QUEENSTOWN BUSINESS CASE
KEY PROBLEMS

The Queenstown area is one of New Zealand's fastest growing regions, driven by growth in population, the tourism industry and supporting activities. This growth is placing increasing pressure on infrastructure and, in particular, the transport system.

This Queenstown Business Case provides a detailed assessment of the previous work undertaken and direction set by the Queenstown integrated Transport PBC and the QTC Masterplan PBC. Both of these PBC recommended programmes, that were economically robust, sought to address the following key identified issues:

- Efficiency.
- Amenity,
- Safety,
- Resilience.

While Covid-19 has affected current growth rates, these are expected to recover by the medium term and do not compromise the findings of this business case.

The agreed investment objectives of the business case are to:

1. Provide more efficient and reliable access for people and goods that:
   - Sustainably manages growth
   - Reduces reliance on private vehicle travel
   - Enables enhanced land use

2. Is adaptable to change and disruption

3. Enhances the livability and quality of the natural and built environment

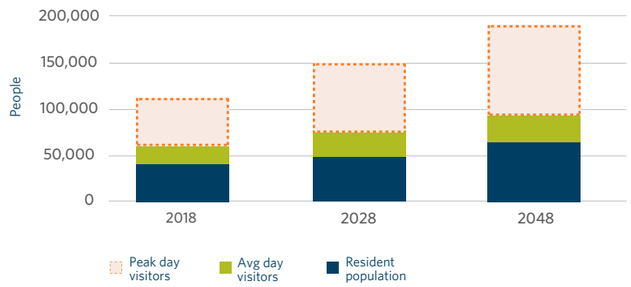
4. Enhances safety with a goal of vision zero.

A wide range of interventions and programmes have been considered in the development of this business case. The overarching philosophy when developing the preferred programme was to shift the current reliance on the private vehicle, providing users with choice, and to have a programme that is adaptive and scalable such that a response is agile to respond to uncertainties in the future.

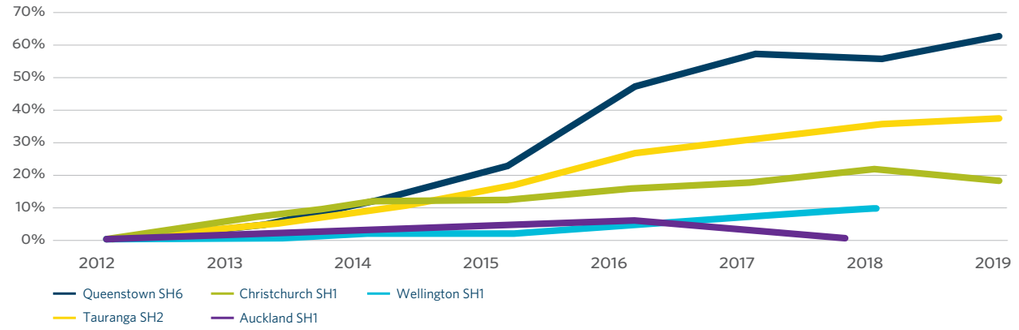
A key outcome of the assessment process was that additional road capacity for State Highway 6A (SH6A) between Frankton and Queenstown would be unfeasible due to cost and geotechnical challenges. Furthermore, a step change is required to achieve the 40% alternative mode share needed during the PM peak on SH6A by 2028 to meet the investment objectives.

The recommended programme has therefore identified a mixture of infrastructure, public transport and travel behaviour change improvements for implementation.

