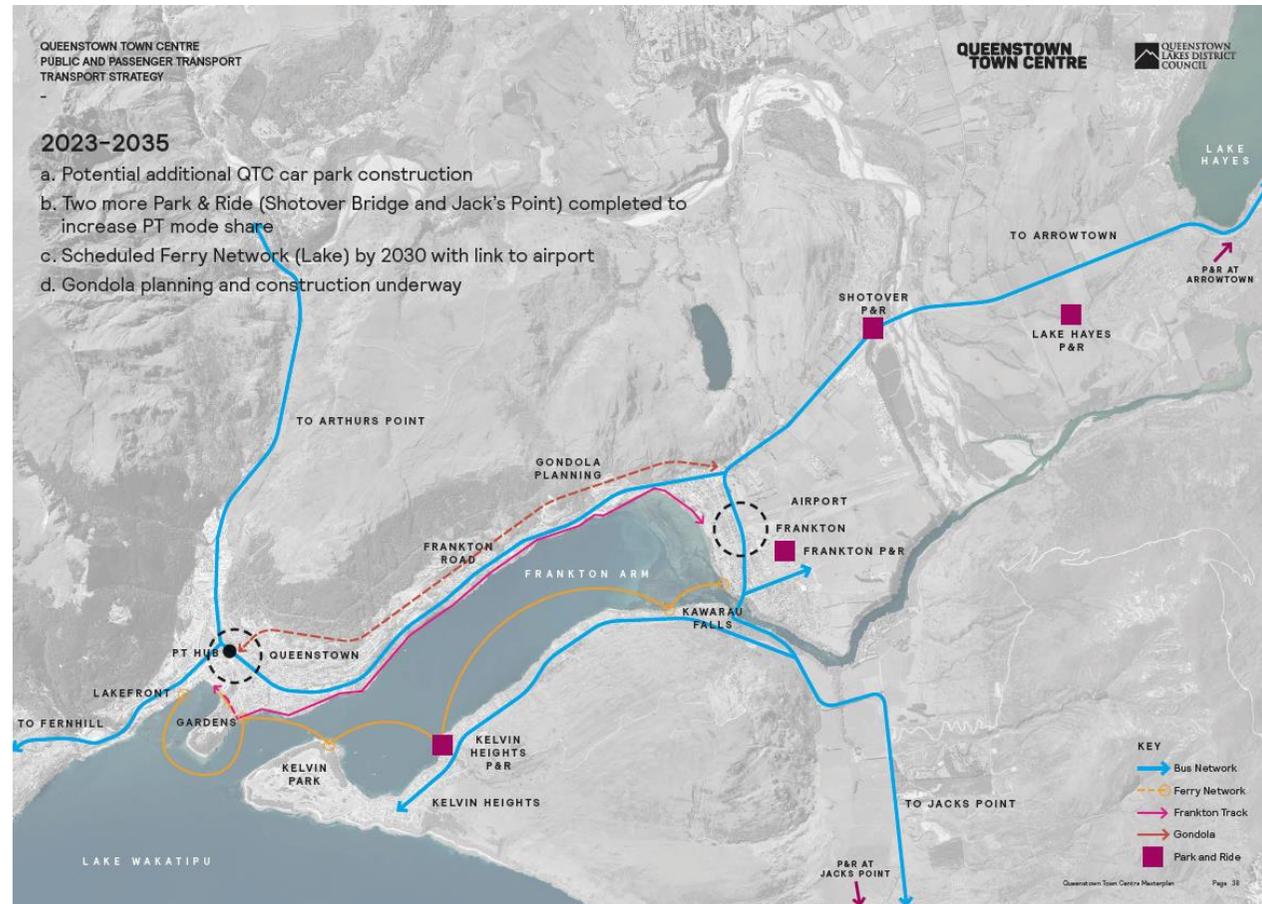


Figure 70: a snapshot of the masterplan transport projects delivery between 2023 and 2035

8.4.4 Long-term (Beyond 2035)

Buses will remain the dominant public transport mode, but due to increased congestion and demand on the Frankton Road corridor, greater co-ordination between bus and other modes of public transport (ferries) will be required. In the longer term, water transportation to be continuously monitored and improvements are to be made, where necessary. In the longer term, the mass transit system is expected to be constructed and in operation. A draft construction schedule to support this full programme is shown below.

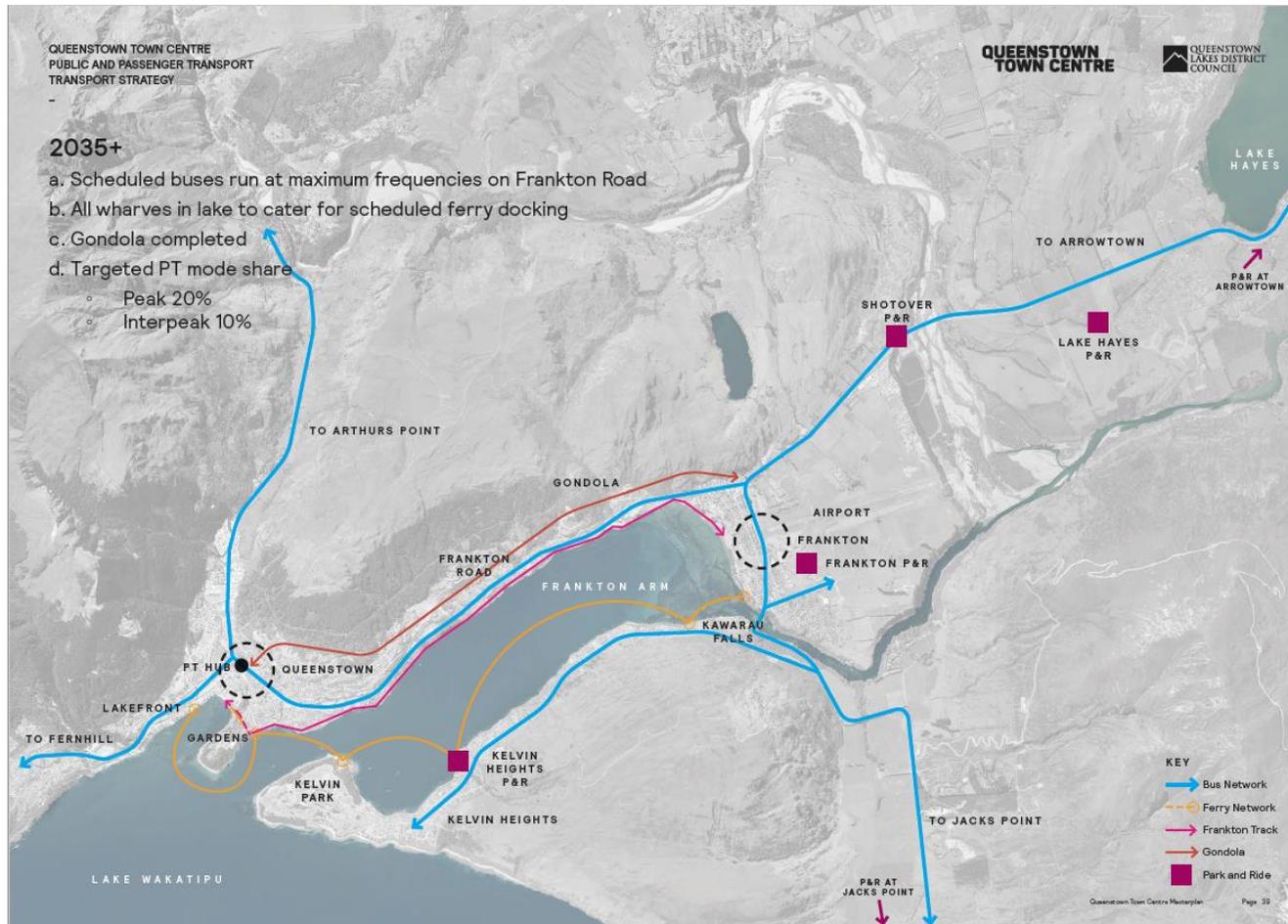


Figure 71: A snapshot of the masterplan transport projects delivery by 2035 and beyond

QUEENSTOWN TOWN CENTRE MASTERPLAN
PROPOSED CONSTRUCTION SEQUENCING SCHEDULE

13 October 2017

	1	2	3	4	5	6	7	8	9	10
	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
Parking (Buildings)										
Parking Building (Boundary St)										
Parking Building (Ballarat St/Project Connect)										
Parking (Interventions/Technology)										
Parking Interventions/Technology (Phase 1)										
Parking Interventions/Technology (Phase 2)										
Town Centre Arterials										
Arterial Route Designation										
Land Acquisition										
Stage 1: Melbourne St to Henry St										
Stage 2: Henry St to Man St										
Stage 3: Man St and Thompson St (to One Mile)										
Public & Passenger Transport Facilities										
Public Ferry Wharves										
Stanley St Interchange										
Public Realm Upgrades										
Upper Beach St										
Rees St										
The Mall (superficial not full upgrade)										
Brecon St (Gondola to Man St only - incl. pedestrian crossing across Man St)										
Lower Beach St & Earnslaw Park										
Brecon St (Lower Brecon)										
Park St										
Rec Ground (Infrastructure and edges relative to the new Memorial Arterial)										
Ballarat St & Village Green										
Stanley St										
Athol St										
Fernhill-Lakeview Walk/Cycle Connection (Town Link track)										
Camp St										
Cow Lane										
Shotover St										
Lake Esplanade										
Church St & St Peters Open Space										
Searle Lane										
Earl St										
Marine Parade (balance)										
Community Heart										
Community Heart (Memorial Hall replacement etc)										

Figure 72: The proposed construction schedule for the Queenstown Town Centre Masterplan programme

The current recommended programme for the Queenstown Integrated Transport Programme Business Case is shown below to demonstrate the connection between the masterplan and the wider transport development programme.

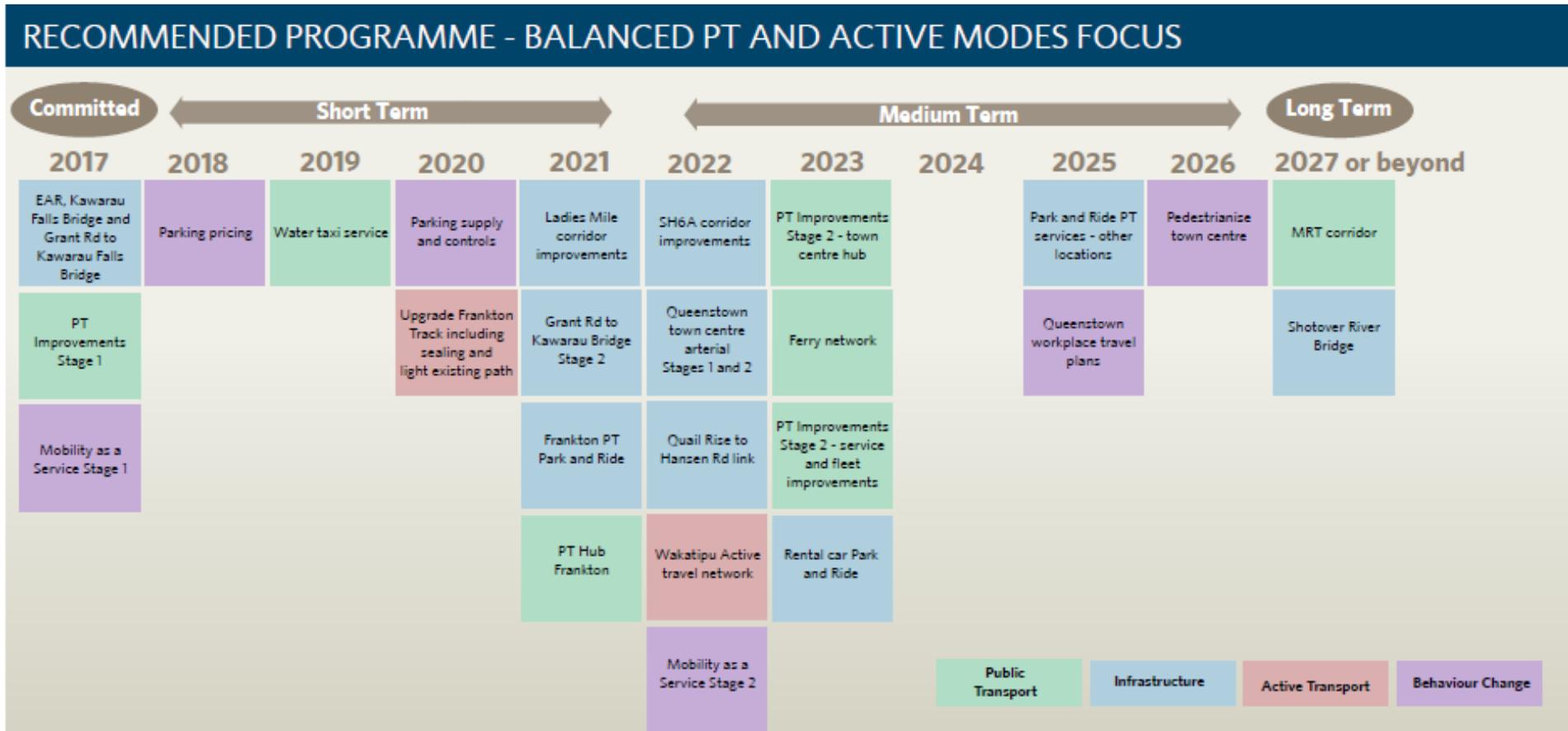


Figure 73: The Queenstown Integrated Transport Programme Business Case – recommended programme

The diagram below shows how the QITPBC proposed activities connect across the district.

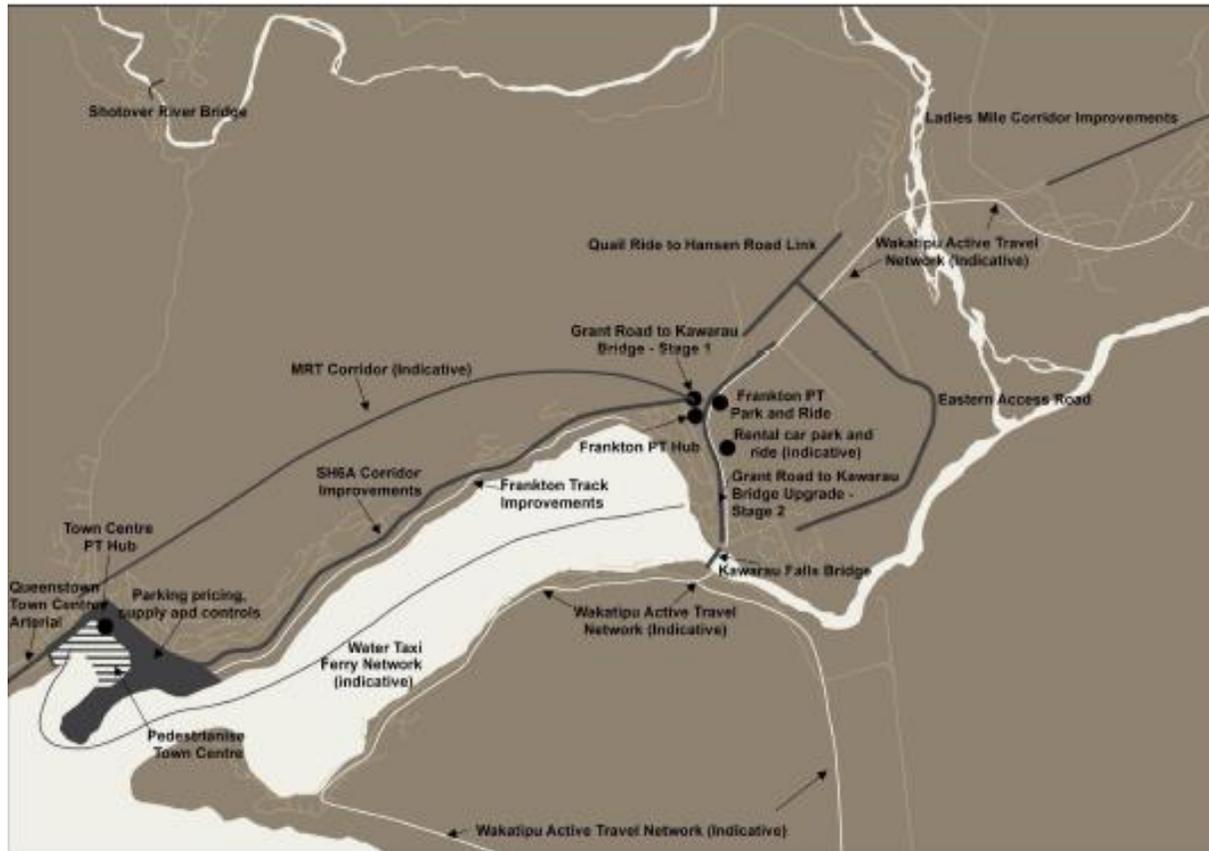


Figure 74: The Queenstown Integrated Transport Programme Business Case – recommended activities outline

8.5 Preferred Programme – Assessment

8.5.1 Assessment method

Each shortlisted option is assessed through an MCA ahead of detailed analysis, including modelling, costing and rating against the NZTA Investment Assessment Framework.

