Land Transport Asset & Activity Management Plan 2024-2034

Queenstown Lakes District Council

Date: January 2025

QUEENSTOWN LAKES DISTRICT COUNCIL

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(N.B. Budgets are subject to change through reforecast and annual plan cycles). The 'AMP at a glance' document will provide updated information but for most up to date budgets, please refer to QLDC council minutes on the QLDC website.

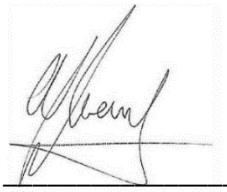
FOREWORD

Asset management provides an important framework for QLDC in our role as one of the Kaitiaki of our district. It is reassuring to see that our transport asset management is growing in strength to strength. This plan sets out the challenges and opportunities in front of us and how QLDC will respond strategically and operationally. Infrastructure assets are long-life assets and will be here long after the many of us working on them today have stepped away. The decisions we make now will impact those who follow. Investment is signalled in both planned capital works and operational budgets, we believe that setting out this asset management plan business case, which is supported by robust evidence, represents an important step in engaging the wider community and our business partners for the future.

There are many challenges that our industry and communities currently face, and these are exacerbated in the Queenstown Lakes District given our historic and continuing rapid growth. The last couple of years have presented significant pressures, whether it is from proposed reforms, weather events, natural hazards, pandemics or economic pressures. QLDC's growth brings many exciting opportunities as we have seen with central government investment in our Queenstown town centre upgrades, but with it comes increasingly complex urbanisation and intensification, which when combined with the district's role as an international tourist destination means our historic infrastructure deficient exacerbates our transport issues.

This plan is not without significant funding and affordability constraints, both NZTA Waka Kotahi and local government are managing complex funding environments where tough decisions must be made around what we can and can't fund. QLDC are working hard to meet the needs of our community, the LTP 2024 focuses on a baseline approach, this means protecting the assets we have and keeping our maintenance and renewals budgets has been key. The next three years of transport capital expenditure will focus on key pre-implementation activities, behaviour change through travel demand management and planning and preparing for our future transport needs.

Faced with uncertainty in reform and financial constraints, it is reassuring to see this plan set out our steps for the next ten years.



Tony Avery

General Manager, Property and Infrastructure

Queenstown Lakes District Council

CONTENTS

FOREWORD 3

1. EXECUTIVE SUMMARY 10

1.1. WHAT WE PROVIDE 10
1.2. KEY ISSUES/CHALLENGES 10
1.3. OUR STRATEGIC FRAMEWORK 11
1.4. OUR TRANSPORT STRATEGY 11
1.5. OUR ASSET MANAGEMENT STRATEGY 12
1.6. OUR TRANSPORT PROGRAMMES 13
1.6.1. CONTINUOUS PROGRAMME SUMMARY 14
1.6.2. IMPROVEMENT PROGRAMME SUMMARY 15
1.7. CLIMATE STATEMENT 16
1.8. WHAT IT WILL COST 16
1.9. QLDC ASSETS & ACTIVITIES 18

2. INTRODUCTION TO THE TRANSPORT AMP 22

2.10. AMP PURPOSE & FRAMEWORK 22
2.11. STRATEGIC ASSET MANAGEMENT PLAN 23
2.11.1. SAMP PURPOSE 23
2.11.2. RELATIONSHIP BETWEEN DOCUMENTS 23
2.12. IMPROVEMENT ACTIONS – STRATEGIC ASSET MANAGEMENT 24

3. STRATEGIC CONTEXT 25

3.1. OUR PEOPLE – KĀI TAHU CONTEXT 25
3.2. OUR DEMAND AND GROWTH 27
3.2.1. POPULATION / DEMOGRAPHIC 29
3.2.2. SCHOOL GROWTH 31
3.2.3. HEALTH SERVICES 32
3.2.4. VISITOR DEMAND 32
3.2.5. THE ECONOMY 35
3.2.6. LAND AND DEVELOPMENT GROWTH 37
3.2.7. TRAFFIC DEMAND AND MODE SHIFT 38
3.3. FUTURE DEMAND FOR OUR ASSETS AND SERVICES 40
3.3.1. OVERVIEW 40
3.3.2. DEMAND FORECASTS 40
3.3.3. TE TAPUAE SOUTHERN CORRIDOR 42
3.4. OUR LAND – OUR NATURAL ENVIRONMENT 44
3.5. CLIMATE CHANGE IMPACTS 45
3.6. OUR TRANSPORT SYSTEM 45
3.7. IMPROVEMENT ACTIONS – STRATEGIC CONTEXT 46