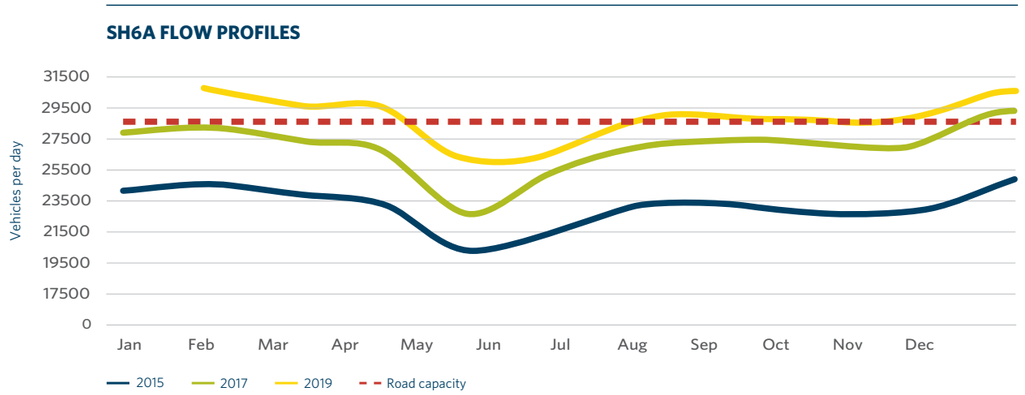
GROWTH FORECAST



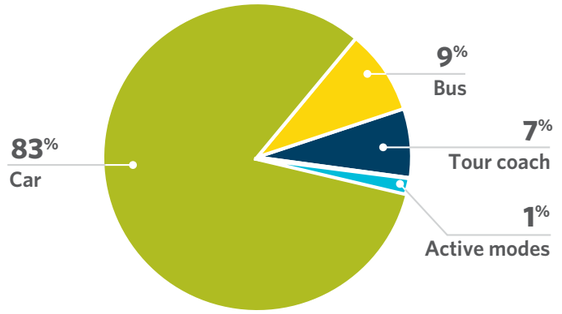
TRAFFIC GROWTH COMPARISON



SH6A FLOW PROFILES



CAR DEPENDENCY



> **"If these problems are not resolved, it is estimated that there will be between a $670M to $1.2 billion loss to the Queenstown economy, over a 40 year period, through visitors travelling elsewhere"**

Why invest?

- Peak day residential population is forecast to grow from approximately 120,000 in 2018 to 200,000 in 2048.
- SH6A practical capacity was exceeded on 140 days in 2019 resulting in high levels of delay and congestion.
- Private car trips make up 83% of trips on SH6A which is not sustainable impacts resident and visitor growth opportunities, efficiency, amenity, safety and network resilience.
- An estimated $670 million to $1.2 billion loss to the Queenstown economy will occur, over a 40 year period through reduced visitor arrivals and/or activity.

QUEENSTOWN BUSINESS CASE
PROGRAMME DEVELOPMENT

The development of the recommended programme involved an iterative optioneering process alongside stakeholders representing local Iwi, businesses, and community groups, as follows:

- More than 300 options were put forward (240 ideas for Queenstown Town Centre and 140 ideas for Frankton to Queenstown).
- Options that did not meet at least one of the project's Investment Objectives were omitted. The remaining interventions were then categorised into 9 'strawman' shortlist packages, ranging from car-focused to public-transport focused.
- The original scope was extended to include Frankton and Ladies Mile to provide a comprehensive assessment of the Wakatipu Basin transport system
- Integration with the Queenstown Spatial Plan, through regular communication with the spatial plan team.
- The best performing components of each package would then be reassembled into an optimised preferred programme.

> **"The Benefit-Cost Ratio for the committed programme phases of the overall project is 2.3"**

NZ Upgrade Programme and CIP funding was also secured in 2020 which has reduced the overall funding requirements of this business case.