The MCA provides the grounds for holistic assessment of each option, ahead of further investigations into the cost break down and economic efficiency of the programme.

The value for money analysis builds on this and considers how well the proposed programme can deliver value through a cost benefit ratio determination.

8.5.2 Masterplan and P&PT Programme Risk

A workshop was held on 4 April 2017 with the wider project team to work through the major risks presented by the entire Masterplan Programme. This workshop produced an agreed risk assessment that will transfer into each programme's risk management and forms part of the ongoing reporting for the Masterplan programme (shown below). These risks were then revisited and detailed through subsequent meetings in June, August and September 2017. The outputs of these workshops are shown in Appendix 7, with blank space allocated for ongoing development of risk management strategies as the programme and case is developed.

8.5.3 Value for Money

In assessing value for money, all of the economic, environmental, social and distributional impacts of a programme are consolidated to determine the extent to which a programme's benefits outweigh its costs.

The MCA approach used provides the initial value for money assessment, with multiple options compared and contrasted using their link to investment objectives, assumed cost levels and delivery timings, in addition to evaluation against business needs and risks.

8.5.4 Economic analysis of programme options

Economic analysis has been undertaken following the full procedures from NZ Transport Agency's Economic Evaluation Manual (EEM) 2016. The content below (in italic text) is sourced directly from the "Queenstown Town Centre Masterplan Modelling and Economic Evaluation" report produced by Abley Transportation consultants for QLDC. This is included as Appendix 7.

In the economic analysis, the following assumptions have been made:

- *6% discounting rate over 40-year evaluation horizon.*
- *Update factors applied to July 2016 benefits and costs.*

Five of the programmes from the short list of programmes develops in the IBC have been evaluated. A simplified summary of the inclusions of each programme are shown in the table below.

Table 25: A simplified summary of Masterplan programme inclusions

Programme	Arterials	PT	Parking
Programme 1 Status Quo	Status Quo	Do Minimum	Do Minimum
Programme 2 Do Minimum	No Arterials	Multiple on street bus facilities and dedicated on street Coach facilities	Parking technology
Programme 3 Least Ambitious	Stages One and Two	11 bay dedicated Off street PT Hub	One car park appropriate supply
Programme 4 Intermediate	Stages One and Three	New Stanley St 6 bay on street PT facility	Redevelop existing sites
Programme 6 Ambitious	Stages One, Two and Three	Stanley St on street PT facility reduced traffic	Multiple new and upgraded off-street facilities

8.5.5 Road user cost benefits

The analysis includes the following benefits:

- travel time costs and additional congestion cost
- vehicle operating costs
- travel time reliability (estimated to be 5% of travel time costs)
- accident costs based on transport model methodology
- emissions (Carbon dioxide costs taken as 4% of vehicle operating costs).

8.5.6 Other benefits

In addition to the total network operating cost benefits, the BCR analysis was expanded to include the following additional public transport (PT) user benefits:

- Public transport reliability improvement benefits (EEM A4.1(b) and assumes 3% work travel, 37% commuting and 60% other purposes as agreed with peer reviewer in the absence of Queenstown guidance).
- Public transport travel time benefits (EEM A3).
- Road reduction benefits (EEM SP10).
- Increased service frequency benefit (EEM A18.4).
- Infrastructure benefits (EEM A18.7).

The infrastructure benefit is calculated based on attributing a typical user's in-vehicle time equivalent value, for the facility and it is assumed that 50% of public transport users will visit the hub. The EEM provides guidance that a public transport station could be valued at up to three minutes based on the level of comfort and services provided to users. A value of two minutes has conservatively been assigned to the most ambitious programme PT Hub (included in programme 4 and 6) acknowledging the proposed high-quality facility. Seventy five percent of this benefit has been included for programme 3 and no infrastructure benefit is included for programme 2 to reflect the relative quality and convenience.

The PT increased service frequency benefit has been included for programmes 3,4 and 6 recognising the increased benefits of moving from a 15 minute to 6-minute service frequency on Frankton Road. The average of 15 and 6-minute evaluations has been assumed to calculate the wait time benefit as is consistent with the procedures.

Public transport reliability benefits and road reduction benefits have been calculated for programme 6 using the EEM formula. It is estimated that programme 3 and programme 4 would deliver 90% and 72.5% of each of these benefits respectively based on the extent to which traffic congestion on the key arterials in the town centre is likely to be relieved under each scenario. Specifically, change in traffic volumes on Stanley Street has been used as a proxy with 2025 volumes dropping from 16500 vpd to 8600 vpd under Programme 6. The addition of stages 1 and 3 (programme 4) reduces volumes from 16500 vpd to 10100 and the full arterials reduces volumes from 16500 vpd to 7700 vpd). On this basis 90% of the traffic reduction is attributable to Programme 3 and 72.5% attributable to Programme 4.

The reduction in average minutes late assumed in the calculation of public transport reliability benefits has not been specifically calibrated, however currently buses experience lengthy delays as a result of blocking back from the signals on Stanley Street and roundabouts on Shotover Street. In 2015 we understand from Trackabus that 30% of services were more than 5 minutes late and on occasion during peak hours buses were cancelled due to extreme late running. In the future with increased traffic volumes and congestion this will deteriorate further in the future. Whilst it is difficult to estimate it is asserted that for bus services on Stanley Street it is plausible that by the start of benefits (2022/23) if the new arterials are not built to relieve congestion and allow buses a free run into the town centre buses may experience on average a five-minute delay resulting in poor public transport reliability, therefore a five-minute reduction in average minutes late is assumed for Stanley Street services only. A sensitivity test is introduced in section 9.6 (of the Abley report) whereby a two-minute reduction is assumed.

Public transport travel time benefits are calculated using the EEM formula and assume a five-minute reduction in travel time is likely as a result of removing the extensive congestion from Stanley Street and Frankton Road, providing bus priority along Stanley Street and ease of access to the new hub. This is only applied to Stanley Street services and a sensitivity test is introduced in section 9.6 whereby a two minute reduction is assumed.

The EEM states the criteria for claiming agglomeration benefits to be “The required spatial concentration of economic activity for realising agglomeration benefits is only likely to occur in the major industrial and urban centres of New Zealand. It is only the large and complex urban transport activities that will provide the relevant conditions that justify an analysis of agglomeration benefits”. We understand the Roads of National Significance projects are the only projects agglomeration benefits have been calculated for to date following the EEM procedures.

The NZTA procedures for calculating agglomeration benefits are quite complex and involve considerable analysis. It is not entirely clear on how well the NZTA procedure will convert to monetised benefits for this project. There is some likelihood that the outputs will be marginal as the benefits are attributable to growth and are not necessarily attributable to the transport interventions in isolation.

Due to this uncertainty to the appropriateness it is our recommendation that the IBC clearly state that there may be agglomeration benefits, but it has been chosen not to enumerate them and on this basis the BCR analysis provides a conservative approach.

The annual public transport and other benefits included in this analysis includes:

- network operating cost benefits
- vehicle operating costs
- vehicle emissions
- in vehicle time cost
- additional congestion cost
- accident costs
- travel time reliability costs.

Table 26: Annual Public Transport and Other Benefits

Programme	Public Transport Reliability	PT user travel time benefits	Road Reduction benefit	PT Increased service frequency benefits	Infrastructure benefits	Annual benefits	40 Year benefit stream PV
Prog 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Prog 3	\$ 5,015,286	\$ 1,044,851	\$ 415,389	\$ 1,189,651	\$ 203,627	\$ 7,868,803	\$ 110,891,177
Prog 4	\$ 4,040,092	\$ 841,686	\$ 415,389	\$ 1,189,651	\$ 271,502	\$ 6,758,319	\$ 95,241,665
Prog 6	\$ 5,572,540	\$ 1,160,946	\$ 830,777	\$ 1,189,651	\$ 271,502	\$ 9,025,416	\$ 127,190,752

8.5.7 Costs and programme BCR

Cost estimates and staging for each programme including all land acquisition costs (including QLDC owned land) were received from Rationale. Estimations for the additional capital and operational expenditure to move from a 15 minute to 6-minute PT service frequency on Frankton Road have also been included. It has been assumed that the increased service frequency would require six additional vehicles three in each direction for the peak 10 hours of the day). Diesel vehicle cost estimates have been used for the low-cost estimate and electric vehicles the higher cost estimate. Indicative variable contract rates for in service kilometres (\$2 per km) and hours (\$35 per hour) have been used to provide an estimate of additional operational costs associated with the increased service frequency.

Maintenance costs have been included at years 10, 20 and 30 following start of benefits and equate to 1.5% of capital costs which corresponds to the estimated maintenance costs from the recent QLDC Eastern Access Road economic evaluation. This is considered to be a conservative figure as the capital costs upon which this is applied includes an allowance for land acquisition costs.

The resultant discounted benefits, costs and programme BCRs are shown in the table below.

At this stage, the preferred programme is carrying a BCR of 1.7.

Table 27: Programme BCR analysis

Base Option	Programme	Upper Programme Cost (\$)	Expected Cost (\$)	Lower Programme Cost (\$)	Programme Benefit (\$)	Programme BCR
1	2	6,292,057	6,292,057	4,840,157	30,552,808	4.9
1	3	125,852,862	107,077,915	92,773,386	216,005,414	2.0
1	4	142,387,338	112,779,443	89,755,410	167,605,129	1.5
1	6	166,965,929	135,586,422	111,079,272	230,417,532	1.7

8.5.8 Incremental BCR Analysis

An incremental cost benefit analysis of the five alternative programmes has been undertaken following the procedures in A19 of the EEM to identify the optimal programme from an investment perspective.

An incremental analysis has been undertaken to assess the incremental value of each programme, and the results are shown below. The programmes were ranked and labelled 1 to 6 in order of increasing cost. Starting with programme one, the next higher-cost programme, (programme 2) was compared to calculate the incremental BCR between the programmes. This was repeated for programme 2 to 3 and 3 to 4.

A BCR of 1 was considered to be the target BCR as it represents a positive return on investment. As the incremental BCR of programme 4 was less than 1, the incremental BCR between programme 3 and 6 was calculated.

Table 28: Incremental BCR analysis

Base Option	Incremental Option	Upper Incremental Cost (\$)	Expected Cost (\$)	Lower Incremental Cost (\$)	Incremental Benefit (\$)	Incremental BCR	Preferred Option
1	2	6,292,057	6,292,057	4,840,157	30,552,808	4.9	2
2	3	119,560,804	100,785,857	87,933,229	185,452,606	1.8	3
3	4	16,534,476	5,701,529	-3,017,975	-48,400,286	-8.5	3
3	6	41,113,068	28,508,507	18,305,886	14,412,117	0.5	3

The incremental analysis shows that programme 3 is the preferred option as the incremental BCR from programme 3 to 4 and programme 3 to 6 is less than the target BCR of 1. **However, it is noted that the economic benefits associated with programme 6 are highly conservative and more should be done in the detailed business case to better capture and account for the wider economic benefits (particularly those provided by the third stage of the arterials).**

Programme 5 from the IBC is identical to programme 6 in terms of infrastructure but differs in that the new arterials are proposed to be staged on a 'just-in-time' basis to maximise benefits. The timing of infrastructure to derive Programme 5 has not been addressed in this assessment.

The programme 6 analysis is considered to be highly conservative as a significant quantum of benefits associated with the delivery of stage 3 of the arterials in programme 6 are not tangible. Specifically, no benefits have been attributed to the provision of coach parking in Shotover Street and Duke Street which is made available as a direct consequence of building Stage 3 of the Arterials (provided in Programme 6).

The evaluation team have sought direction from NZTA as to how this can be enumerated, and this appears to be an intangible but very significant benefit attributed to Stage 3 of the arterials and corresponding incremental benefits of Programme 6. On this basis the broader intangible benefits arising from the delivery of stage 3 of the arterial should be considered further in the assessment of programme 6.

In addition to the comments above, the cost of the third stage of the arterial upgrade has recently dropped significantly (by approximately \$50 million) following the recent work completed to identify an improved alignment. The new alignment for this section will include a great deal less supporting works (such retaining walls and cuts) which is expected to reduce the construction costs and it may also open up new land for development (providing new benefits). Through these shifts and more detailed analysis of the wider benefits in the detailed business case, the BCR for the programme is expected to keep improving.

8.5.9 Sensitivity testing

Sensitivity testing has been completed to help understand how the BCR may change based on variations in cost and benefits. This is shown below.

Table 29: Sensitivity testing on the BCR

Base Option	Programme	Programme BCR	Upper Cost	Lower cost	+30% Benefits	-30% Benefits
1	2	4.9	4.9	6.3	6.3	3.4
1	3	2.0	1.7	2.3	2.6	1.4
1	4	1.5	1.2	1.9	1.9	1.0
1	6	1.7	1.4	2.1	2.2	1.2

8.5.10 Peer review of the programme transport model

Peer reviews have been used to test the approach used to model transport and economic benefits in this programme. The first peer review was completed by John Row of Beca and the second review was undertaken by Graeme Bellis of NZTA. These peer reviews have been used to refine the transport modelling and economic appraisal of the programme options and Abley have used this feedback to refine and re-issue their report (the outputs of which are shown above).

In addition to ensuring the modelling was being undertaken correctly, the reviewers noted the need for a more advanced model to be developed to provide the level of analysis required for the detailed business case phase. This supports QLDC's current investigations into the best scope and objectives for a more advanced modelling tool.

The peer report completed by Beca is included as Appendix 18 and the initial comments from Graeme Bellis in a recent email to the project team are included below.

“My observations on the economic evaluations carried out for the IBC work are as follows:

1. *The procedures used generally are in accordance with the requirements of the Economic Evaluation Manual, and at a level of detail that is appropriate for the IBC stage.*
 2. *The incremental BCR analysis has now been carried out correctly, and supports programme 3 as a preferred option. I understand that recent review of predicted construction costs may change this position. In any event, this can be confirmed at the next level of the investigation, but should be included in the IBC work, as any further analysis required should be trivial.*
 3. *I still have concerns over the predicted public transport patronage, and the consequent level of private traffic on the network in the future. This is due to:*
 - a. *Initial incorrect application of elasticity methodology in the IBC that has a flow-on effect to other assumptions and conclusions made in the subsequent analysis,*
 - b. *The high levels of uncertainty in the variables and relationships that contribute to both the overall level and mode shares of future trip-making. Because of the high level of uncertainty in these aspects, there will need to be wide-ranging scenario and sensitivity testing in the DBC,*
 - c. *The high level of sensitivity of traffic flows on the network, and hence performance of future development options, to the level of PT patronage.*
 4. *Peer reviews of the modelling and economic analysis have highlighted the inability of the current strategic modelling to provide the level of detailed information that will be needed to clearly differentiate options that will be compared at the DBC stage. This will have implications for both operational and economic analyses. Given the high levels of predicted growth in Queenstown, careful thought needs to be given to choice of models, to ensure that they have appropriate levels of sensitivity to critical predicted variables.*
- I hope these comments help in shaping the next stage”.*

8.5.11 Evaluation through transport modelling

This programme has also been tested through detailed transport modelling.

Queenstown-Lakes District Council (QLDC) engaged Abley Transportation Consultants (Abley) to provide transport planning and transport economics support to Beca Consultants for the Queenstown Town Centre Masterplan Programme Business Case (PBC).

The modelling takes into consideration the likely uptake of public transport in alignment with the draft recommended programme from the Queenstown Integrated Transport PBC, and includes a range of inputs from the Masterplan PBC team including:

- parking supply, charges and time restrictions
- provision for a bus hub in the town centre with bus priority
- introduction of new arterials and associated changes in parking availability.

Two options have been assessed at 2025 and 2045 using the QLDC Tracks Transportation Model and the economic benefits and costs of the new arterials included within each scenario have been assessed in accordance with NZ Transport Agency Economic Evaluation Manual (EEM) 2016 full procedures.

Public transport patronage has been forecast by applying the transport elasticities in section 3 of the Abley report (refer appendix 7) to figures from 2016 MWH occupancy surveys which included public transport and coach patrons accessing the town centre between 7am and 11am on a typical weekday. For the purposes of this analysis bus patrons were estimated from the combined bus patron/coach patron total as a function of the current number of services and average occupancy on each corridor.

The inbound 7-11am patronage totals have been converted to peak hour (8-9 am) totals based on calibrated peak hour conversion rates from surveys.