4. STRATEGIC DIRECTION 47

4.8. NATIONAL DRIVERS 49
4.9. REGIONAL DRIVERS 54
4.10. LOCAL DRIVERS 57
4.11. IMPROVEMENT ACTIONS – STRATEGIC DIRECTION 61

5. STRATEGIC ASSESSMENT 62
5.1. KEY STRATEGIC ISSUES AND RESPONSES 62
5.1.1. RAPID AND SUSTAINED DEMAND GROWTH 62
5.1.2. CLIMATE EMERGENCY 66
5.1.3. RESILIENCE TO SHOCK EVENTS 68
RESILIENCE & ADAPTATION 68
5.1.4. RESOURCE CONSTRAINTS 72
5.1.5. GOVERNMENT SETTINGS 73
5.2. IMPROVEMENT ACTIONS – STRATEGIC ASSESSMENT 75
6. ASSETS AND ACTIVITIES – LIFECYCLE MANAGEMENT 76
6.1. ASSET ACQUISITION 76
6.1.1. ACQUISITION PROCESSES 76
6.2. TRANSPORT ASSETS & ACTIVITIES 79
6.2.1. OVERVIEW OF NETWORK AND ASSETS 79
6.2.2. TRANSPORT SAFETY AT QLDC 81
6.2.3. NETWORK AND ASSET MANAGEMENT (NAM) 96
6.2.4. CORRIDOR ACCESS MANAGEMENT 103
6.2.5. SEALED ROADS 103
6.2.6. UNSEALED ROADS 110
6.2.7. BRIDGES AND STRUCTURES 113
6.2.8. WALKING AND CYCLING – ACTIVE TRAVEL NETWORK – FOOTPATHS & CYCLEWAYS 117
6.2.9. OPERATIONAL TRAFFIC MANAGEMENT 123
6.2.10. DRAINAGE 124
6.2.11. FLOOD PROTECTION AND CONTROL 125
6.2.12. STREET LIGHTING 125
6.2.13. RESILIENCE 127
6.2.14. ENVIRONMENTAL MAINTENANCE 130
6.2.15. PARKING MANAGEMENT 133
6.2.16. TRAVEL DEMAND MANAGEMENT 134
6.2.17. TRAFFIC SERVICES - SIGNS, MARKINGS, GUARDRAILS AND RAILINGS 135
6.2.18. PUBLIC TRANSPORT 136
6.3. IMPROVEMENT ACTIONS –ASSETS AND ACTIVITIES 141
7. DEFINING AND MEASURING LEVELS OF SERVICE 143
7.1. QLDC LEVELS OF SERVICE FRAMEWORK 143
7.2. STRATEGIC ALIGNMENT 144
7.3. NATIONAL LEVELS OF SERVICE 147
7.3.1. DEPARTMENT OF INTERNAL AFFAIRS (DIA) MEASURES 147
7.3.2. SUB-CLASSIFICATION OF ACCESS AND LOW VOLUMES ACCESS ROADS 148
7.3.3. ONE NETWORK FRAMEWORK (ONF) 149
7.3.4. LGNZ ROAD CONTROLLING AUTHORITY REPORT 149

