



Kā Huanui
a Tāhuna



QUEENSTOWN
LAKES DISTRICT
COUNCIL



WAKA KOTAHI
NZ TRANSPORT
AGENCY

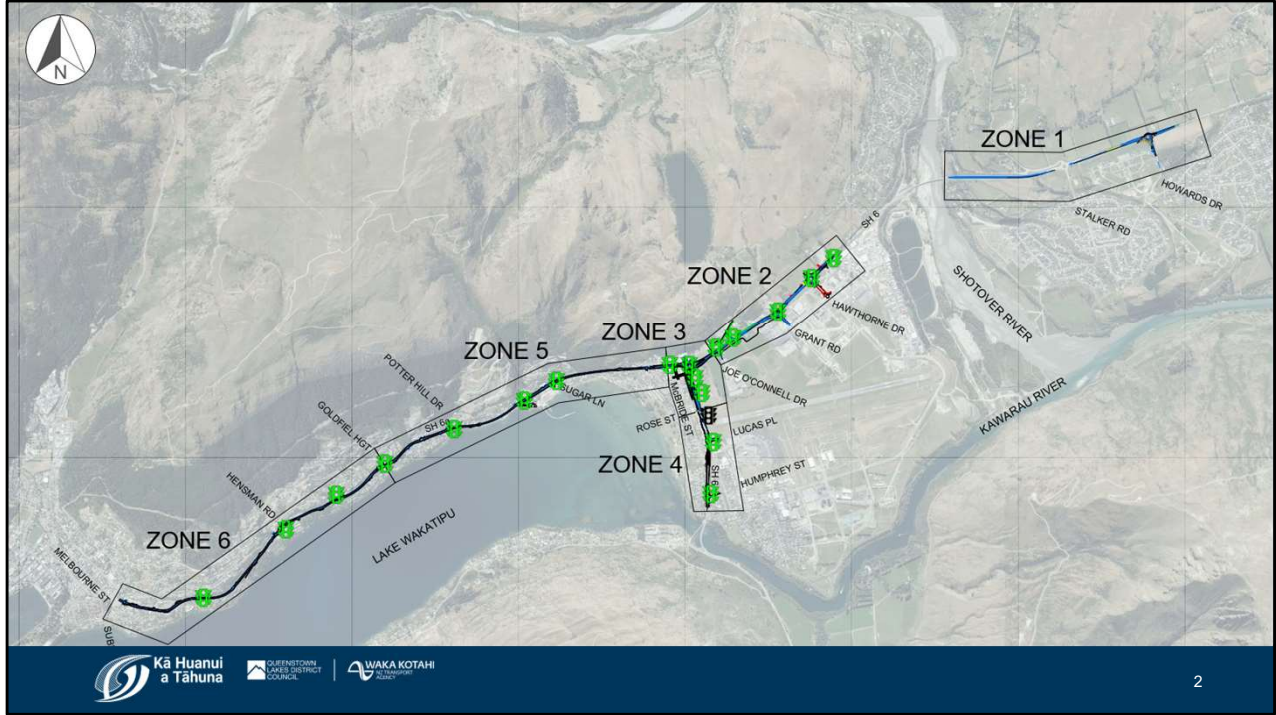
SNUG Workshop – Ka Huanui a Tahuna Update

24 August 2023

Queenstown
Package

New Zealand
Upgrade
Programme





Street Upgrades: Beautification and upgrades project expanding the Town Centre and providing more pedestrian and cycle friendly connections; 2 new sets; complete 2023

QLDC Signals, custom poles, teething problems as first new site

Lakeview: Residential, hotel, commercial and hospitality precinct where Alliance building the horizontal and underground infrastructure, developer will build vertical; complete 2023

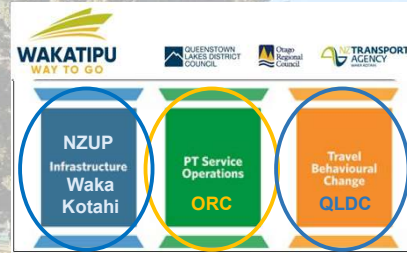
Arterials Stage 1: Grand scheme to create a “bypass” road around Queenstown to expand the town centre for peds. Currently funding for Stage 1 as shown in yellow that takes traffic off of Stanley Street; 3 new sets (2 QLDC, 1 NZTA); modify 2 existing sets; currently under construction and complete 2024

NZUP: Series of roading and intersection upgrades with the intent of prioritising infrastructure to support our public transport network to improve the level of service; 18 new sets (all NZTA); modify 1 existing signalised crossing; remove 2 existing signalised crossings; incorporates a number of raised safety platforms; currently in detailed design development; construction anticipated 2024-2027

Special resort town, people struggle with change and somehow expect traffic to stay the same. I will get run out of town!