After applying elasticities to account for public transport investment and parking charges, the approximate public transport patronage numbers (and number of buses based on average occupancy of 40 persons per service) in 2025 by corridor are estimated to be (per peak hour):

- Gorge Rd - 80 passengers (2 buses).
- Frankton Rd - 290 passengers (up to 7 buses plus water taxi).
- Lake Esplanade - 140 passengers (3 buses).

The corresponding forecast public transport patronage numbers (and number of buses based on average occupancy of 40 persons per service) in 2045 by corridor are estimated to be:

- Gorge Rd – 100 passengers (2-3 buses).
- Frankton Rd - 300 passengers by bus/water taxi (up to 7-8 buses plus water taxi) and 490 passengers by Mass Rapid Transit.
- Lake Esplanade – 170 passengers (4 buses).

A critical part of this modelling has been identifying how much mode shift needs to be achieved to keep the town growing sustainably and how integrated changes in arterials, parking and P&PT will impact this. Two scenarios were modelled. The first scenario allowed some tests to be completed on the model outputs and Scenario 2 was used as the best indication of the effect of the preferred programme. These outputs are shown below.

Table 30: Scenario 2 2025 outputs

2025 Scenario 2 modelling outputs

Morning Peak Period		Scenario			
	BAU	P&R	P&R + Parking Sc 1	Change (PR-DN)	Change (PR+Sc1-DN)
Modal Shift (7-9am)					
Total vehicle driver trips	24483	23778	23433	705	1050
Increase in PT Trips		705	1050	-705	-1050
Town centre vehicles (7am-9am)					
Total vehicles entering town centre	4521	4211	3876	310	645
Total vehicles leaving town centre	3183	2965	2965	219	219
%age reduction in arterial volumes to/from town centre		6.9%	11.2%		
Parking available (approx 10am)					
Paid parks	303	316	591	-13	-288
Free parks	1842	1921	1981	-79	-138
Total parks available	2145	2237	2572	-92	-427
Paid parking occupancy	88%	87%	76%		
Free parking occupancy	50%	48%	47%		
Total parking occupancy	65%	64%	58%		
Town centre through trips	578				
%age redn in non through trips		8.1%	13.2%		
Interpeak Period		Scenario			
	BAU	P&R	P&R + Parking Sc 1	Change (PR-DN)	Change (PR+Sc1-DN)
Modal Shift (9am-4pm)					
Total vehicle driver trips	107309	106015	105808	1294	1501
Increase in PT Trips		1294	1501	-1294	-1501
Town centre vehicles (9am-4pm)					
Total vehicles entering town centre	14378	13833	13632	545	746
Total vehicles leaving town centre	14399	13853	13651	546	747
%age reduction in arterial volumes to/from town centre		3.8%	5.2%		
Parking available (approx 1pm)					
Paid parks	127	134	321	-7	-194
Free parks	1457	1541	1689	-84	-232
Total parks available	1584	1675	2009	-91	-425
Paid parking occupancy	95%	95%	87%		
Free parking occupancy	61%	59%	55%		
Total parking occupancy	74%	73%	67%		

Table 31: Scenario 2 2045 outputs

2045 Scenario 2 modelling outputs

Morning Peak Period		Scenario			
	DN after 2016 Sc1	P&R + Gondola	P&R + Gondola + Parking Sc 1	Change (PRG-DN)	Change (PRG+Sc1-DN)
Modal Shift (7-9am)					
Total vehicle driver trips	31540	28658	28202	2882	3338
Increase in PT Trips		2882	3338	-2882	-3338
Town centre vehicles (9am-4pm)					
Total vehicles entering town centre	5233	4069	3626	1165	1607
Total vehicles leaving town centre	4480	3483	3483	997	997
%age reduction in arterial volumes to/from town centre		22.3%	26.8%		
Parking available (approx 10am)					
Paid parks	267	291	817	-24	-550
Free parks	1625	1769	1685	-144	-60
Total parks available	1892	2059	2502	-167	-610
Paid parking occupancy	92%	91%	75%		
Free parking occupancy	50%	46%	48%		
Total parking occupancy	71%	68%	61%		
Town centre through trips	770				
%age redn in non through trips		26.4%	31.9%		
Interpeak Period		Scenario			
	DN after 2016 Sc1	P&R + Gondola	P&R + Gondola + Parking Sc 1	Change (PRG-DN)	Change (PRG+Sc1-DN)
Modal Shift (9am-4pm)					
Total vehicle driver trips	140567	136979	136705	3588	3862
Increase in PT Trips		3588	3862	-3588	-3862
Town centre vehicles (9am-4pm)					
Total vehicles entering town centre	18545	15429	15163	3116	3383
Total vehicles leaving town centre	18643	15511	15243	3132	3400
%age reduction in arterial volumes to/from town centre		16.8%	18.2%		
Parking available (approx 1pm)					
Paid parks	86	99	435	-12	-349
Free parks	995	1134	1238	-139	-244
Total parks available	1081	1232	1674	-151	-593
Paid parking occupancy	97%	97%	87%		
Free parking occupancy	69%	65%	62%		
Total parking occupancy	83%	81%	74%		

8.5.12 Implementability

This project has been assessed from an implementability and wider project impact perspective. This high-level assessment will be followed up by detailed analysis during the detailed business case development. In summary, none of the factors below signal that the programme cannot be implemented successfully. However, each project solution needs to be considered further in the detailed business case and the programme needs to consider the holistic effect of delivering each project as an integrated schedule.

Table 32: Implementability assessment

Area	Key points
Constructability	The PT Hub and the park and ride facilities have been designed to an extent that can inform construction challenges. No major challenges have been identified to date for these simple structures.
Operability	Operability of the new P&PT transport assets and arrangements has been considered and at this stage there are no significant issues identified. QLDC will complete more work to understand challenges around operating a new PT hub and changed passenger transport arrangements, including waterborne and mass transit transport solutions.
Statutory requirements	<p>To meet statutory requirements related to construction, operation and maintenance activities, QLDC and partners need to gain various authorisations from those with regulatory responsibilities for the natural and built environments such as local authorities, Environmental Protection Authority, Environment Court, culture and heritage (Heritage New Zealand) and the conservation estate (Department of Conservation). These may include:</p> <ul style="list-style-type: none"> - Resource consents - Designations and notice of requirements - DOC concessions - HNZ authorities <p>More work needs to be completed in this area to confirm the extent of requirements for this programme. Initial assessments indicate this will be low and early indications are that given the urban nature of the programme, these requirements will not be a serious constraint for the project.</p>
Property	The level of land take is not presenting an impediment to progressing with the project and this should be monitored and tested as the detailed planning progresses.
Ongoing asset management	Further work is required to demonstrate that QLDC and partners are prepared for the changes in asset management that will come from delivering the new infrastructure proposed in this programme. This will include increased maintenance budget and activities, management of new technology, managing greater uptake of P&PT services and management of new types of assets such as Ferry Wharves, a PT Hub and a mass rapid transit solution.

Table 33: wider programme impact assessment

8.5.13 Wider project impacts

Area	Key points
Safety	Exception reports and design assessments are required to ensure the new infrastructure to be delivered through this programme will meet the appropriate standards. This will be further assessed in the next stage of design. No significant safety risks have been identified to date through the risk assessment, but this should be closely monitored through regular updates.
Joint working	This programme has featured strong local stakeholder engagement and joint working opportunities have been explored with NZTA, QAC and ORC. The integrated nature of this programme in support of the QITPBC programme are key platforms for joint working to deliver value for the district.

Environmental and social	Initial benchmarks have been sought through ORC and a detailed Environmental and Social Responsibility scan needs to be completed and documented to confirm the level of planning required in this area. Early assessments indicate that this will not be a significant constraint for the programme.
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8.5.14 Investment Assessment Framework

The P&PT programme has been assessed against the 2018-2021 NZTA Investment Assessment Framework. The two criteria applied for the IAF are the BCR and ‘Results Alignment’. Following on from the BCR result, the Results Alignment outputs are shown below.

Table 34: Investment Assessment Profile

Assessment criteria for a High ranking		Alignment with Strategic Case
Results Alignment	Matches Desired GPS	A key objective of the draft GPS 2018 is ‘A land transport system that addresses current and future demand for access to economic and social opportunities’, which supports the P & PT programme. The proposed P&PT improvements is consistent with key objectives of the GPS and, if implemented, is predicted to improve the capacity and effectiveness of the land transport network through Queenstown.
	Is significant in relation to the desired GPS	
	Is significant in relation to the scale of the gap to the appropriate customer level of service or performance measure	
	Addresses a significant gap in the appropriate customer levels of service for one or more of: <ul style="list-style-type: none"> • Safety • Journey time reliability • Matching capacity and demand and/or resilience 	<ul style="list-style-type: none"> • Evidence shows that there is significant P&PT under performance in all these customer service areas, resulting in performance lower than its classification and the gap to the appropriate service levels or system performance significantly impacts on the customer experience. • The integrated programme benefits will deliver an improvement in levels of service or system performance. • With a rapidly growing resident population over 30,000 (urban and high growth threshold) and visitor population, Queenstown is experiencing capacity issues that represent a demand mismatch. This programme will address this issue through a multi-faceted mix of projects and interventions. • Queenstown is a recognised Tourism hot spot with a significant role to play in the regional and national tourism economy. This programme will address the areas of greatest risk for the town and ensure that positive experiences can be delivered to support ongoing growth in this area. • Safety will be improved through this programme, in particular through reduced pedestrian / traffic conflict, greater public transport use and improved active transport facilities. • Journey Time Reliability will be improved through reducing congestion and using an integrated programme to encourage mode shift and increased active transport.
	Supports economic growth and productivity for: <ul style="list-style-type: none"> • Employment • access to economic opportunities and social opportunities • Tourism and / or freight 	
	Addresses a capacity and demand mismatch for journeys in major urban and high growth urban areas	
Addresses intermodal connections that need addressing		

Assessment criteria for a High ranking		Alignment with Strategic Case
	Addresses a capacity and demand mismatch for safety issues presenting a high crash risk, communities subject to high risk	<ul style="list-style-type: none"> • Economic Growth is a key part of this programme and it will be supported through growing the town centre, supporting more efficient access (for personal, public and commercial traffic) and supporting continued tourism growth. • Intermodal Connections – the proposed programme integrates across modes and provides good connections with and support of district, regional, national and international connections.
	is significant as part of an end to end journey	The P&PT project forms part of an integrated approach to traffic issues and the development of a Masterplan for Queenstown. Alignment between the business cases for town centre parking, public and passenger transport and the masterplan is clearly established through the role that an arterial route can play in supporting the uptake of public, passenger and active transport modes, as well as changes in parking facilities to collectively contribute to reduced congestion in the area.
	is significant from a national perspective (given local, regional, national perspectives)	This project is needed to support economic growth, not only for Queenstown but also for the South Island and the nation due to the role Queenstown plays in driving the regional and national tourism economy.
	is significant in relation to GPS timeframes, i.e. a significant issue/opportunity within 3/10/10+ years	Queenstown has been recognised as an area of High Growth with the consequent dependence on provision of appropriate infrastructure to enable and facilitate that growth. The masterplan takes a long-term view but the implementation schedule outlines how QLDC plan to move with pace to address the transport challenges, providing an immediate and longer-term opportunity in line with the GPS.
Cost-Benefit Appraisal	BCR	An integrated transport programme BCR has been completed by Abley Transportation Consultants. The current BCR for the programme is 1.7.

Assessment criteria for a High ranking		Alignment with Strategic Case
	Non-monetised benefits and additional benefits	<p>There are a number of non-monetised benefits targeted in the masterplan that will provide wider value form this programme, including:</p> <ul style="list-style-type: none"> - Improved town centre experiences for locals and visitors. - Improved authenticity of the town centre – celebrating local culture and heritage. - Improved civic pride and local visitation. - Improved community satisfaction - Improved visitor satisfaction - Improved town centre productivity - Improved environmental outcomes through reduced vehicle emissions.

The assessment above demonstrates how the programme achieves a ‘High’ ranking. The analysis below shows how this programme is also eligible for a ‘Very High’ ranking.

Assessment criteria for a Very High ranking	How this programme meets the criteria
<p>A Very High Results Alignment rating for a road improvement must only be given if the improvement is responding to specific government priorities for:</p> <p>Transport access required to enable housing development in high growth urban areas</p> <p>Or</p> <p>Preparing the network for safer in-vehicle and/or driverless technology</p> <p>Or</p> <p>Delivering innovative solutions through the use of new technology (including innovative data and information use) in order to improve the customer levels of service and outcomes set out in the Medium and High Results Alignment above.</p>	<p>Transport access required to enable housing development in high growth urban areas</p> <p>This programme will play a critical role in enabling the Lakeview (PC50) and Gorge Road Special Housing Area (SHA) developments, which will provide significant levels of new housing in this high growth urban area. The delivery of stage 1-3 of the new arterials (particularly 3 given the way it will reduce traffic on Shotover Street) will also support improved pedestrian flows around the town centre.</p> <p>Delivering innovative solutions through the use of new technology (including innovative data and information use) in order to improve the customer levels of service</p> <p>Technology is proposed to play an important role in improving the level of transport services for Queenstown’s visitors and locals. The scope for these solutions includes:</p> <ul style="list-style-type: none"> - development or enhancement of applications to inform customers of transport choices - smart parking management system to inform users of availability, deals and parking period lapsing - remote parking inventory management - ITS systems to inform drivers and travellers of parking availability and transport options through digital signage.

9 Commercial Case

A workshop (held on 3 August 2017) confirmed the preferred Commercial approach for this and other Masterplan projects. This was reinforced through a project team discussion on 12 September 2017.

At this indicative stage, this Commercial Case will focus on the key strategies to ensure this programme is commercially viable and how the market will be engaged to deliver it. Key components are the requirements statement, strategies for procurement, consenting and property acquisition, alongside the approach to risk allocation and delivery responsibilities. All of these strategies will be developed further through the detailed business case phase.

9.1 The deal – what is required

To deliver the preferred programme, QLDC and partners (as part of an Alliance or steering group) needs to deliver a set of services and facilities. Some of these can be delivered internally, while other elements need to be procured from the market.

The items that need to be delivered through engaging the market include:

- the next stage of business cases and all associated technical and professional services
- the design, construction and operation of the PT hub, including the new structures, facilities and reconfiguration of the area
- the reconfiguration of the road space and signs to provide the new passenger transport, coaches, and taxi locations
- public transport priority lanes
- the design and construction of the ferry wharves and associated signs and landscaping
- the design, development and operation of enabling technology (that will also support the wider Masterplan projects, particularly Public and Passenger Transport).

9.2 Market capability

The specification above can be delivered by known local and national developers. The proposed public transport interchange requires a simple design and structure that can be delivered by a range of engineering and construction firms. There is also an opportunity to support mixed use development in the PT Hub area, broadening the opportunities for potential developers and creating an attractive atmosphere, with high foot traffic for businesses to tap into.

There will be cross over with the technology solutions required for parking, so it makes sense to combine procurement processes where relevant. It would also make sense to leverage the work already occurring by QLDC, ORC and NZTA in developing solutions around '*movement/transport as a service*' solutions. The recently launched "Choice" app already provides some of the capability required for this programme, so the gaps need to be agreed and developed in a cost effective and integrated way.

Guidance may also be provided by industry groups, such as ITS New Zealand. Intelligent Transportation Systems New Zealand (Inc) provides leadership in the promotion, development and facilitation of ITS in New Zealand to achieve a sustainable, effective, efficient, safe and environmentally friendly transportation system.

9.3 Implementing organisations

The following organisations will play a role in implementing the commercial aspects of this project.

- The proposed Transport Alliance (see the Management Case) will play a role at a governance level, ensuring the project activities are coordinated with the wider Masterplan and the related activities occurring in the district. It is assumed that a governance or steering group will be used to represent the partners and oversee programme delivery activities.
- Through this steering group, QLDC will work in partnership with NZTA and ORC to plan, review and appoint the suppliers for the transport projects.

- QLDC and partners will work with professional services providers as required to progress the programme, including technical, commercial, legal, planning, project management, business case and economic advisers.
- NZTA and ORC will have an interest and may play a role in the development of specifications for and development of the supporting technology solutions (through providing guidance to the selected developer).
- NZTA and ORC will also have an interest in the new facilities and the role they play in supporting uptake of public and passenger transport.
- Suppliers will be selected to play a role in the development of the Detailed Business Case, such as professional and technical services firms and they will play a role as partners to QLDC and potential advisers to the proposed Alliance.
- External partners will also be selected to deliver the required buildings (and potentially operate them as well), the technology supporting the parking system and supporting elements (such as changed signage or ticketing hardware).

9.4 Procurement Strategy

The procurement strategy can be discussed in two phases.