7.4. REGIONAL LEVELS OF SERVICE DRIVERS 149
7.4.1. REGIONAL LAND TRANSPORT PLAN 149
7.5. LOCAL LEVELS OF SERVICE DRIVERS 151
7.5.1. TRANSPORT LTP LoS OUTCOME 151
7.5.2. LONG TERM PLAN MEASURES 151
7.5.3. CLIMATE AND BIODIVERSITY PLAN MEASURES 154
7.5.4. QLDC CUSTOMERS - LEVELS OF SERVICE 154
7.6. IMPROVEMENT ACTIONS – DEFINING AND MEASURING LEVELS OF SERVICE 158
1. MANAGING RISK 160
1.1. QLDC RISK MANGEMENT FRAMEWORK 160
1.2. CRITICAL ASSETS 160
1.3. HERITAGE ASSETS AND PROTECTED FEATURES 162
1.4. CONSENTS 164
1.5. IMPROVEMENT ACTIONS – MANAGING RISK 165
2. EFFICIENTLY AND EFFECTIVELY PROCURE & MANAGE 166
2.1. PROCUREMENT 166
2.1.1. QLDC (PROPERTY & INFRASTRUCTURE) PROCUREMENT 166
2.1.2. KĀ HUANUI A TĀHUNA WHAKATIPU TRANSPORT PROGRAMME ALLIANCE 167
2.2. SERVICE DELIVERY 168
2.2.1. CONTRACTING ARRANGEMENTS 168
2.2.2. CONTINUOUS PROGRAMME DELIVERY MECHANISMS 168
2.2.3. IMPROVEMENT PROGRAMME DELIVERY MECHANISMS 169
2.2.4. STRATEGY FOR PROCUREMENT OF LAND TRANSPORT ACTIVITIES 2023 169
2.2.5. SMART BUYER ASSESSMENT 170
2.3. IMPROVEMENT ACTIONS – EFFICIENTLY AND EFFECTIVELY PROCURE AND MANAGE 171
3. OUR TRANSPORT PROGRAMME 172
3.1. CONTEXT OF 2024-34 PROGRAMME 172
3.2. INVESTMENT PRIORITISATION METHOD (IPM) 2024-27 173
3.3. PARTNERING FOR TRANSPORT OUTCOMES 174
3.3.1. ECONOMIC STIMULUS CROWN INFRASTRUCTURE PARTNERSHIP 174
3.3.2. HOUSING INFRASTRUCTURE FUND 175
3.3.3. THE NZ UPGRADE PROGRAMME 175
3.4. CONTINUOUS PROGRAMME 176
3.4.4. CONTINUOUS PROGRAMME DEVELOPMENT 176
3.4.1. EVOLUTION OF PROBLEM STATEMENTS 177
3.4.2. CONTINOUS PROGRAMME STRATEGIC RESPONSE 177
3.4.3. ASSESSMENT OF CONTINOUS PROBLEM STATEMENTS 178
3.4.4. BENEFIT SUMMARY OF ADDRESSING ISSUES 185
3.4.5. MAINTENANCE OPERATIONS AND RENEWALS (MOR) 185
3.4.6. OPTIONEERING -DIFFERENTIAL LEVEL OF SERVICE 188
3.4.7. MOR PEER BENCHMARKING 192

3.4.8. IPM CONTINUOUS PROGRAMME 197
3.5. STRATEGIC TRANSPORT IMPROVEMENT PROGRAMME 198
3.5.1. 2024-2027 NLTP CAPITAL FUNDING SHORTFALL 199
3.5.2. THE STRATEGIC 'TOOLKIT' APPROACH 199
3.5.3. CAPELL AVE ROAD FORMATION 208
3.5.4. ARTHURS POINT BRIDGE 208
3.5.5. IPM IMPROVEMENT PROGRAMME – SELF ASSESSMENT 208
3.6. IMPROVEMENT ACTIONS – OUR TRANSPORT PROGRAMME 209
4. FINANCIAL MANAGEMENT 210
4.1. INTRODUCTION 210
4.2. FINANCIAL IMPACT LARGE DEFECTIVE BUILDING CLAIMS 211
4.3. FUNDING SOURCES 211
4.3.1. NZTA WAKA KOTAHI 211
4.3.2. OTHER FUNDING SOURCES 211
4.4. REVENUE AND FINANCING POLICY 212
4.4.1. QLDC WARDS 213
4.4.2. SPECIAL PURPOSE ROADS – TRANSITION TO LOCAL ROADS 213
4.4.3. FUNDING RISKS 214
4.5. AMP FINANCIAL ASSUMPTIONS 214
4.6. ASSET VALUATION 215
4.6.1. EXCLUSIONS 216
4.6.2. DEPRECIATION (LOSS OF SERVICE POTENTIAL) 216
4.6.3. DEPRECIATION PROVISION 216
4.6.4. CONFIDENCE 217
4.6.5. BACKLOG (DEFERRED MAINTENANCE AND DEFERRED RENEWALS) 218
4.6.6. MONITORING THE BACKLOG TRENDS 218
4.7. TOTAL EXPENDITURE 218
4.7.1. CAPITAL EXPENDITURE 219
4.7.2. OPERATIONAL EXPENDITURE 220
4.7.3. KEY ASSUMPTIONS, CONFIDENCE AND RELIABILITY 221
4.8. IMPROVEMENT ACTIONS – FINANCIAL MANAGEMENT 221
5. CONTINOUS AMP IMPROVEMENT 222
5.1. CONTINOUS IMPROVEMENT 222
5.2. ASSET MANAGEMENT MATURITY 222
5.3. PROGRESS AGAINST PREVIOUS AMP (2021-24) 223
5.4. IMPROVEMENT PLAN 224
5.4.1. ASSET MANAGEMENT IMPROVEMENT PLAN 224
5.4.2. AUDITS 225
5.5. IMPROVEMENT ACTIONS – CONTINUOUS AMP IMPROVEMENTS 226
APPENDIX 228
TRANSPORT ACTIVITY PROCUREMENT STRATEGY ENDORSEMENT 230
NZTA WAKA KOTAHI TECHNICAL AUDIT 2023 231