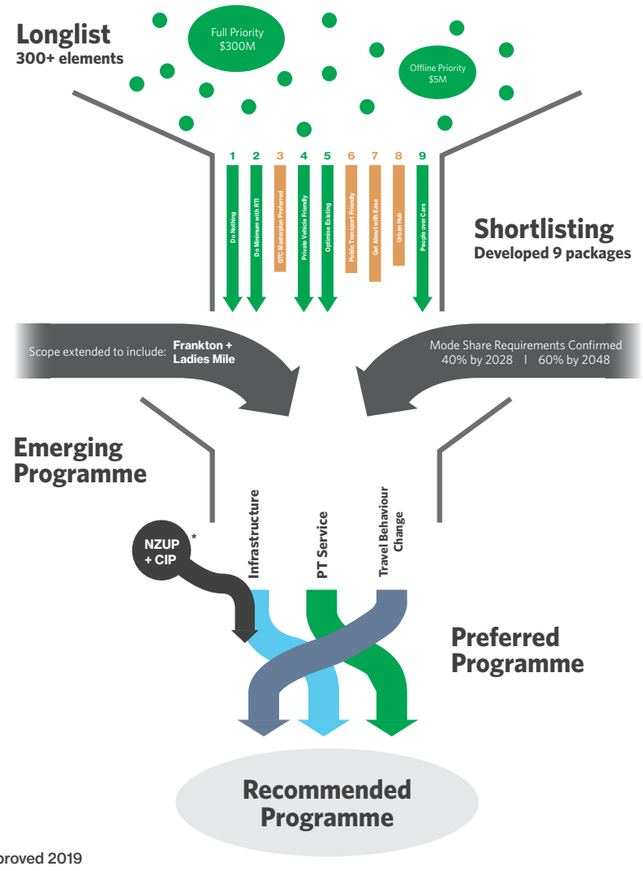
Implementation of the recommende programme will enable the full value of these investments to be realized. The integrated programmed has therefore been shown in three parts:

1. Committed Activities,

2. Supporting Activities: Where funding is sought (2021-2027 NLTP Periods), and

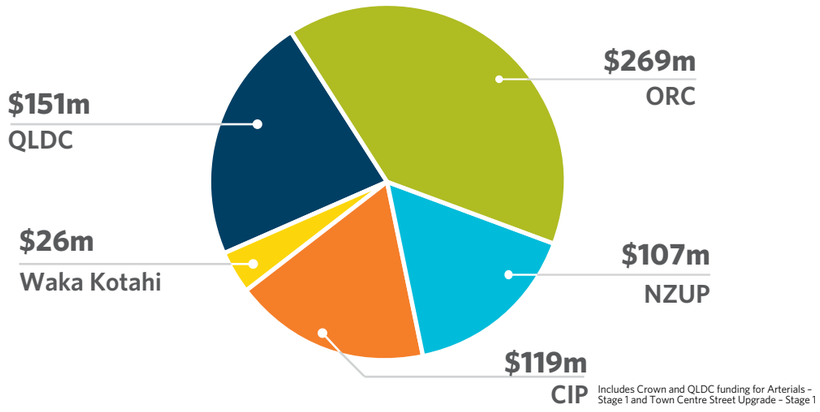
3. Other Activities: Where programme endorsement is sought (2027+)

4. Other Activities: For noting only as potential future activities which will be subject to further evaluation.



*Approved 2019

SUMMARY OF FUNDING SOURCES (10 YEAR PROGRAMME)



SHORTLIST MULTI-CRITERIA ANALYSIS

More car based / More PT based

	Relative Score	Ranking	IO1	IO2	IO3	IO4
Do nothing	117	9	✗	✗	✗	✗
Do Minimum + RTI	127	8	✗	✗	✗	✗
QTC masterplan preferred	248	5	–	–	✓	✗
Private vehicle friendly	161	7	✗	✗	–	✗
Optimise existing	211	6	–	–	–	✓
Public transport friendly	276	3	✓	✓	✓	–
Get about with ease	300	2	✓	–	✓	✓
Urban hub	266	4	✓	–	✓	–
Cars not needed	304	1	✓	✓	✓	✓

Note: not in ranked order

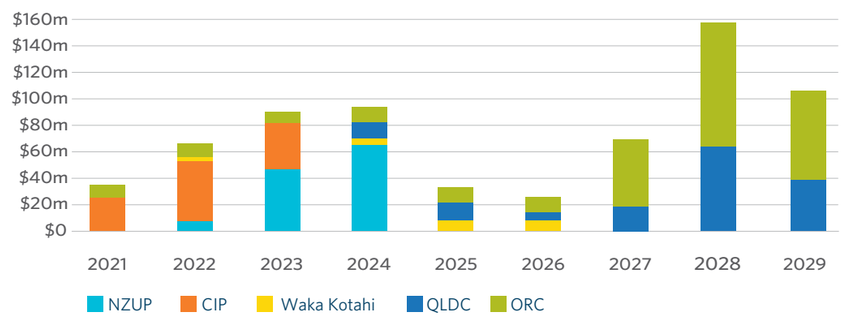
RECOMMENDED OPTION - 10 YEAR PROGRAMME

Programme	60-year NPV Cost	60-year NPV Benefit	BCR
PT Services and Infrastructure NZUP Enabled PT Services Stanley + Shotover Streets Queenstown Bus Hub	$162M	$374M	**2.3**