The first phase is to support the development of a Detailed Business Case to progress the P&PT programme to a point where an investment application can be produced and QLDC can engage with the market. This first phase can follow Council's standard procurement processes, with agreed set of skills and services to be procured to guide the project through the development of a detailed P&PT business case, as part of a wider Masterplan programme.

The second phase needs to enable QLDC to procure services and products to deliver the preferred programme through to 2050. This phase will enable the private sector to do as much as possible through the development of the new public transport hub and the wider technology solutions. There is also an opportunity to encourage private industry to embrace the public transport hub by taking up space within and around this area. Where appropriate, other services may be targeted to support other programme elements such as development of Park and Ride sites, changed or improved signage (such as digital signage to support the management systems) or larger enforcement resources. A Commercial Team assembled by QLDC would play a key role in shaping this strategy and helping the Council to connect with the right capability in the market.

9.5 Consenting Strategy

As part of the Masterplan programme, the consenting strategy will aim to gain approvals in a timely manner to prevent delays to construction activities. The detailed business case will provide a sufficient level of design to inform the consenting and designation process. A designation is only required for the PT Hub if the land cannot be secured. However, a designation may be required to secure the future mass rapid transit route.

The AEE completed by Beca has provided a guide for issues and impacts that will need to be considered in relation to the PT Hub and supporting building location.

QLDC will need to seek legal and planning advice to assess and inform the detailed approach to consenting process management. The scope for this support will be focused on determining the Resource Management Act (RMA) requirements for obtaining the necessary planning approvals to deliver the construction elements of the programme.

In addition to this, the advisors in this area will need to work through the underlining zonings, look at land holdings and seek a designation over it that allows the programme to be delivered.

Designations are often used by authorities as a planning mechanism to manage road development and networks. A designation enables a requiring authority (in this case QLDC) to do anything that is consistent with a designation's purpose, subject to relevant conditions of the Notice of Requirement (NOR).

Designations also ensure that no other party is able to do anything that might be inconsistent with the purpose of the designation.

A designation provides greater flexibility to accommodate minor changes in construction and design, provided the works remain in the designated corridor and have the same intent as outlined in the NOR.

Through the NOR process, greater weight is also attached to the public benefit element of the project or work. Consideration of the objectives of the requiring authority, and whether the designation is reasonably necessary to achieve those objectives, is a key factor in decision making.

9.6 Property acquisition

If property is required for facilities and service provision, then standard QLDC acquisition processes would be applied. Confirming the preferred option in the Detailed Business Case is a pre-cursor to property negotiations.

9.7 Implementation timing

The Detailed Business Case needs to be completed in 2018 to facilitate the required procurement processes for this programme. The procurement and delivery timing will be aligned to the masterplan programme implementation schedule shown in section 8. It will be important to move swiftly to agree a process around significant lead time items, such as detailed business case development, funding approvals, procurement, designation and consenting.

9.8 Contract Management

The form of contracts to be used should be determined during the detailed business case planning. At this stage, it is assumed that a development partner arrangement may be beneficial given the wider opportunities across the masterplan, including the structures and facilities to be delivered around the new public transport facility, the parking buildings and the public realm upgrades.

9.9 Risk allocation

Risks during planning and implementation should be owned by the group most capable of managing it, subject to costs. During the detailed planning phase, QLDC will retain the programme risk. During implementation, QLDC retains risk around programme delivery, however, the contractor that is engaged to build the new public transport facility would take on the construction risk around their delivery. As the programme progresses, it will be important to identify how risks are allocated for the technology aspects of the programme. This should be tested in the detailed business case, including identifying the opportunity for risk sharing in each of the following areas:

- design
- construction
- transition and implementation
- availability and performance
- operating
- revenue
- termination
- control
- financing
- legislative
- residual value.

10 Financial Case

The Financial Case develops the financial model to be used for the preferred programme. It outlines the costs of the proposal, its proposed funding arrangements and an indication of its affordability.

10.1 Indicative costs

The cost estimates below have been used to inform the QLDC Long Term Plan forecast.

Table 35: 10-year costs by activity

LTP Category	10-year total
Detailed Business Case	\$75,000
Marketing and Communications	\$156,000
Property Costs	\$5,225,000
Public Ferry Wharf	\$5,699,000
Stanley St Interchange and Associated Works	\$22,693,000
	\$33,848,000

The breakdown of this investment across the first six years is shown below (as the investment is all loaded in this period).

Table 36: Near term investment schedule

	10 Yr Total	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Early Works Investigation	\$75,000	\$75,000						
Marketing and Communications	\$156,000					\$100,000	\$56,000	
Property Costs	\$5,225,000			5,225,000				
Public Ferry Wharf	\$5,699,000		\$100,000		\$305,000	\$1,987,000	\$1,234,000	\$1,204,000
Stanley St Interchange and Associated Works	\$22,693,000					\$1,658,000	\$21,035,000	
	\$33,848,000	\$75,000	\$100,000	\$5,225,000	\$305,000	\$3,745,000	\$22,325,000	\$1,204,000

10.2 Revenues

At this stage revenues are not confirmed due to the further work required to understand what the ferry revenues may be, and how revenues may be managed between QLDC and ORC. On a similar note, commercial hub lease revenues may be captured as part of the PT Hub configuration, but the detailed of this revenue is not yet known. These revenues have not been factored into the BCR and should be explored further in the DBC.

10.3 Funding arrangements

The following funding arrangements are proposed for this programme:

- The public transport facility is assumed to be eligible for NZTA funding under the normal QLDC Funding Assistance Rate (FAR) of 51 per cent.
- ORC and NZTA may also have an interest in the ITS solutions proposed in this programme and may benefit from shared investment. This needs to be discussed and agreed as part of the detailed business case preparation.

10.4 Affordability

The preferred programme demonstrates affordability through utilising available road space to avoid the significantly larger investment required for an off-street solution.

The costs for this programme have been loaded in the Long-Term Plan budget for the Council.

With a significant amount of investment required to meet the needs of growth, QLDC will be reaching its debt ceiling and for this reason, potential commercial leases around the bus hub should be further investigated in the detailed business case. The cost of the masterplan programme should also be used to assess the impacts on the Council operating budget during the detailed business case as informed by more mature designs and costs.

Given the scale of the masterplan programme costs, work is already underway to consider how the masterplan programme may be adjusted to manage affordability for the Council and investor partners. See further details on this within the financial case of the Queenstown Town Centre Masterplan Programme Business Case.

This should be explored further in the DBC and QLDC also needs to work closely with NZTA and ORC to ensure all eligible parts of this programme can be supported with the appropriate subsidy.

11 Management Case

The Management Case seeks to identify what needs to be done, why, when, how, and by whom with measures in place to identify and manage any risks. Given this is an indicative business case, some areas will require further work during the detailed business case phase to further define a detailed implementation approach.

The Management Case considers:

- governance and management
- project management and assurance
- risk management
- communications and stakeholder management
- benefits measurement.

11.1 Programme governance and reporting

A highly effective governance structure has been used to guide the Masterplan programme to date. This will need to evolve as the programme moves into detailed planning (see Appendix 1). It will be important to maintain strong governance and direction as the project transitions through the detailed planning and delivery stages.

Given the scale of the wider Masterplan programme and the developments planned for the district, a logical discussion has emerged between the investor partners around a more unified approach to planning and delivering through an integrated approach.

As reflected in the recent Queenstown Integrated Transport Programme Business Case (QITPBC) and the proposed Town Centre Masterplan Programme Business Case (TCMPBC), there is a well-supported assertion that targeted work programmes delivered within a single agency cannot deliver the required solutions effectively.

In the next 10 years, the investment partners (QLDC, ORC, NZTA) are collectively seeking to deliver a significant scale of transport, parking and public realm projects. The scale and complexity of these plans demonstrate a real need to work in a highly integrated way to ensure that each activity provides support to and gains benefit from other programme actions. Equally, the community and commercial audiences deserve to see a unified plan with a proactive and respectful approach to engagement that is not complicated by varied approaches.

The changes to the investor partners approach is to see each other as partners not stakeholders and applying a multi-customer centric way of system thinking.

With this question in mind, a facilitated workshop exercise was conducted with members of the Transport Advisory Group (TAG) on Wednesday, 5 July 2017. This workshop identified several common challenges within the existing arrangements. These challenges were summarised as:

- delivery at pace with quality outcomes
- gaining multi-party alignment, approvals and funding processes
- Queenstown's isolation and distance from our investment partners
- effective governance
- capacity
- business case capability
- local knowledge
- dispersed skills
- statutory framework.

While this conversation is continuing, and no decisions have been made, the structure below demonstrates how this might look in practice.

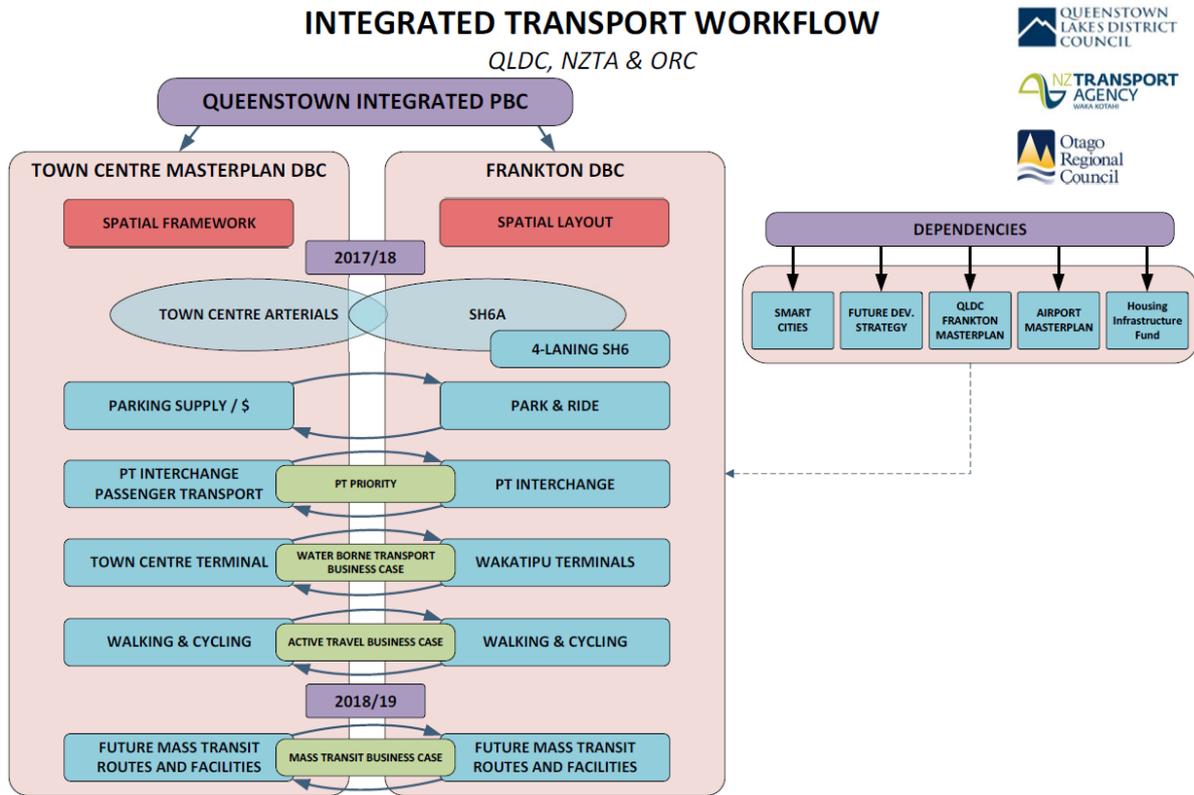


Figure 75: A proposed governance structure for the masterplan programme

It is suggested that this approach be adopted as quickly as possible to best coordinate the detailed planning for the Masterplan alongside the equivalent process for the Frankton, all in the context of the Queenstown Integrated Programme Business Case.

If this approach cannot be adopted, the existing governance arrangements should be maintained while optimising the interface to the multi-agency Transport Advisory Group.

An incremental approach may also be practical to develop an Alliance-type arrangement during the detailed business case development phase. This discussion is now being progressed by the Chief Executives from QLDC, NZTA and ORC. The next meeting on this topic is due to occur on 6 December 2017.

11.1.1 Scope and structure for the detailed business case phase

In addition to discussing a planning and delivery model, QLDC and NZTA have progressed discussions around the scope and structure for the detailed business case phase.

This discussion will continue into 2018, but at this stage, the discussion is centred around integrating the town centre projects where it makes sense, while ensuring connections with between planning for the town centre, the Frankton Flats area and the cultural strategy for Queenstown. The next step in this discussion will be to agree the relevant activities and the resources required to deliver these and the supporting funding.

11.2 Project management and assurance

11.2.1 Project Management Structure

At a project level, it may also be useful to adopt a standard a localised governance structure for detailed planning and delivery. This will need to be tested and refined during the detailed planning phase and as the wider programme collaboration model is agreed.

11.2.2 Reporting Framework

It is expected that formal reporting to the Steering Group will be on a monthly basis and in alignment with investor/partner standards.

The format of such reporting will be as agreed with the Steering Group but is likely to be a consolidated report of all delivery aspects including but not limited to the following topics:

- Executive Summary.
- Project Risks.
- Health & Safety.
- Programme & Milestones.
- Consent & Consultation.
- Design Status.
- Contractor Report.
- Financial.

11.2.3 Project Management Plans

Project Management Plans (PMP) are developed to outline 'how the project will be delivered'.

The PMP typically identifies:

- project's goals and objectives
- scope definition
- key personnel with roles and responsibilities
- delivery programme
- procurement of services
- cost estimating and budget
- risk management including identifying and 'treating' risks
- RMA processes / procedures / compliance
- quality management / assurance
- communications plan including project partners and all key stakeholders
- project closure.

A detailed PMP will need to be developed as part of the Detailed Business Case to inform the transition from planning into delivery and manage the ongoing programme of works.

The PMP will be prepared and delivered to the QLDC and it must meet the needs of both the Council and NZTA as a major investor.

The PMP is a 'live document', which is continually reviewed and updated over the project life. Significant changes to the project's key deliverables will be documented.

11.2.4 Assurance and Acceptance

There will be key stages and documents that will require formal review and acceptance. These are identified in the table below:

Project Management Plan:	Alliance/PCG review and acceptance required.
Supplier Engagement:	<p>Tender Evaluation Teams to be selected from appropriately qualified personnel with no conflict of interest in the process.</p> <p>Contractor/s will be procured in general accordance with the QLDC Procurement Manual.</p> <p>Qualified tender evaluators to be used as far as possible.</p> <p>Tender Evaluation Recommendation to be submitted for approval in accordance with QLDC procedures and NZTA requirements.</p>
Preliminary and Final Designs / Documentation:	<ul style="list-style-type: none"> • To follow normal internal review procedures of relevant organisation. • Preliminary and final designs, and documentation to be submitted to Project Manager for approval.
Budget / Cost Estimates:	<ul style="list-style-type: none"> • To follow normal internal review procedures of relevant organisation. • To be updated monthly with reporting, in particular once construction commences. • Project Manager to review and confirm budgets monthly. • Any significant deviations to be reported to Project Control Group as appropriate.
Construction:	<ul style="list-style-type: none"> • QA requirements to be outlined in contract documentation. • Contractor to submit QA plan prior to commencing physical works – to include QA procedures for construction as well as identification and rectification of faults

11.3 Risk Management

A detailed risk register has been developed to address current and future risks as the Masterplan Programme moves through the detailed planning and delivery stages. This is included as Appendix 7. This register and management plan has been updated through a number of recent workshops (most recently 4 August). It is recommended that it be updated again in the early part of the detailed planning phase to assign responsibilities to project partners and again in the delivery phase to recognise the transfer of risk to development and operational contractors.

11.4 Communications and Stakeholder Engagement

It will be important to continue the level of transparency that has been a big feature of the Masterplan programme to date. The extensive engagement undertaken so far has been a huge contributor to the successful development of the programme options and the feedback received recently will help shape the options as they move into the detailed planning phase.

A formal consultation period is scheduled for March 2018 and this will focus on the full draft masterplan programme following the refinement that is set to occur between October 2017 and March 2018.

As done during the indicative business case development, leveraging governance and stakeholder groups will be a key part of informing and engaging a wide audience, alongside regular main stream updates (such as the QLDC website, social media channels and monthly newsletter). Key groups to regularly inform and gain guidance from will be:

- the proposed Alliance

- QLDC Executive Leadership Team
- District Mayor and Councillors
- the Transport Advisory Group
- a Town Centre Adviser Group (in its current or revised form)
- community and business groups noted in this project's stakeholder matrix.

11.5 Benefits Management

The benefits map shown in Appendix 1 demonstrates the way the agreed benefits will be measured. Work is underway to establish the baselines and validate the measurement types. This map will be used to generate a benefit register for regular reporting and a benefits management plan to show how benefits will be monitored and managed throughout the programme delivery. These items will be completed as part of the detailed business plan and should be integrated into the Masterplan programme reporting.