Introduction to NZUP

- Response to rapid pre-Covid growth placing increasing pressure on the transport system (January 2020)
- Solutions constrained by geology, topography, competing demands for land and high cost
- Increased people movement through improved PT efficiency and capacity
- Kā Huanui a Tāhuna to implement public transport infrastructure
- NZUP Includes PT priority and intersection upgrades for:
 - SH6 Ladies Mile
 - SH6 Frankton incl. expanded bus hub
 - SH6A Frankton to Queenstown
- and improved walking & cycling connections to PT and general network



Integrated Transport Outcomes*:



Provide more efficient and reliable access for people and goods that:

- Sustainably manages high growth
- Reduces reliance on private vehicle travel
- Enables enhanced land use



Is adaptable to change and disruption



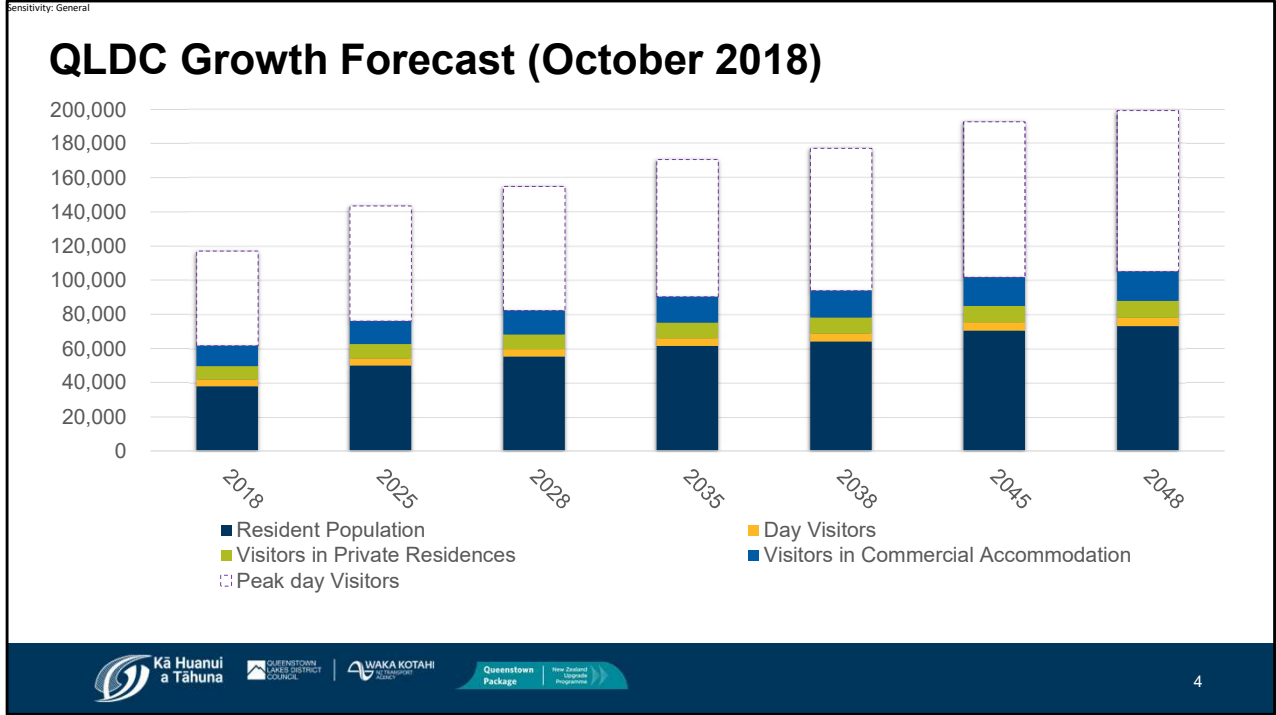
Enhances the liveability and quality of the natural & built environment



Enhances safety with a goal of Vision Zero

* refer Queenstown Transport Business Case Summary Report and Poster

In response to 2018-2021 Queenstown Transportation Business Case
 Provides for growth through increased public transport efficiency and capacity, plus support from walking and cycling, in conjunction with spatial planning
 Infrastructure is just 1 leg of the coliseum
 MUST be a mode change. Morning peak observation – all single driver vehicles. People used to it being a small resort town, taking their car everywhere



2022 census puts us at 50k residents

Dashed boxes at top illustrate the variability in peak day visitors – can more than double population on any given day

City of Queenstown - General

Challenges

- Traffic volumes & continued growth
- Daily & seasonal traffic profiles
- Limited space for traffic and
- Limited or no alternative routes
- Underground and overhead
- Airport operations/OLS
- Overdimension Vehicle Routes
- Construction season
- As-built & RAMM data

Can lead to disruption, frustration and re

SH6A Seasonal Flow Profiles
SH6A 85%ile Hourly Flows

Christmas New Year

11-DEC-2019 WED 12-DEC-2019 THU 13-DEC-2019 FRI 14-DEC-2019 SAT 15-DEC-2019 SUN

Queenstown Package

Kā Huanui a Tāhuna

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WAKA KOTAHU

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High traffic volumes and continuing rapid growth

Daily and seasonal traffic changes difficult to get baseline for travel time comparisons + network close to capacity so falls over very easily

Modelling is just about full time job – Tracs, Paramics, Aimsum, Sidra, Vissim + bespoke QT PT model

OLS = obstacle limitation Surface “The OLS defines the airspace to be protected for aircraft operating during the initial and final stages of flight, or when maneuvering in the vicinity of the airport.”