LIFETIME PROGRAMME - 50 YEAR

Full Programme NZUP Enabled PT Services Stanley + Shotover Streets Queenstown Bus Hub Town Centre Upgrades - Stage 2 Queenstown Arterial - Stage 2 Queenstown Arterial - Stage 3	$295M	$445M	**1.5**
Offline public transport (inc. Frankton Bus Hub)	$114M	$187M	**1.6**

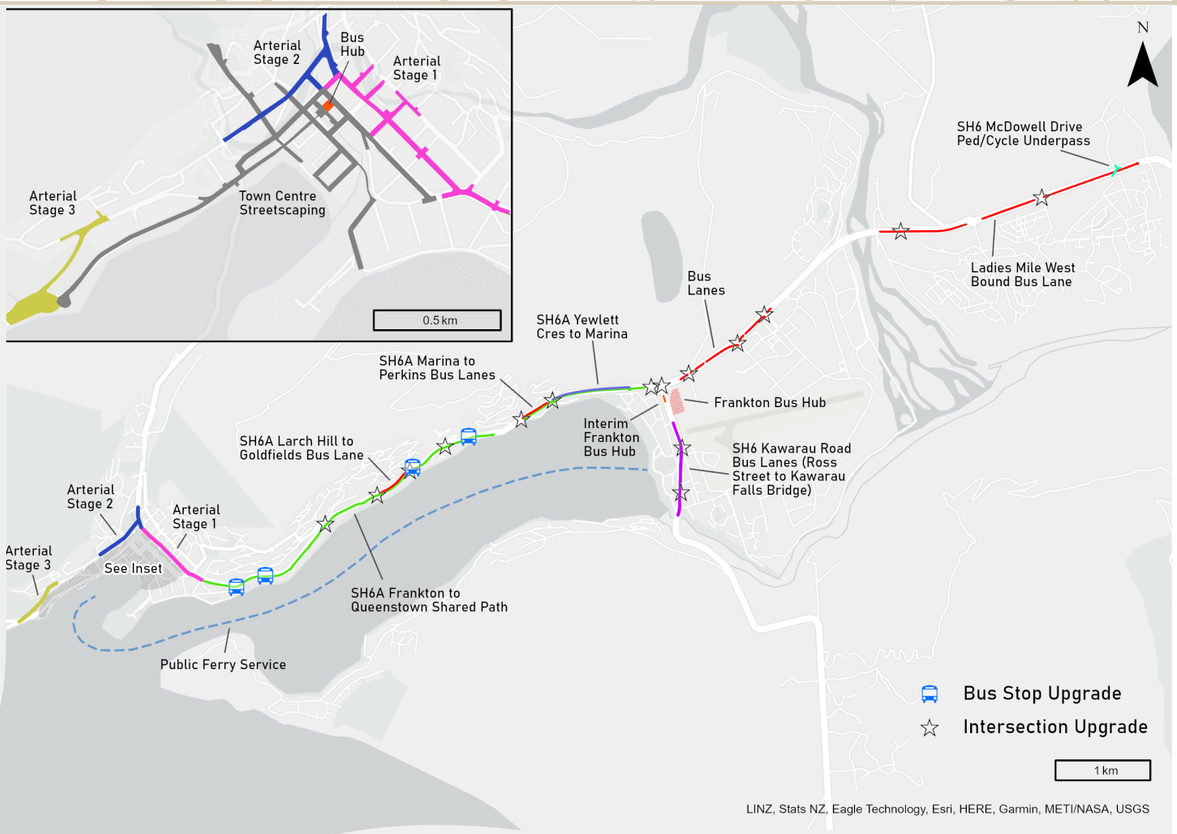
EXPENDITURE PROFILE (10 YEAR PROGRAMME)