NZTA WAKA KOTAHI AUDIT INVESTMENT REPORT 2023 232
ACTIVE CONSENTS RELATING TO TRANSPORT 233
INVESTMENT LOGIC MAPS 235
ASSET MANAGEMENT IMPROVEMENT PLAN 236
BCA AMP & IMM 239
GLOSSARY OF TERMS 240

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This document is proudly produced internally by QLDC staff, but the content is the culmination of many different pieces of work that has been undertaken by leading members of our industry.

Polly Lambert – Whole Box ‘n’ Dice

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Mark Cruden – Meyer Cruden Engineering

Steve Browning – Strategic Asset Solutions Ltd

NZTA Waka Kotahi

WSP

1. EXECUTIVE SUMMARY

QLDC's vision for land transport is:

"To provide a safe, resilient, efficient transport system that supports modal choice and addresses current and future demand for economic and social opportunities."

1.1. WHAT WE PROVIDE

QLDC provide a transport system that enables people and goods to move through and around the district. Our district is made up of the two main towns of Queenstown and Wānaka, with emerging urbanised communities such as Frankton, Hāwea, Arrowtown and the Te Taupuae (Southern Corridor) which are settlements in their own right. There are a number of smaller, remote communities such as Kingston and Glenorchy, which play an integral part in our community and QLDC is focused on strengthening their connection to the main centres particularly through active travel and public transport.

Our District is in a state of transition in how it operates its transportation network; as QLD becomes more urbanised, it faces many issues similar to a small city. In 2020, QLDC installed its first set of local road traffic signals, by the end of the 2024-27 NLTP, we are projected to have five local road signalised intersections. Congestion, unreliable and unacceptable travel times and lack of alternative routes all combine to reduce the liveability of our district. These impacts are exacerbated by our key challenges.

1.2. KEY ISSUES/CHALLENGES

This Asset Management Plan draws on the significant issues identified within the QLDC 30-Year Infrastructure Strategy:

- Rapid and sustained population growth
- Increased and increasing standards
- Resilience to shock events
- Climate emergency
- Historic infrastructure deficit

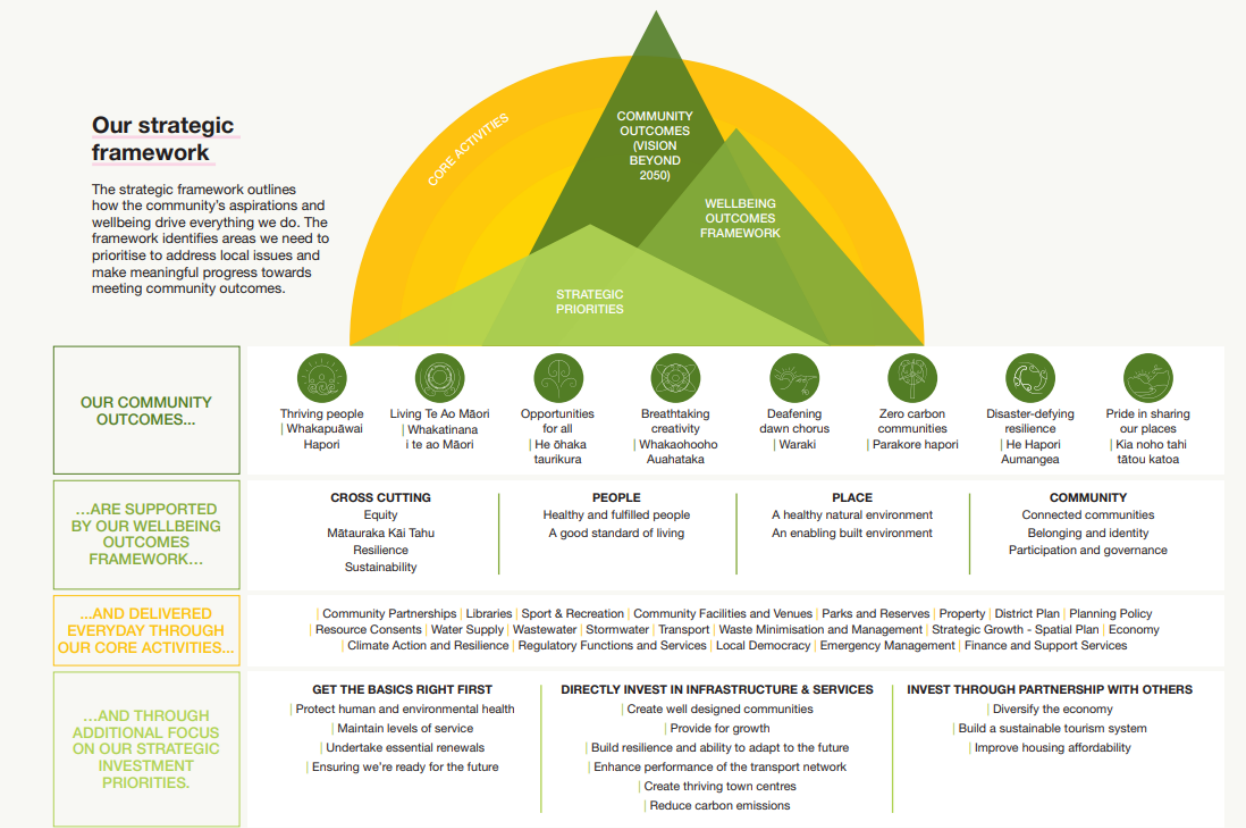
QLDC's response to these challenges is constrained by:

- Cost escalation
- Limited capacity to deliver
- Timing and investment of other infrastructure providers
- Long project incubation periods and barriers to implementation
- Limited availability of funding

Our Transport Programme has been developed to respond to these challenges as far as is practicable within the context of overarching constraints.

1.3. OUR STRATEGIC FRAMEWORK

Figure 1: QLDC Strategic Framework | Our Strategic Framework | Queenstown Lakes District Council



1.4. OUR TRANSPORT STRATEGY

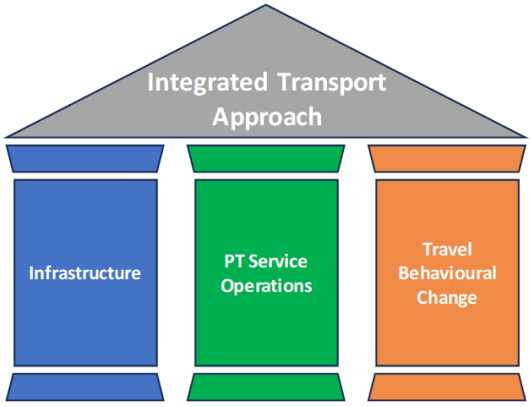
Figure 2: Way to go (QLDC, ORC, Waka Kotahi)

QLDC is working closely with the collaborative 'Way to Go' partnership (Otago Regional Council and NZTA Waka Kotahi) to address our challenges.

In addition to the Government Policy Statement for Transport to deliver economic growth and productivety, QLDC aspires to develop better transport options and achieve a modal shift into active modes. Investment is focused on providing a safe and accessible multimodal network that is aligned with our Net Zero Carbon 2050 objective and supports economic prosperity. This is achieved by working with our Way to Go Partners (NZ Transport Agency NZTA Waka Kotahi and Otago Regional Council).

As set out in the Queenstown Integrated Business Case we cannot build ourselves out of our issues, so the business case sets out an approach based on three pillars.

Figure 3: The QIBC Pillars of Investment



This is detailed in the Better Ways to Go Mode Shift Plan which sets out how we will encourage customers to move from their cars to active modes.

- **Public Transport** Provide urban public transport (PT) services; improve public transport infrastructure; bus stops and shelters; information technologies, Bee cards, provisions to carry, prams, bikes and skis and trialling new services such as water ferries. The conversation around mass rapid transport become key solutions which are being explored.
- **Behaviour change /Travel Demand Management (TDM)** Active Travel; PT can only offer part of the solution; the first and last part of people's journeys (between home and the PT services and work) are likely to be made by foot or bike, so Active Travel is a key part of the solution.
- **Infrastructure** Shaping Urban form; working with planners and developers early in the process to shape a transport system that supports multi modal approach.