11.6 Change Management

A Change Management Plan needs to be developed to demonstrate how the changes that the masterplan will introduce can be managed in an integrated and proactive way. This plan will build on the high level of stakeholder engagement and community ownership developed to date and focus on how the impacts on people and practices will be managed through a well-coordinated transition.

11.7 Next Steps

This indicative business case seeks approval from decision-makers to take the project into the detailed planning phase. This detailed phase will build on the work done to date to confirm:

- strategic alignment
- learnings to date from recent public and passenger transport changes
- value for money decisions
- robust commercial strategies
- agreed funding arrangements
- agreed management strategies that clearly outline how the project will be delivered.

A key aspect of this next stage will be confirming the ways in which partnership arrangements can help deliver the best possible outcome through commercial, financial and management arrangements. The Alliance arrangements proposed to date need to be confirmed in a way that informs the detailed project business cases as part of the ongoing programme development. Just as the Masterplan aims to provide certainty to the community and stakeholders, certainty in these areas will allow QLDC and partners to move with sustained momentum through the detailed planning and implementation phases.

The following steps are also planned to better inform this project:

- Installation of pedestrian cameras and a summer public life survey to better understand activity in the town centre.
- Progression of an economic study being undertaken by Martin Jenkins that will identify the value of the Queenstown experience and the costs associated with allowing it to degrade through a lack of investment.
- Ongoing investigation of deferred or altered programme features to manage affordability.
- Progression of the design for the third stage of the arterial alignment to better inform (and likely reduce) the costs and better capture the benefits associated with this stage.
- Discussion with industry experts regarding the value of walking and how this can be applied in Queenstown.

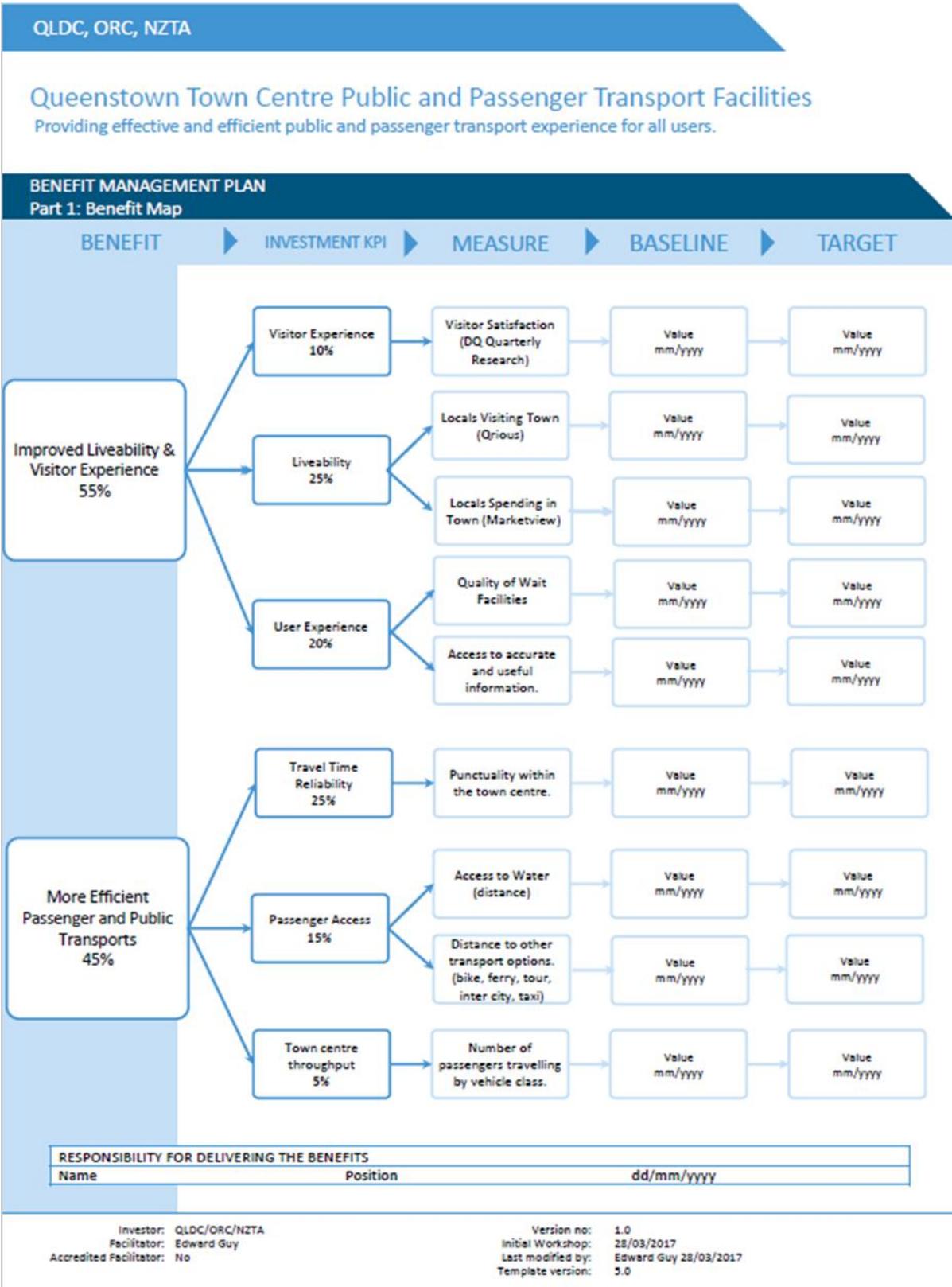
- Identification of the best form of transport modelling tool to understand people, cyclist and vehicle movements in the town centre.
- Completion of a town centre parking survey in March 2018.
- Monitoring of the first three months of the new Orbus service operations after its launch on November 2017.
- Discuss the performance of the choice app with NZTA and ORC in relation to the benefits that it may bring to the programme.
- Further work to understand active transport movements in the town centre.

Key dates

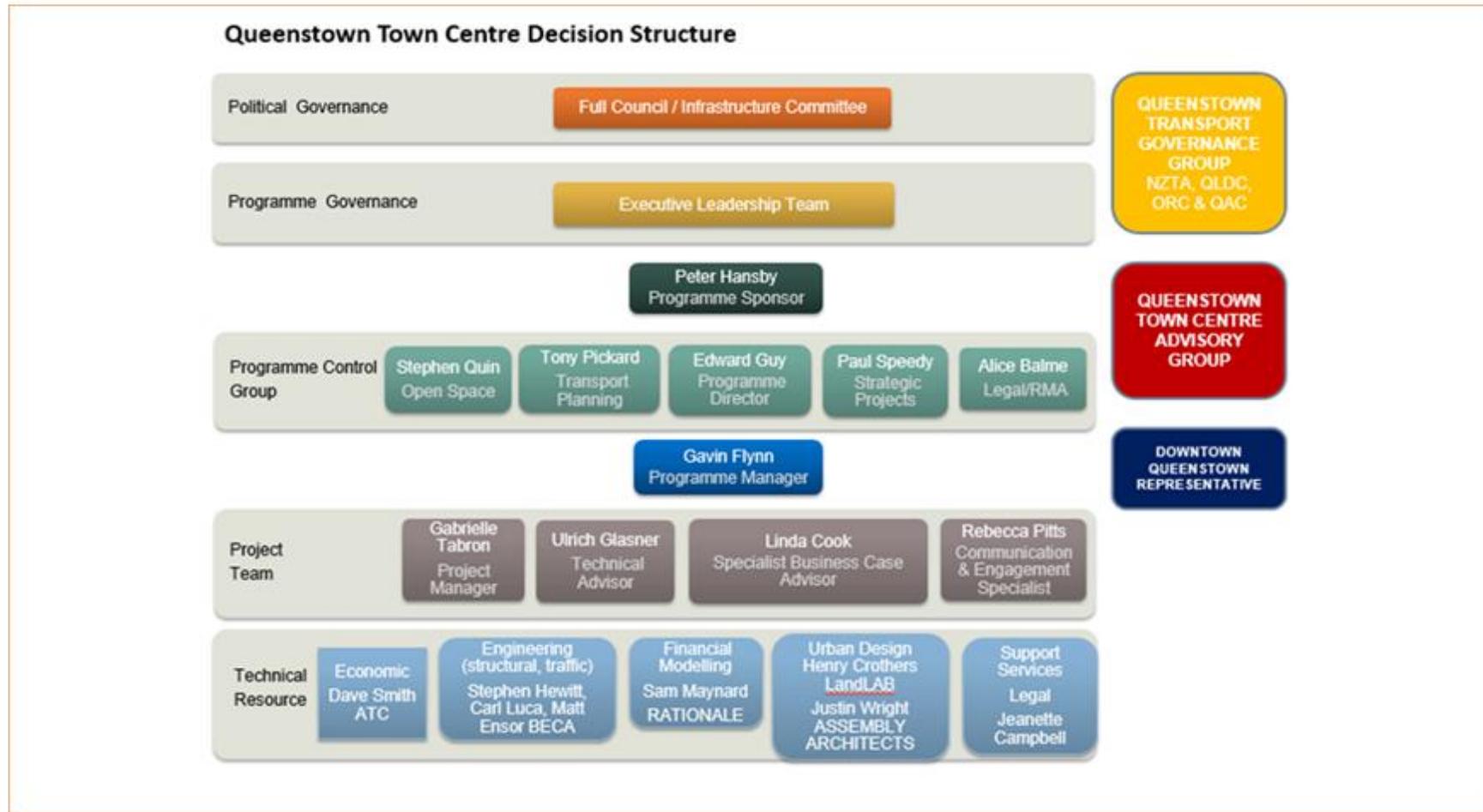
In order to address the challenges facing the Queenstown Town Centre in a timely manner and to meet the timings outlined in the current schedule, the Masterplan Programme milestones below will need to be met.

- Completion of the Spatial Framework and Design Guidelines by February 2018.
- Completion of the Town Centre Arterials Detailed Business Cases by October 2018.
- Completion of the Parking Buildings and Public Realm (street upgrades) construction procurement documentation and associated financial feasibility by June 2018 (to meet the scheduled construction dates).
- Completion of the Town Centre Arterial designation process by June 2020 (commencing July 2018).
- Commencement of Town Centre Arterial construction by July 2020 (to enable delivery of the related public and passenger transport improvements).

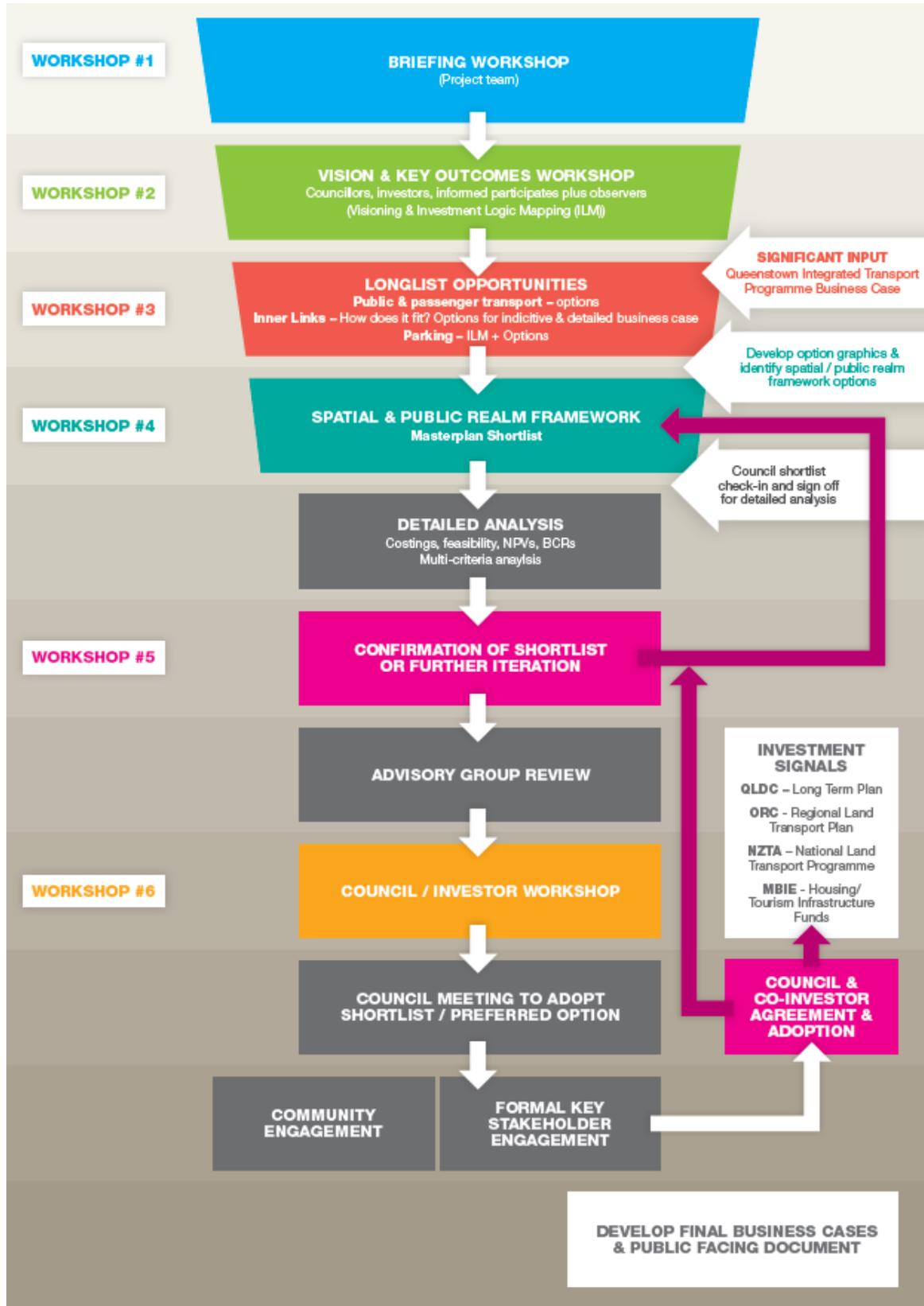
Appendix 1: Benefit Map



Appendix 2: Business Case Governance Structure



Appendix 3: Programme development process



Appendix 4: Completed and planned engagement activities

Engagement activities to date

Engagement activities have played a big role in informing the development of the ILM and the ensuing options identification for the public and passenger transport programme business case. A huge emphasis has been placed on engaging early and building ownership in the solutions ahead of sharing proposed options with a wider audience for feedback and refinement. A snapshot of engagement activities to date includes:

- Remarkables Park information stand.
- Town Centre pop up stand.
- Introductions to businesses.
- Introduction to Council Staff.
- Wakatipu High School 'youth council' briefing.
- A public online survey.
- Stakeholders Options Workshops (Apr).
- Findings and Testing Workshops (May).
- Passenger Transport survey.
- Weekly Downtown QT meeting.
- Advisory Group – briefings and workshops to confirm ILM and support the selection of preferred options.

Planned engagement around options

Stakeholder and community engagement around the Queenstown Town Centre Masterplan preferred options will occur in July 2017. This will provide valuable feedback on the work done to date and how it came together. The feedback will be used to make potential enhancements to the options, while providing a more detailed view of any public or political risks that may affect the programme in its later stages.