Sealing season October-March

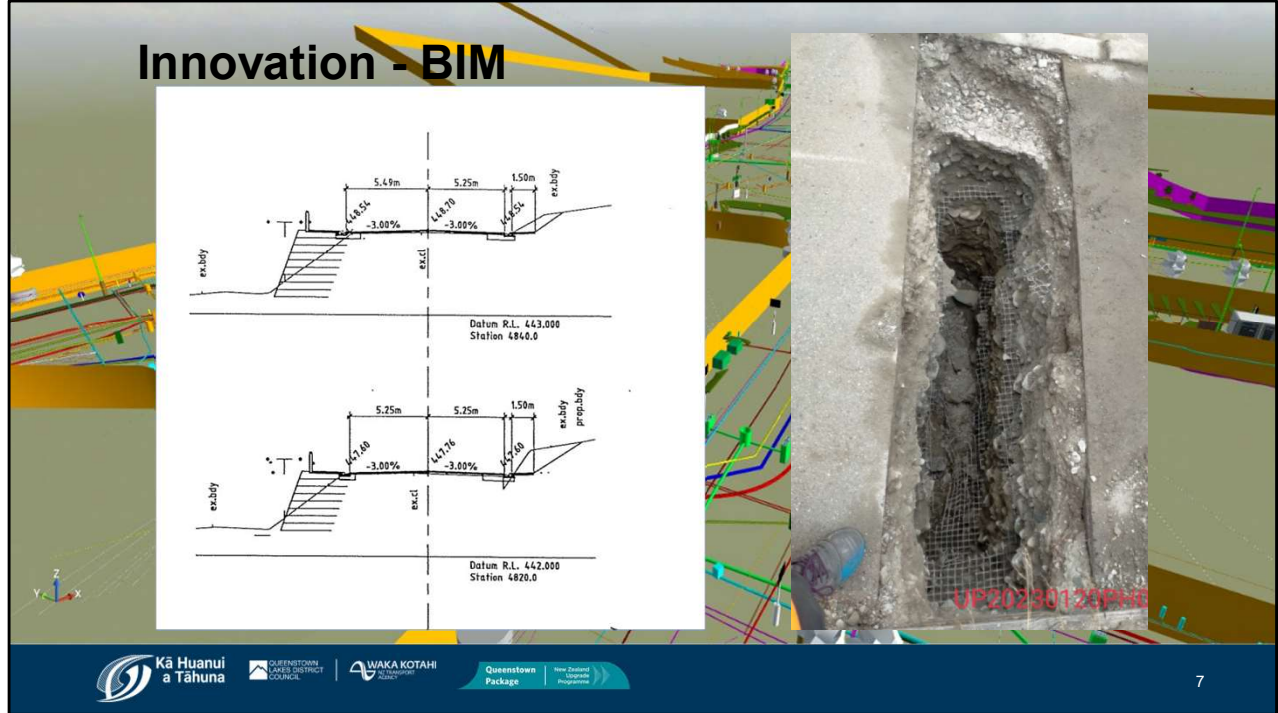
Resourcing – staff turnover; housing crisis; time for collaboration

NZUP Business Case PT Priorities



BP is the network pinch point. By signalling we can control the traffic heading into town
Marina/Sugar Lane is the only 4 leg intersection on Frankton Road and therefore a constraint on the network; creating new intersection at other end of marina to remove the RT at the existing intersection so now all intersections have roughly equal capacity
There MUST be a mode change

Innovation - BIM



Multi-disciplinary team. BIM on horizontal project (unique for transport project)

- Clashes with design of underground utilities and above ground – reduce time and cost during construction
- Property boundaries
- QAC OLS
- Over-dimension load envelopes

Setting up 3D Design & BIM models with as-built/RAMM data attributes

Queenstown Traffic Signals Map

- Currently existing or in development:
 - 6 QLDC Queenstown Signals
 - 3 QLDC Wanaka Signals
 - 23 NZTA Queenstown Signals
 - 2 NZTA-District Signals (Albert Town & Luggate)
- 7 identified potential future signals

8

5 sets of lights when I first moved to town; potentially 34 by end of 2027



BP intersection most expensive intersection NZTA has ever built for its size (land acquisition process; construction costs and staging)
CONESTOWN

- How are you?
- Fine, holding on,
working