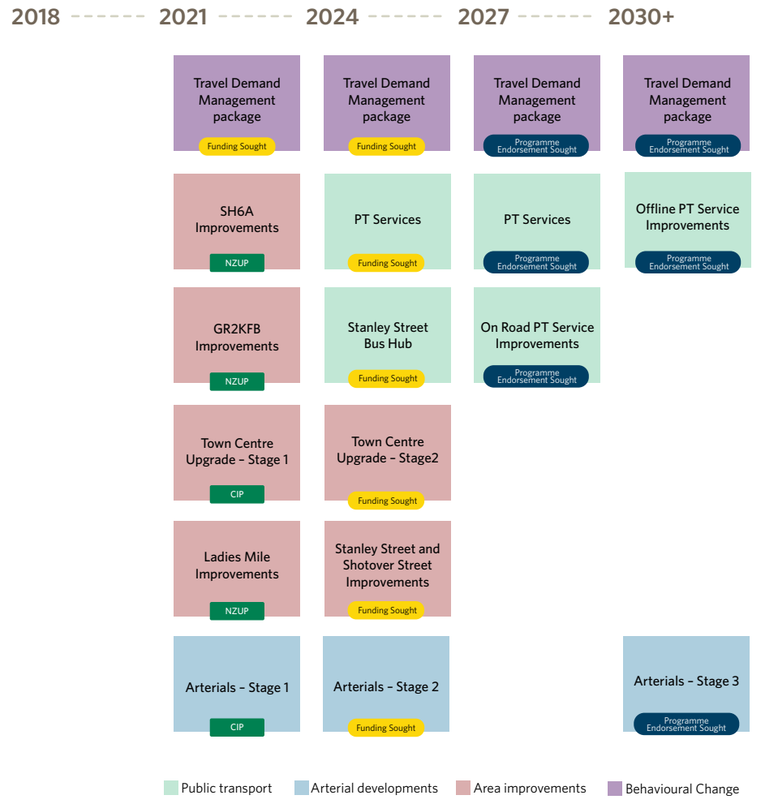


QUEENSTOWN BUSINESS CASE
PREFERRED PROGRAMME

Preferred Programme

- Town Centre – Arterial Stage 1 and streetscape upgrades.
- SH6A Corridor Improvements – Targeted PT priority and intersection improvements.
- SH6 Ladies Mile Corridor Improvements - Targeted PT priority and intersection improvements.
- SH6 Improvements - Targeted PT priority, intersection improvements, town centre upgrades and an upgrade to the existing Frankton bus hub.
- Other infrastructure – Stanley Street PT Hub, Arterials Stage 2 and Stage 3, increased active mode amenity.
- Public Transport Services – Enhanced PT fleet, Ferry services and PT hubs.
- Travel Behavioural Change – Travel demand management and parking management.



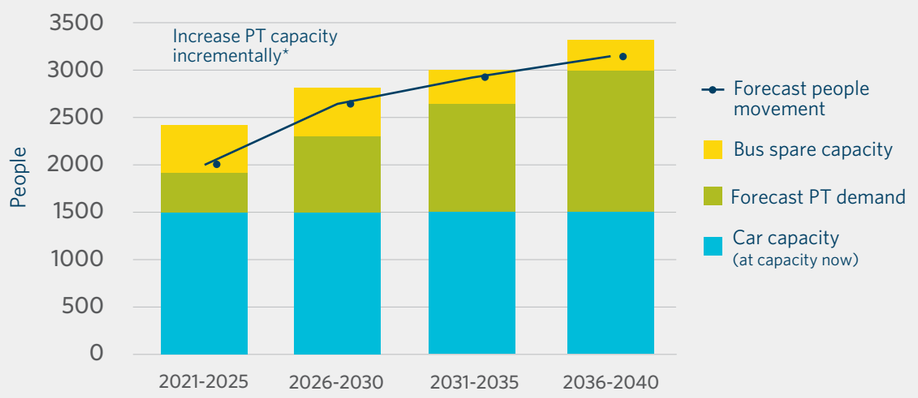


Outcomes

In summary, the proposed interventions will deliver the following key benefits and fufill the projects investment objectives:

- Corridor capacity increases in excess of 100% on the most constrained parts of the network will allow the Queenstown area to continue the grow and flourish as a tourist destination of international standing and a high quality place to live. This is estimated to unlock between $670M and $1.2 billion of economic growth.
- The delivery of a BRT based transport system, coupled with travel demand management measures, will improve travel times across the network by over 20%, along with significant reliability improvements.
- The suite of improvements in the town centre will increase the quality of the built environment stimulating development.
- Safety and access improvements across the network.

SH6A MOVEMENT CAPACITY



*Interventions scheduled to achieve value for money and address capacity constraints

Outcomes

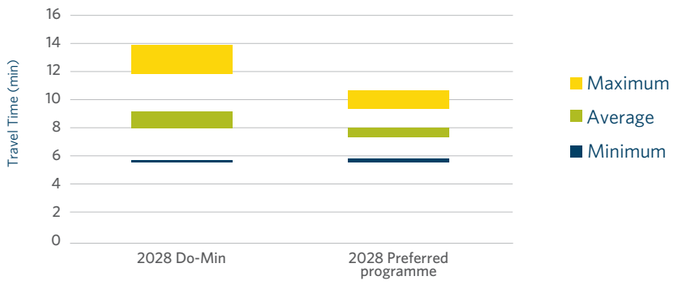
- Infrastructure to support PT services
- Town centre traffic reduction
- Town centre urban realm improvements

- Improved PT capacity
- Town centre hub
- Further town centre improvements

- BRT services
- Step change in PT capacity

- Further town centre traffic reduction
- Offline PT providing additional capacity

MODEL SH6A TRAVEL TIMES 11AM-12PM



QUEENSTOWN BUSINESS CASE
ADDITIONAL INFORMATION AND NEXT STEPS

Delivery approach:

As part of the NZUP and CIP funding, an alliance approach has been agreed between the investment partners for delivery of these critical infrastructure projects.

Key risks:

Risk allocation is dependent on the procurement approach and delivery model. For the projects that are delivered through the traditional approach it is expected that most risks would remain with QLDC or Waka Kotahi, but for the alliance it is expected that many of the risks would be transferred to the alliance.

A key philosophy is that the risks will be allocated to the organisation that is best placed to manage them. This requires that the individual projects develop their own risk registers for their next stage (under the traditional approach). These would be managed together under an alliance.

The key risks outlined in the commercial case for the recommended programme are:

1. That even with the infrastructure and service improvements in place the minimum mode shift target is not achieved to maintain a functioning transport as behavioural change to travel by non-car -modes has not occurred. Mitigation includes recommending a wider transport package with travel demand management and behavioural change initiatives developed and implemented.

2. That we are not be able to rely on the compulsory acquisition provisions of the Public Works Act to acquire all the land needed in time for planned construction start date, noting that here is a significant number of portions of privately owned land that is required for the package. This could cause delay to the programme. Mitigation includes the early development of the project property strategy and the early identification of the required properties for discussions to begin with property owners. Consideration of staging of construction also may help to minimise the delay from property acquisition.

3. There is a risk that the costs increase as more detailed assessment and investigation is complete. Mitigation of this risk includes the business case work going into a high level of detail to reduce this risk. Also, the parallel estimate currently being undertaken will provide a greater level of certainty with the project cost.

Next steps:

1. The Queenstown Business Case programme is endorsed by the by Way to Go partners

2. A data improvement plan and final benefit realisation plan is delivered and signed off by the Way to Go Board

3. A parking implementation plan is delivered by Queenstown Lakes District Council, that is consistent with the Parking Strategy and able to support the ambitious mode share targets.

4. That a Travel Demand Management SSBC is progressed with urgency

5. That the Public Transport Services DBC is progressed with urgency.

Artists impression