Engagement method	Details
QLDC Website	<ul style="list-style-type: none"> • All options and visuals are available on the website • Online interactive maps, where possible. • Full information portal • Online feedback form
Place-based engagement opportunities:	<ul style="list-style-type: none"> • Drop in display area (Council office/memorial centre/arts centre – location TBC) • Attend Creative Queenstown Arts Market including displays, interactive activities, handouts and ipads to make a submission. • Hold a community bbq or free coffee cart at Village Green. • Walking Tours for key stakeholders, led by QLDC. • Pop up engagement activities at various locations (including Frankton / Arrowtown etc)

Engagement method	Details
Public Displays	<ul style="list-style-type: none"> On site signage showing project options in the relevant town centre locations – call to action to provide feedback online Queenstown and Arrowtown Library Queenstown Events Centre Gorge Road and Shotover Street Council office
Media	<p>Media Advisories to be drafted and sent at key milestones.</p> <ul style="list-style-type: none"> Announcing community engagement sessions Invite local journo to do a walkaround once shortlist of options available. Engage with LWB tv to discuss possible video contribution/story. Announcing any interim changes – always tying into the bigger picture.
Develop supporting material	<ul style="list-style-type: none"> Infographics to help with understanding the process Options flyers / posters 3D modelling / physical models etc.
Display and Radio Advertising	<p>Extensive advertising campaign print/online/radio.</p>
Social media	<ul style="list-style-type: none"> Continue to build social media community. Use Facebook advertising to boost post reach – getting more of our posts onto more newsfeeds.
Scuttlebutt or consultation document	<p>Cover and 6-8 pages showcasing options</p>
Internal comms	<ul style="list-style-type: none"> Staff presentation / workshop on options Team talk articles Intranet/Family Hub posts
Elected member updates	<ul style="list-style-type: none"> Include updated presentation/clinic/workshop sessions from the programme
Radio Interviews	<p>Seek radio interviews throughout the engagement period to broaden community reach.</p>
Interviews / surveys with key stakeholders	<p>One-on-one interviews with interested parties. Promote the opportunity directly to relevant stakeholders. Interviews to be conducted by Project leads, supported by the wider group of tier 3 managers and other interested staff.</p>

Appendix 5: Masterplan Programme Risk Register

Queenstown Town Centre Masterplan – Risk Assessment

Rev 7. 22/11/17

No	Risk Event – Description	Causal Factor – Probable Cause	Consequence	Mitigation in place	Intended Mitigation	Risk Score/ Risk Owner
1	Programme Risk: There is a threat that elected members do not approve funding for the preferred option detailed in the Masterplan. (Long Term Plan)	<ul style="list-style-type: none"> The preferred option does not deliver the best long term strategic objectives for Queenstown. The preferred option does not meet the Councillor's constituent's requirements. Councillor's may personally agree with the Masterplan but will not vote it in if they think the public are not happy. Political appetite to increase rates. LTP deferred programme is not affordable. 	<ul style="list-style-type: none"> Delay to the approval of the Master Plan Rework. Option which is not optimal. 	<ul style="list-style-type: none"> Advisory group engaged to provide assurance to elected members Regular update workshops held with elected members Elected members involved in vision and ILM workshop at outset of project. 	<ul style="list-style-type: none"> Identify mechanisms for alternative funding (e.g. MBIE) and partner contributions (NZTA) 	<ul style="list-style-type: none"> H PH
2	Programme Risk: There is a threat that NZTA do not approve funding for the transport elements of the Queenstown Masterplan.	<ul style="list-style-type: none"> NZTA are a funding partner. NZTA object because of the potential impact on their state highways. NZTA do not accept the business case. Personnel changes within NZTA. 	<ul style="list-style-type: none"> Funding shortfall. Project delays. Rework of the masterplan. 	<ul style="list-style-type: none"> Regular engagement with NZTA at Officer and Executive level. Obtain NZTA inputs and feedback on preferred option. Workshop held with NZTA to clarify expectations, roles and responsibilities (16 August 2017). NZTA now attending weekly meeting as programme partners. 	<ul style="list-style-type: none"> QLDC to evidence benefit of the Project to NZTA. 	<ul style="list-style-type: none"> H PH
3	Programme Risk: There is a threat that the existing State Highway designation prevents the preferred location of the PT hub being realised due to lack of NZTA support	<ul style="list-style-type: none"> NZTA have indicated that they are not supportive of the preferred PT hub location. NZTA have indicated that an obstacle to implementing the preferred option is the existing State Highway designation. 	<ul style="list-style-type: none"> Delay to the implementation of the Master Plan Funding shortfall. Rework. Option which is not the optimal option. 	<ul style="list-style-type: none"> Regular engagement with NZTA at Officer and Executive level. Obtain NZTA inputs and feedback on preferred option. Workshop held with NZTA to clarify expectations, roles and responsibilities (16 August 2017). NZTA feedback received on IBC's giving support to proceed to DBC's 	<ul style="list-style-type: none"> QLDC to evidence benefit of the Project to NZTA. 	<ul style="list-style-type: none"> M PH
4	Programme Risk: There is a threat that Otago Regional Council (ORC) do not approve funding for the public transport/transport elements of the Queenstown Masterplan.	<ul style="list-style-type: none"> They do not get support from the various other Councils to support Queenstown's special case. Lack of funding for subsidies for public transport. ORC do not accept the business case. Projects are not considered as high priority by ORC. 	<ul style="list-style-type: none"> Funding shortfall. Project delays. Rework of the masterplan 	<ul style="list-style-type: none"> Ring-fence as opposed to separate funding. Regular engagement with ORC at Officer and Executive level. Transport components of the Masterplan confirmed by ORC as Priority One within the draft RLTP. 	<ul style="list-style-type: none"> QLDC to evidence benefit of the projects to ORC. 	<ul style="list-style-type: none"> L PH
5	Programme Risk: There is an opportunity to investigate other potential funding streams.	<ul style="list-style-type: none"> MBIE can provide additional funding (loan or grant). Private Public Partnership (e.g. parking facilities, transport corridor). Philanthropic funding 	<ul style="list-style-type: none"> Reduction in Queenstown's rate payers funding. Ability to undertake other projects not related to the Masterplan. 	<ul style="list-style-type: none"> Investigation by QLDC. 	<ul style="list-style-type: none"> Develop business case for Civic heart 	<ul style="list-style-type: none"> No risk rating required PH
6	Programme Risk: There is a threat that the Masterplan is not aligned to residents and rate payer's expectations.	<ul style="list-style-type: none"> The public are expecting something that is very innovative and aspirational and the Masterplan does not meet that (considered business as usual). Fail to demonstrate transport will be fixed. 	<ul style="list-style-type: none"> Do not get approval with LTP. Decision making is slowed. Multiple iterations Project stopped or half finished. Environment of distrust. 	<ul style="list-style-type: none"> Short-term Project success Prioritising / programming projects. Options analysis / timeframe story. Key themes that disentangle the issues. Present the future well. 	<ul style="list-style-type: none"> LTP consultation to commence in March 2018 Prepare and issue media release prior to remaining IBC's going to Council. 	<ul style="list-style-type: none"> M PH

No	Risk Event – Description	Causal Factor – Probable Cause	Consequence	Mitigation in place	Intended Mitigation	Risk Score/ Risk Owner
		<ul style="list-style-type: none"> Public opinion on what's critical / what's 'nice to have' – we are not addressing the big issue. Perceived inefficient use of money. Car parks are lost. Misinformation. The consultation process has not been effective. Residents and ratepayers do not believe that the Masterplan will move past the consultation stage. Misleading communications from media. 	<ul style="list-style-type: none"> Re-work. Misunderstanding of Masterplan programme details. 	<ul style="list-style-type: none"> Good communication / continue to engage. Updating our stakeholder groups. Champions /Advisory Group. Demonstrate transport will be sorted. Sweeteners, release valves. Implement post engagement feedback strategy/ Comms representative allocated to the project. Regular communications undertaken through programme development. 		
7	Programme Risk: There is a threat that the Master Plan does not meet accessibility requirements for all users.	<ul style="list-style-type: none"> Design does not consider and incorporate specific accessibility requirements for all users. 	<ul style="list-style-type: none"> Restricted access for certain users. 		<ul style="list-style-type: none"> Consider accessibility requirements for all users within the detailed business cases. 	<ul style="list-style-type: none"> L PH
8	Programme Risk: There is a threat that the Master Plan does not meet local business expectation.	<ul style="list-style-type: none"> Loss of road side parking is perceived as making it more difficult for people to access the town. Diversion of roads reduces visibility of businesses. Business owners do not support pedestrianisation due to the perceived loss of parking. 	<ul style="list-style-type: none"> Loss of political support. Project delays. Project rework. Reputational damage. 	<ul style="list-style-type: none"> Short-term Project success Prioritising / programming projects. Options analysis / timeframe story. Key themes that disentangle the issues. Present the future well. Good communication / continue to engage. Updating our stakeholder groups. Champions /Advisory Group – Steve Wilde (Downtown Queenstown engaged). 	<ul style="list-style-type: none"> Implement interim activation to mitigate short term impacts on Beach St and Camp Street. 	<ul style="list-style-type: none"> M PH
9	Programme Risk: There is a threat that the Masterplan does not meet the tourism sectors expectations.	<ul style="list-style-type: none"> The tourism sector are expecting something that is very innovative and aspirational and they perceive the masterplan does not meet that (considered business as usual). A central bus interchange may detract from the convenience of door to door pick-ups. 	<ul style="list-style-type: none"> Loss of political support. Project delays. Project rework. Reputational damage. 	<ul style="list-style-type: none"> Good communication and engagement with representatives of the tourism industry (attendance at stakeholder workshops). Passenger Transport survey undertaken. Public Life Survey data incorporated in to options analysis. Consideration of tourism requirements during options analysis. 		<ul style="list-style-type: none"> L PH
10	Programme Risk: There is a threat that the Masterplan does not meet Central Government expectations	<ul style="list-style-type: none"> The strategic fit for the Masterplan is not well described and does not fit into the Central Governments funding assessment. Change in government. 	<ul style="list-style-type: none"> Funding shortfall. 	<ul style="list-style-type: none"> Engaged economic expert to evaluate local, regional and national benefits of wider masterplan projects to support funding options (Martin Jenkins). Community engagement underway. 	<ul style="list-style-type: none"> Engage with new government regarding compelling investment story in Queenstown. 	<ul style="list-style-type: none"> M PH
11	Programme Risk: There is a threat that the QLDC Long Term Plan programme is unaffordable	<ul style="list-style-type: none"> Queenstown has a low rate base and therefore the burden on the ratepayer is too high if additional funding is not able to be sought. The debt to earnings ratio to fund the long-term plan is too high. The preferred Masterplan option is not perceived to be an expensive aspirational design. 	<ul style="list-style-type: none"> Increase in transportation issues. Queenstown CBD cannot accommodate growth. Shortfall of funding for aspects of the Masterplan which potentially has on flow affects for other projects. 	<ul style="list-style-type: none"> QS work to be undertaken to understand delivery costs Engaged economic expert to evaluate local, regional and national benefits of wider masterplan projects to support funding options (Martin Jenkins). Continued engagement at Officer and Executive level with potential funding partners. 	<ul style="list-style-type: none"> Prepare compelling story to potential funding partners 	<ul style="list-style-type: none"> H PH

No	Risk Event – Description	Causal Factor – Probable Cause	Consequence	Mitigation in place	Intended Mitigation	Risk Score/ Risk Owner
		<ul style="list-style-type: none"> The Masterplan preferred option uses all available QLDC funding. Too many large/expensive projects. Lack of support from co-investors. 		<ul style="list-style-type: none"> Delivery timeframe increased for some components from 10yrs to 20yrs. ELT review of draft LTP completed indicating programme affordable based on assumptions around funding. 		
12	Programme Risk: There is a threat that the Masterplan budget exceeds the publicly declared budget (for business case)	<ul style="list-style-type: none"> Scope change. Scope creep, design development. Crude budget. Lack of detailed project estimate. Lack of implementation of risk management processes Poor governance. 	<ul style="list-style-type: none"> Reputational damage for QLDC. Project stopped/delayed. Reduced scope. Negative media coverage. 	<ul style="list-style-type: none"> Project Manager to track costs against budget. 		<ul style="list-style-type: none"> L GT
13	Programme Risk: There is a threat that the Masterplan cannot adapt to external influences.	<ul style="list-style-type: none"> Subdivisions and industrial areas that are in conflict with the Masterplan. Lack of integration with the built form produces suboptimal outcomes. The Masterplan outcomes produce a consenting requirement that is perceived to be too onerous. Change of government. 	<ul style="list-style-type: none"> Reputational damage to QLDC. Negative media coverage. Land use activities best suited for the CBD locate within Frankton. 	<ul style="list-style-type: none"> Investigation with planning to look ahead at major infrastructure, land use change. Spatial plan may require flexibility. Increased involvement of P and D team in Project Control Group. Escalated to GM level. Fortnightly ELT updates 	<ul style="list-style-type: none"> Continue engagement with developers and work through issues. Progress with refinement of Stage 3 of the Arterials. Approach land owners of critical sites. Engage with new government regarding compelling investment story in Queenstown. 	<ul style="list-style-type: none"> H PH/TA
14	Programme Risk: There is a threat the market is unable to deliver the magnitude of physical works required to complete the Master Plan with the existing resources in Queenstown	<ul style="list-style-type: none"> A large number of projects inside and outside of Queenstown. There are not enough competent and experienced staff within QLDC. There are not enough consultants and contractors in the region. Not enough available accommodation for staff bought in from out of the region. Changes to immigration law. 	<ul style="list-style-type: none"> Project delay. Higher cost of labour if labour is required to be sourced from other regions. Rework. Quality issues. Reputational damage. 	<ul style="list-style-type: none"> Staging of masterplan undertaken with consideration of delivery constraints Consideration of Alliance options for design and physical works to be undertaken by CEOs of funding partners. Workshop held with NZTA to clarify expectations, roles and responsibilities (16 August 2017). 	<ul style="list-style-type: none"> NZTA, ORC, QLDC (and QAC) CEOs to meet to discuss delivery model. Communicate programme with key partners and market as soon as practicable. 	<ul style="list-style-type: none"> M PH
15	Programme Risk: There is a threat that five different projects are not well coordinated	<ul style="list-style-type: none"> Pressures of an aggressive Masterplan time frame. A lack of communication and project planning. Silo mentality with a lack of consideration with interdependencies. 	<ul style="list-style-type: none"> One Project can have a detrimental impact on another. The Masterplan Projects are not well integrated. Rework. Limited time for assessing all options. 	<ul style="list-style-type: none"> Masterplan approach determined which coordinates project development. Engagement of Advisory Group for project assurance. Staging of masterplan undertaken with consideration of delivery constraints Partners have been engaged to support coordination of projects. 		<ul style="list-style-type: none"> L PH

No	Risk Event – Description	Causal Factor – Probable Cause	Consequence	Mitigation in place	Intended Mitigation	Risk Score/ Risk Owner
16	Programme Risk: Funding of Project Connect undermines QLDC’s application for Central Governments support for the whole Masterplan Project	<ul style="list-style-type: none"> Pressure on Council funds to deliver the whole programme. Staging may undermine the programme. Deferring Project Connect may impact the Masterplan programme. 	<ul style="list-style-type: none"> Funding shortfall. Lack of political support. 	<ul style="list-style-type: none"> QS work to be undertaken to understand delivery costs Engaged economic expert to evaluate local, regional and national benefits of wider masterplan projects to support funding options (including Central Government lobbyist). Continued engagement at Officer and Executive level with potential funding partners. Project Connect managed as a distinct project from the QTC Masterplan programme 		<ul style="list-style-type: none"> L PH
17	Programme risk: There is a threat that the front-end story which Martin Jenkins are working on cannot deliver a compelling and well substantiated story in a timely manner, reducing our ability to attract wider investment.	<ul style="list-style-type: none"> The wrong arguments are used. The arguments do not properly connect with the story to date and the story of Queenstown. The right data cannot be obtained. The work being undertaken takes too long and is too late support the masterplan detailed business cases. 	<ul style="list-style-type: none"> The data does not tell a powerful story. Funding opportunities are lost. The Queenstown context is not understood. 	<ul style="list-style-type: none"> Detailed briefing of Martin Jenkins on work done to date. Sharing of strategic documents. Connection of Martin Jenkins with known providers such as Market view and Qrious. 	<ul style="list-style-type: none"> Ongoing updates between projects. Review of arguments to validate connection and focus. Testing of assumptions and methodology once developed. 	<ul style="list-style-type: none"> H PH
18	Community Heart: There is a threat that displaced stakeholder’s expectations are not met.	<ul style="list-style-type: none"> Engagement presentations/meetings misunderstood and stakeholder expectations that full facility replacement/upgrade will be provided at QLDC cost. Stakeholders have unrealistic expectations of facility enhancements. Underlying landownership and related designations precludes use of preferred land activities. 	<ul style="list-style-type: none"> Community complaints Adverse local media coverage Reduction in NGO service provision. 	<ul style="list-style-type: none"> Engagement with affected parties ongoing. Civic Heart Concept Scenarios completed. Communication of importance of the Community heart to ELT. 	<ul style="list-style-type: none"> Understand uses of site, ownership implications and delivery options. Progress Cultural Masterplan 	<ul style="list-style-type: none"> H PH Project Team
19	Community Heart: There is a threat that community expectations are not met.	<ul style="list-style-type: none"> Community have unrealistic expectations of facility provisions and funding. Permitted land use is still being investigated. Blockages between underlying ownership and designation Misaligning our offering with what is required. 	<ul style="list-style-type: none"> Community complaints Adverse local media coverage Loss of civic amenities to Frankton. Rework. 	<ul style="list-style-type: none"> Engagement with community ongoing. Civic Heart Concept Scenarios completed. Review of ownership and legal implications completed. Meetings with affected parties Meetings with potential funding partners Communication of importance of the Community heart to ELT. Additional options on alignment of arterial affecting the Memorial Centre investigated. 	<ul style="list-style-type: none"> Understand uses of site, ownership implications and delivery options. Funding options and sequencing in relation to Memorial Centre replacement to be investigated Progress Cultural Masterplan 	<ul style="list-style-type: none"> H PH Project Team
20	Arterials: There is a threat that the option assessment does not meet stakeholder/partner expectations.	<ul style="list-style-type: none"> Lack of visibility of option assessment; speed at which programme is moving Changing the status of the highway status. If there are certain users who can no longer use it. E.g. cyclists. The preferred option does not provide for future development (hotels, etc.) Failure to adequately forecast future use. Transport and economic modelling does not meet NZTA expectations 	<ul style="list-style-type: none"> Option falls over / doesn’t getting funding. Implications on wider network and spatial planning. 	<ul style="list-style-type: none"> Engagement process underway (NZTA, ORC, affected parties) Workshop held with NZTA to clarify expectations, roles and responsibilities (16 August 2017) NZTA Process Gap Analysis completed for agreed Indicative Business Case. NZTA feedback received on IBC’s giving support to proceed to DBC’s Peer Review of modelling completed 	<ul style="list-style-type: none"> Additional engagement needed with NZTA to define roles and responsibilities for DBC delivery and funding Include PT benefits (ie. gondola landing) within MCA for Stage 2 Option 4.1 to justify as the preferred option. Respond to peer reviewer’s comments 	<ul style="list-style-type: none"> H PH/UG Project team

No	Risk Event – Description	Causal Factor – Probable Cause	Consequence	Mitigation in place	Intended Mitigation	Risk Score/ Risk Owner
					and engage with NZTA economics specialist	
21	Arterials: There is a threat that demand exceeds the design capacity sooner than we anticipated.	<ul style="list-style-type: none"> Assumptions used in the modelling are incorrect. 	<ul style="list-style-type: none"> The public will perceive that we have not solved the problem. 	<ul style="list-style-type: none"> Modelling future demand Using outcomes for design Ensure public/passenger transport project is delivered 	<ul style="list-style-type: none"> Plan for rapid transport system 	<ul style="list-style-type: none"> M Beca Project team
22	Arterials: There is a threat that giving traffic an alternative route undermines the economic activity of the town centre.	<ul style="list-style-type: none"> Less traffic through flow the CBD. People perceive that business will relocate to the alternative route. 	<ul style="list-style-type: none"> Business owners are not supportive of the Arterial Project. Negative media. 	<ul style="list-style-type: none"> Master planning to incorporate spatial frame work Engagement process underway Develop staging plan, shared space design based on public life survey data 		<ul style="list-style-type: none"> M Project team
23	Arterials: There is a threat that the design does not meet NZTA's and stakeholders/partners expectations	<ul style="list-style-type: none"> NZTA are a funding partner Limited engagement during detailed concept development (due to time). Land requirements are being reduced to make the Project viable. 	<ul style="list-style-type: none"> The option does not receive stakeholder support. Rework. Lack of funding. Implications on wider network and spatial planning 	<ul style="list-style-type: none"> Engagement process underway (NZTA, ORC, affected parties) Follow NZTA design requirements (best design to achieve objectives and funding). NZTA Process Gap Analysis to be completed to support Detailed Business Case 	<ul style="list-style-type: none"> Additional engagement needed with NZTA to define roles and responsibilities for delivery and funding Ensure public/passenger transport project is delivered One on one engagement with affected property owners needed 	<ul style="list-style-type: none"> M PH/UG Project team
24	Arterials: There is a threat that residents will oppose the option assessment.	<ul style="list-style-type: none"> The proposed route is closer to affected residents and community groups (noise and traffic volume). Potential land take requirements. The Whakatipu Rugby Club, the Memorial Hall, RSA may need to be relocated. 	<ul style="list-style-type: none"> The option does not receive stakeholder support. Loss of political support. Rework. 	<ul style="list-style-type: none"> Engagement process underway (NZTA, ORC, affected parties). Rigorous options analysis ELT agreement that the preferred Stage 2 Option 4.1 will include removal of the protected Wellingtonian tree. Reconsider shortlisted options (e.g. double T intersection) within the DBC. 	<ul style="list-style-type: none"> One on one engagement with affected property owners/parties needed Incorporate environmental and social assessment within existing MCAs 	<ul style="list-style-type: none"> H PH/UG Project team
25	Arterials: There is a threat that the land may not be able to be purchased at a reasonable cost and in timely manner.	<ul style="list-style-type: none"> Developers and owners of existing properties New District Plan changes zoning. 	<ul style="list-style-type: none"> Increased costs. Project delays. Rework. 	<ul style="list-style-type: none"> Engagement process underway with affected parties underway Balance land take with residual land for development. 	<ul style="list-style-type: none"> Progress one on one engagement with affected property owners/parties Prepare options/route alignment to eliminate risk Legal advice to be sought on PWA process 	<ul style="list-style-type: none"> H PH/UG Project team
26	Arterials: Environment Court doesn't grant designation or reserve status isn't changed.	<ul style="list-style-type: none"> Road can't be built as proposed. Alternative route alignment required Reserves Act implications 	<ul style="list-style-type: none"> Additional cost Project delay rework 	<ul style="list-style-type: none"> Various route options already investigated 	<ul style="list-style-type: none"> Prepare options/route alignment to eliminate risk Legal advice on designation and options to change reserve status to allow road in order to support decision making around our approach to designation 	<ul style="list-style-type: none"> M PH/UG Project team

No	Risk Event – Description	Causal Factor – Probable Cause	Consequence	Mitigation in place	Intended Mitigation	Risk Score/ Risk Owner
27	Arterials: There is a threat of environmental impacts	<ul style="list-style-type: none"> The gradient of the Thompson Street link may require lake reclamation. Impacts on Horne Creek. 	<ul style="list-style-type: none"> Opposition from environmental groups and residents. Ecological impacts. 	<ul style="list-style-type: none"> Design of gradient and round about excess in more detail underway Additional engagement needed with NZTA and stakeholder groups Engagement with ORC required to discuss environmental impacts and mitigation 	<ul style="list-style-type: none"> High level assessment of environmental effects to be undertaken by planning consultant and technical experts. 	<ul style="list-style-type: none"> L GT
28	Spatial Framework: There is a threat that there is insufficient evidence relating to pedestrian movement to support business case.	<ul style="list-style-type: none"> Lack of pedestrian counts throughout town centre. Perceived necessity for parking in town centre. Congestion caused by town centre parking. 	<ul style="list-style-type: none"> Employees and business owners do not support the spatial plan interventions. 	<ul style="list-style-type: none"> Master planning to incorporate spatial frame work Public life survey pedestrian count (July '17) 	<ul style="list-style-type: none"> Pedestrian survey to be undertaken in Nov '17 for key pedestrian/transport conflict areas. Public Life Survey to be undertaken in Jan '18 Pedestrian counting cameras to be installed. Pedestrian model to be developed. 	<ul style="list-style-type: none"> L Project team Beca
29	Spatial Framework: There is a threat that the Business Community does not support the Spatial Plan.	<ul style="list-style-type: none"> The on street parking is being replaced by the improved public realm. The traffic is diverted outside the historic core. Loss of convenience of foot traffic. 	<ul style="list-style-type: none"> Lack of political support. Rework. 	<ul style="list-style-type: none"> Master planning to incorporate spatial frame work Community engagement underway, including with Queenstown Chamber of Commerce Steve Wilde (Downtown QT) on Advisory Group 		<ul style="list-style-type: none"> L Project team Beca
30	Spatial Framework: There is a threat that the Spatial Framework is not endorsed by elected members.	<ul style="list-style-type: none"> The public do not endorse it. It is perceived as too ambitious due to cost, disruption and changing too much. It's not ambitious enough to achieve the objectives of the Masterplan. 	<ul style="list-style-type: none"> Rework. Project delays. Project could be discontinued. 	<ul style="list-style-type: none"> Master planning to incorporate spatial frame work Regular updates to Councillors 		<ul style="list-style-type: none"> L Project team Beca
31	Spatial Framework: There is a threat that the Spatial Framework does not meet public expectations	<ul style="list-style-type: none"> Lack of engagement to demonstrate the benefits. Lack of ownership of the process by stakeholders. 	<ul style="list-style-type: none"> Rework. Project delays. 	<ul style="list-style-type: none"> Master planning to incorporate spatial frame work Community engagement completed 		<ul style="list-style-type: none"> L Project team Beca
32	Spatial Framework: There is a threat that we fail to prioritise funding for the Spatial Framework.	<ul style="list-style-type: none"> Failure to understand integration and sequencing of all projects within the spatial framework. 	<ul style="list-style-type: none"> Projects become siloed. Inefficient Project delivery. 	<ul style="list-style-type: none"> Master planning to incorporate spatial frame work Delivery programme/Draft LTP includes Spatial Framework outcomes Ongoing consultation with P&D to understand and work with private development opportunities. 	<ul style="list-style-type: none"> Spatial Framework document to be completed in Jan '18. 	<ul style="list-style-type: none"> L Project team Beca
33	Spatial Framework: There is a threat that we do not have an operational budget to maintain the various project facilities.	<ul style="list-style-type: none"> Capital investment may require more operational funding to maintain. 	<ul style="list-style-type: none"> Additional cost to ratepayers over the long term. 	<ul style="list-style-type: none"> Operational requirements incorporated in to draft LTP. 	<ul style="list-style-type: none"> Consequential operational budget associated with individual projects to be included in LTP programme Adequate staff and/or contractor resource in place. Business cases to include whole of life costs. 	<ul style="list-style-type: none"> M PH/EM Project team

No	Risk Event – Description	Causal Factor – Probable Cause	Consequence	Mitigation in place	Intended Mitigation	Risk Score/ Risk Owner
34	Spatial Framework: There is a threat that operational and maintenance requirements have not been incorporated into the design/costings	<ul style="list-style-type: none"> Failure to engage with the operational and maintenance team Failure to consider whole of life costs 	<ul style="list-style-type: none"> Ongoing operational and maintenance issues Insufficient operational and maintenance budget 	<ul style="list-style-type: none"> Engagement with operational and maintenance team Consider whole of life costs within the business case 		<ul style="list-style-type: none"> L PH/EM Project team
35	Parking: There is a threat of public resistance to the removal of car parking from town centre streets.	<ul style="list-style-type: none"> Perceived necessity for parking in the town centre. Resistance to change. Financial implications for the public. 	<ul style="list-style-type: none"> No support for spatial plan / masterplan, particularly from businesses and locals. 	<ul style="list-style-type: none"> Community feedback recognised in forward planning. 	<ul style="list-style-type: none"> Develop detailed business case for parking. Develop Wakatipu Parking Strategy 	<ul style="list-style-type: none"> H Comms Lead
36	Parking: There is a threat of public resistance due to the perceived high cost of parking.	<ul style="list-style-type: none"> Economic model does not represent does not match user expectations. 	<ul style="list-style-type: none"> No support for spatial plan / masterplan, particularly from businesses and locals. 	<ul style="list-style-type: none"> Community feedback recognised in forward planning. Modelling of the tipping point being used to set charges. Regular engagement with Councillors and ELT on phasing implementation. 	<ul style="list-style-type: none"> Promotion of alternative modes of transport. 	<ul style="list-style-type: none"> H BECA
37	Parking: There is a threat that the investment in parking is not financially sustainable.	<ul style="list-style-type: none"> User uptake may be lower than predicted. Income from revenue is low. 	<ul style="list-style-type: none"> We rely on parking revenue to subsidise public transport. Rates increase. 	<ul style="list-style-type: none"> Robust optioneering through BCA. Sequencing the provision of major infrastructure (parking buildings) with appropriate decision gateways after each. 	<ul style="list-style-type: none"> Consider PPPs for delivery Business cases to include whole of life costs. Include flexibility in design so that parking facilities can be repurposed. 	<ul style="list-style-type: none"> M BECA
38	Parking: There is a threat that we are unable to secure land for public car parking.	Inability to negotiate successful (viable) purchase.	<ul style="list-style-type: none"> The preferred option(s) are not viable. Spatial Framework outcomes are affected. PPP is preferred option, resulting in less favourable financial outcome for Council. 	<ul style="list-style-type: none"> Robust optioneering through BCA including highest and best use of Council property. QLDC controlled locations as preferred option. 		<ul style="list-style-type: none"> L BECA
39	Parking: There is a threat that car parking buildings diminish the character of town centre.	<ul style="list-style-type: none"> Site constraints. Poorly designed buildings. 	<ul style="list-style-type: none"> Public opposition. Reduce the amenity of the public realm. 	<ul style="list-style-type: none"> Ensuring good design. Heeding Advisory Group feedback. 		<ul style="list-style-type: none"> L BECA
40	Parking: There is an opportunity to include enabling objectives within the District Plan.	The transport section of the District Plan is currently under review.	<ul style="list-style-type: none"> District Plan provisions may support parking options sought. 	<ul style="list-style-type: none"> PCG member inputting to internal project team on D / Plan. Increase involvement of P&D team in Project Control Group. 	<ul style="list-style-type: none"> Review of implications of draft Transport Chapter. 	<ul style="list-style-type: none"> M TP
41	Parking: There is a threat that the increasing cost of parking discourages people from visiting the town centre.	<ul style="list-style-type: none"> Perception that the cost outweighs the benefits. 	<ul style="list-style-type: none"> Public opposition. Business opposition. Locals are resistant to paying for parking. 	<ul style="list-style-type: none"> Communication Providing subsidised alternative modes of transport. 	<ul style="list-style-type: none"> Identify and implement events/activities to encourage people to the town centre. 	<ul style="list-style-type: none"> L PH
42	Parking: There is a threat that private car parking buildings control car parking prices.	<ul style="list-style-type: none"> Private car parking may be at a lower rate than public. Private parking is not regulated. 	<ul style="list-style-type: none"> QLDC are unable to effectively manage car parking supply. 	<ul style="list-style-type: none"> Communicate with private operators. 	<ul style="list-style-type: none"> Investigate possible future controls (District Plan/bylaw). 	<ul style="list-style-type: none"> M TP
43	Parking: There is a threat that car park buildings are not required in the future.	<ul style="list-style-type: none"> Car parking buildings have been designed with single use in mind. Failure to future proof. Lack of consideration of innovation in forward planning. 	<ul style="list-style-type: none"> Inefficient building and land use. Ineffective return on capital investment. 	<ul style="list-style-type: none"> Ensure design encompasses future uses noting prevalence of innovations in transport technology. 		<ul style="list-style-type: none"> L BECA

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44	Parking: There is an opportunity that car park buildings can be designed for a regenerative use.	<ul style="list-style-type: none"> Forward planning and acceptance of the longevity of the planning horizon. Innovative design utilised. 	<ul style="list-style-type: none"> Significant return on investment... Highest and best use protected. 	<ul style="list-style-type: none"> Ensure design encompasses future uses noting prevalence of innovations in transport technology. 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> BECA
45	Public and Passenger Transport: There is a threat that there is no behavioural change or the uptake is slower than predicted.	<ul style="list-style-type: none"> Other modes are not efficient or preferred over private car usage. 	<ul style="list-style-type: none"> Insufficient parking capacity to meet demand. Increased traffic volumes. Expected revenues will not be achieved. 	<ul style="list-style-type: none"> Understand elasticities. Employ predictive modelling 	<ul style="list-style-type: none"> Work with ORC to ensure appropriate advertising of PT services. 	<ul style="list-style-type: none"> M BECA
46	Public and Passenger Transport: There is a threat that the inter-dependencies between arterials and public transport parking inhibits the ability to provide an on-street option.	<ul style="list-style-type: none"> Arterials and parking solutions will take some time to implement. 	<ul style="list-style-type: none"> Congestion on Stanley Street and the wider network. Loss of support for spatial planning. 	<ul style="list-style-type: none"> Staging approach for arterials. Interim solution for Camp Street PT facilities. 	<ul style="list-style-type: none"> Evaluate through the detailed business case. 	<ul style="list-style-type: none"> M BECA
47	Public and Passenger Transport: There is a threat of failing to meet passenger transport demand from tourist operator view.	<ul style="list-style-type: none"> The passenger transport facilities do not meet the tourist operator requirements due to the location and future growth needs. 	<ul style="list-style-type: none"> The passenger transport operators will not use the facilities. Increased pressure on the roading network. 	<ul style="list-style-type: none"> Consideration of tourism providers in CBD shared areas. Increased communication with tourism operators. Designing options for passenger transport which include existing facilities. 	<ul style="list-style-type: none"> Continue to communicate and engage with tourist operators during the DBC phase. 	<ul style="list-style-type: none"> L BECA
48	Public and Passenger Transport: There is a threat that the public transport facility creates a potentially unsafe environment.	<ul style="list-style-type: none"> Potential for intoxicated people to congregate. Potential for disorderly behaviour. 	<ul style="list-style-type: none"> Public do not feel safe. Decrease in public use. Negative media attention. 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Work closely with police. Technical Advisory Group to review design CPTED guidelines to be incorporated in to design briefs 	<ul style="list-style-type: none"> L PH/Design consultants
49	Public and Passenger Transport: There is a threat that the built form of the new facilities does not integrate well with the surrounding environment.	<ul style="list-style-type: none"> Design does not integrate well with potential and or adjoining developments. The design does not facilitate a high quality public realm. Strategic land acquisition does not occur. 	<ul style="list-style-type: none"> Negative media attention. Decreased public use. Negative impacts on overall town centre amenity. 	<ul style="list-style-type: none"> Integrated design being addressed through co-ordination of spatial planning. 	<ul style="list-style-type: none"> Technical Advisory Group to review design 	<ul style="list-style-type: none"> L PH/BECA
50	Public and Passenger Transport: There is a threat that future funding is not adequate.	<ul style="list-style-type: none"> Low passenger numbers on the bus network. Decrease in bus fares does not result in higher passenger numbers. 	<ul style="list-style-type: none"> Bus fares increase. Increase in traffic congestion. Increase in town centre parking. 	<ul style="list-style-type: none"> Encouragement of mode shift through transport strategies and interface with District Plan ongoing. Process Gap Analysis to be completed to support Detailed Business Case 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> M TP
51	Public and Passenger Transport There is a threat that the programme fails to gain full buy in from both public and passenger transport providers.	<ul style="list-style-type: none"> We have not integrated all public and passenger transport components in the Masterplan. Does not meet public and passenger provider demands. 	<ul style="list-style-type: none"> Negative media attention. Decreased public use. Negative impacts on overall town centre amenity. 	<ul style="list-style-type: none"> Involvement of both business community (operators) and ORC (regulators) is ongoing. 	<ul style="list-style-type: none"> Consider QLDC taking over responsibility for public transport from ORC. PH to table proposal from Rationale. 	<ul style="list-style-type: none"> H TP

Appendix 6: Advisory Group Members

Jane Taylor (Chair)

Jane is a professional director and independent hearings commissioner, following a 35-year career in law, accountancy and finance.

She is currently Chairman of New Zealand Post Limited, Landcare Research New Zealand Limited and Predator Free 2050 Limited, and Deputy Chair of Radio New Zealand Limited. She is a Director of Silver Fern Farms Limited, Kiwibank Limited, Hirepool Group Limited and Ontario Teachers' Pension Plan New Zealand Forest Investments Limited, and is a board member of the External Reporting Board (XRB).

Jane holds a LLB(Hons) and a LLM with First Class Honours from Auckland University and a postgraduate qualification in accountancy from Victoria University of Wellington. She is a Chartered Fellow of the New Zealand Institute of Directors, a Barrister and Solicitor of the High Court, a Member of the New Zealand Law Society and the Resource Management Law Association, and a Member of the Institute of Chartered Accountants in New Zealand.

Jane, together with her family of 5, has been a permanent resident of Queenstown since 2001, and is passionate about what she considers is the best place in the world to live and enjoy.

Jacqui Moir

Jacqui originates from Auckland, New Zealand and has been living and working in Queenstown for the last 8 years. She has raised two children, now both in their twenties

Jacqui has a passion for all things community and absolutely loves her role as Manager at Wakatipu Youth Trust, working with a dedicated team to create and provide a huge array of opportunities for our young people to grow their strengths and potential.

Her passion for young people grew through training and volunteering for two years on the crisis phone lines at Youthline and during studying for a Bachelor of Arts in Sociology followed on by a Graduate Diploma in Teaching.

Through supporting and advocating for youth of the Wakatipu area and celebrating all that they contribute to our community we ensure they feel connected and a valued part of this place they call home and is also an investment in our future as a district as well as any community they choose to be part of in the future.

Steve Wilde

Steve has lived in Queenstown for 20 years. Having spent many years as a journalist for radio New Zealand, he has a broad understanding of the issues facing the area. He has a strong community focus and is involved in several community organisations, including Showbiz Queenstown and was part of a group that raised \$3million to rebuild the Queenstown Memorial Centre.

For the past two years, Steve has been General Manager of DowntownQT. He enjoys enjoying the challenge of working with the business community and the Council to ensure the town Centre retains its position economically, socially and culturally - at the heart of New Zealand's number one tourist destination.

Mike Fisher

Mike is an experienced practitioner who has worked for over 17 years in placemaking, urban regeneration and planning projects across New Zealand, Australia and the United Kingdom.

He currently has his own small practice Urban Tacticians based in Christchurch supporting governments, the private sector and community groups on a variety placemaking and planning projects.

Mike has qualifications in Planning (Massey University, New Zealand) and Sustainable Development (Imperial College, London). He is a member of the international Placemaking Leadership Council, the Planning Institute Australia and the New Zealand Urban Design Forum.

Mike is on the board of Te Pūtahi - The Christchurch Centre for Architecture and City Making, and recently served on the Property Council (South Australia) Mainstreets Committee.

Mike presents at various conferences and masterclasses and has lectured tertiary students on placemaking, urban regeneration and planning both in Australia and New Zealand.

Graeme McIndoe

Graeme McIndoe is a Wellington based architect and urban designer, and director of McIndoe Urban Ltd.

He has been involved at the core of projects including the Christchurch Retail Precinct Plan, the Auckland and Wellington waterfronts, Auckland’s Unitary Plan, Aotea Square in Auckland and Civic Square in Wellington.

He is a member of several design panels, provides town and city centre and district plan policy advice, design review, and masterplanning including many projects for major institutions and developers.

Current projects include a spatial plan for Petone, parking policy for Lower Hutt City, work on the proposed East West Link motorway connection in Auckland and on the Basin Reserve masterplan in Wellington.

As a specialist urban designer he takes particular interest in the vitality and success of town and city centres, and the quality of the processes, spaces, connections and design projects that help to deliver great urban outcomes.

Darren Davis

Darren Davis works in the tricky nexus between land use, placemaking and movement. Put simply, there’s no point having place without movement to get there and no point having movement with no place to go.

Darren has 25 years' experience in transport and land use, including being a lobbyist, planner, strategist, communicator and consultant. He has been involved in projects ranging from high level strategic policy advice; successfully influencing regional and central government agencies; to on-the-ground involvement in major transport infrastructure and land-use projects; doing public transport service design; carrying out high-level policy and strategy work as well as being a key team member on transit oriented development projects.

Darren is currently Auckland Council's Transport and Land Use Integration Manager as well as being a lead instructor in Simon Fraser University’s on-line Next Generation Transportation Certificate programme.

Dean Whaanga

Dean Whaanga is a born and bred Southlander who lives in Bluff with his wife Loureen. They have three boys. “Most of our holidays were spent holidaying in Frankton at the family caravan, swimming in the lake and visiting the town centre, it was very enjoyable and each year we looked forward to the summer there”.

Deans tribal affiliations are Ngai Tahu, Rongomaiwahine and Ngāti Kahungunu. He has worked for Telecom as a communication technician, and for the last twenty years has worked in the Maori Tertiary sector and then for his Iwi Ngai Tahu.

Dean is the Kaupapa Taiao Manager for the Murihiku entity ‘Te Ao Marama Inc’ which is the Ngai Tahu resource management and environmental consultancy for Southland and Central Otago (which is shared with Kai Tahu ki Otago).

Dean brings to the Advisory Group a strong knowledge of Ngai Tahu values and tikanga. He knows the Maori histories and traditions for the Whakatipu area. He has worked in the Maori arts field and enjoys sharing his knowledge with others.

Jay Cassells

Jay is a lawyer with over 30 years' experience in environmental and planning law in Australia and New Zealand. He is the founding director of a film, media and arts company, and a published cartoonist and writer.

A long-time local, Jay is married with two sons who are quite interested to know in what shape the place will be left for them.

Johnny Stevenson

Johnny has lived in Queenstown for over 20 years, but his affiliation with Queenstown goes back 5 generations.

He started the property investment company Westwood Group Holdings back in 1994 and is currently the co-owner of Coronet Property Management. He is on the Chamber of Commerce Board of Directors and serves on the Central Otago Branch NZ Property Council committee.

On a personal level, Johnny is a member of the Shotover 4WD Club, Arrowtown Tennis Club, is a 6 year Motatapu Mountain Bike Veteran and user of NZ Ski's First Aid Team most seasons.

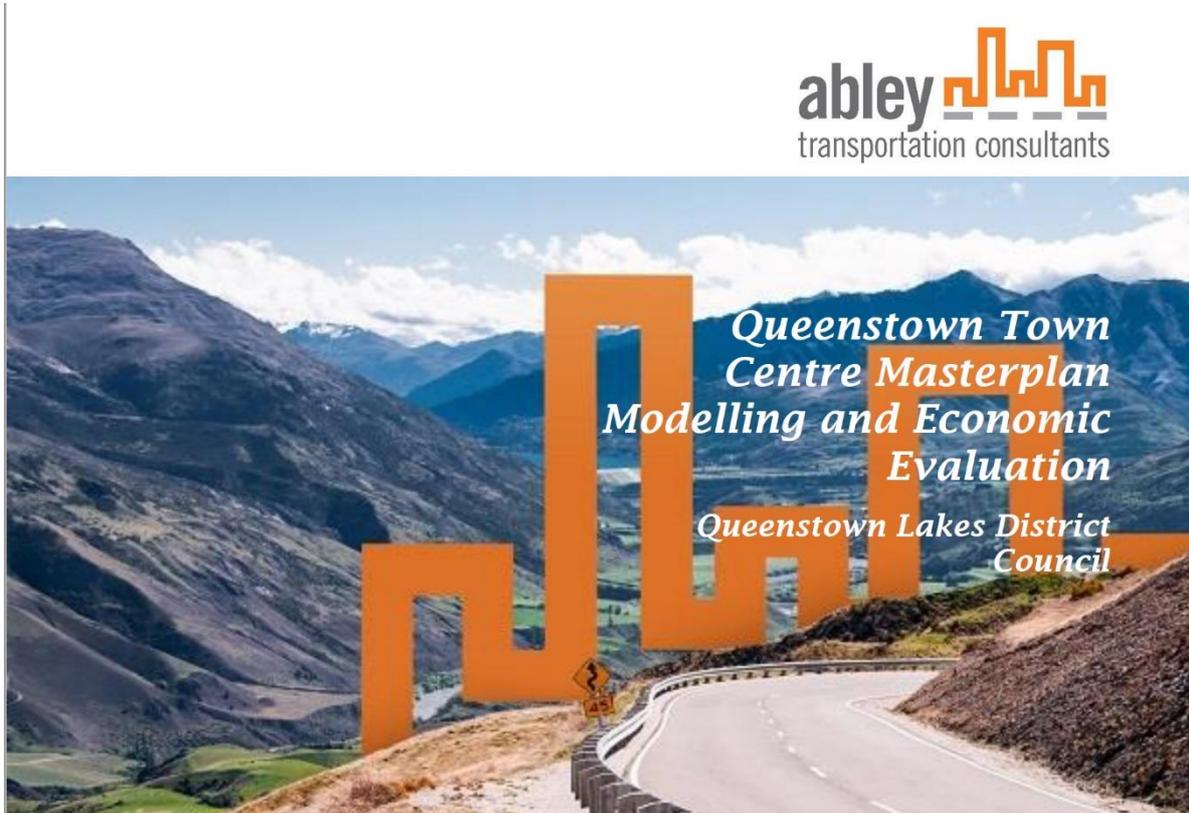
AJ Mason

AJ is an astrophysicist and self-confessed 'uber geek'. He has been involved in many science based community events including the annual science week, the 'Gigatown' application process and is Co-Chair of the Catalyst Trust. He is representing Shaping Our Future on the Advisory Group

AJ has been involved in the Masterplan process both in stakeholder sessions to test the various options being considered and on the Advisory Group.

Appendix 7: Queenstown Town Centre Masterplan Modelling and Economic Evaluation

See separate document



Appendix 8: Queenstown Town Centre Masterplan Passenger Transport Requirements

See separate document.



Report

Queenstown Transport Masterplan - Public and Passenger Transport Requirements

Prepared for Queenstown Lakes District Council
Prepared by Beca Limited

18 August 2017



Appendix 9: Queenstown Integrated Transport Programme Business Case

See separate document.

Queenstown Integrated Transport Programme Business Case

Queenstown Integrated Transport Programme Business Case

Abley Transportation Consultants

16/06/2017

VERSION 4

Programme business case

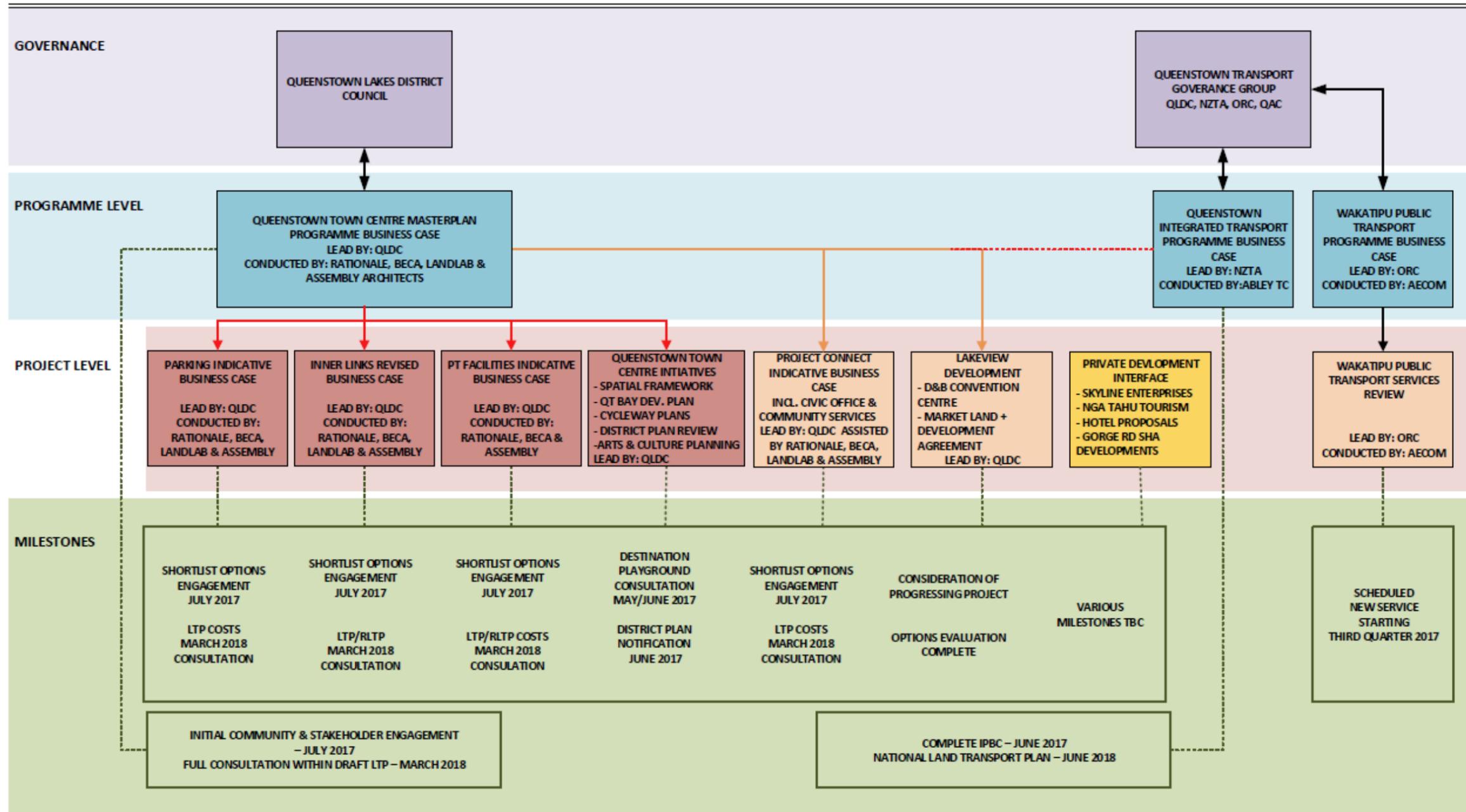


[New Zealand Government](#)



Appendix 10: Town Centre Masterplan workflow diagram

QUEENSTOWN TOWN CENTRE WORKSTREAMS



April 27, 2017

Appendix 11: Queenstown Town Centre Masterplan Programme Business Case

See separate document.

Appendix 12: Queenstown Town Centre Arterial Routes Indicative Business Case

See separate document.

Appendix 13: Queenstown Town Centre Parking Indicative Business Case

See separate document.

Appendix 14: Advisory Group Feedback and project team response

See separate documents.

Appendix 15: Queenstown Town Centre Masterplan - Wakatipu Transport Model Peer Review

Appendix 16: Assessment of Environmental Effects (Beca Report)