1.5. OUR ASSET MANAGEMENT STRATEGY

QLDC's asset management strategy builds on the newly developed QLDC Strategic Framework and the 30 Year Infrastructure Strategy. The Strategic Framework describes the outcomes QLDC is seeking to achieve, the ten year investment priorities required to achieve those outcomes, and the ways in which the organisation will work. The 30 Year Infrastructure translates the Strategic Outcomes Framework into a suite of infrastructure investment objectives designed to guide investment in infrastructure to best deliver on the defined community outcomes. The 30 Year Infrastructure Strategy defines the significant issues facing QLDC's infrastructure and charts a most likely course for the management of its infrastructure in response.

QLDC have developed a Better Business Case AMP Approach (BCA AMP). The Business Case approach ensures that we understand the issues we face and can deliver maintenance, operations, renewals and improvements in the right place, at the right time to ensure we provide an appropriate level of service. QLDC has developed its inaugural Strategic Asset Management Plan (SAMP), which seeks to translate this broader strategic direction into the strategic management assets. This Asset Management Plan (AMP) should be read in conjunction with the SAMP, QLDC Asset Management Policy, and 30 Year Infrastructure Strategy.

QLDC are committed to Continuous Improvement in order to effectively plan, manage, operate and deliver the transport network. QLDC have focused investment in processes, data collection, condition and demand monitoring, modelling and analysis. As our programme moves into a large delivery stage, attention is moving to network and benefits realisation. Our AMP Improvement Plan captures key actions and these are tracked and updated regularly.

1.6. OUR TRANSPORT PROGRAMMES

QLDC has continued to face ongoing challenges with building defect and weather tightness claims (often referred to as "leaky buildings" which can affect some properties built between the late 1980s and mid-2000s). Under the current law, Council is often the final party left to settle large and historic claims. Two recent claims have had a significant fiscal impact on the Council, which along with other market pressures has required Council to seriously review its capital works programme and service delivery. These settlements have led to higher borrowings for Council, and in turn higher interest costs. As a consequence, the Long-Term Plan contains a reduced capital expenditure (capex) programme as Council puts in place the financial provision to meet these costs. This has largely led to the rescheduling of projects into later years.

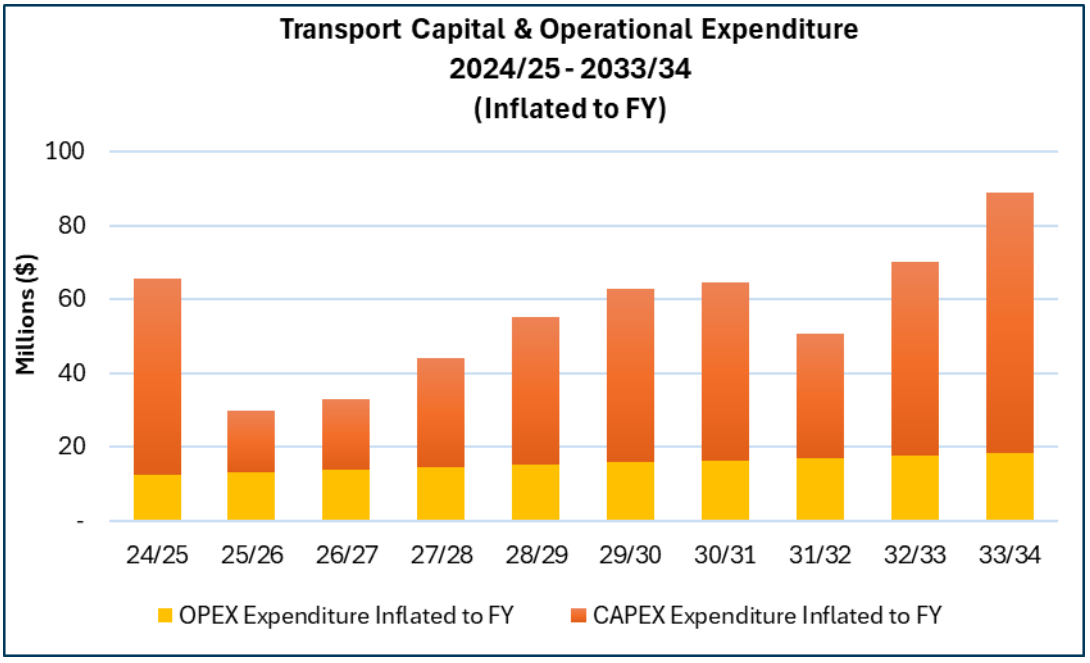
The QLDC Transport Programme for the 2024-34 LTP has been developed around QLDC's baseline approach to the Long-Term Plan. The following criteria set out what fits that baseline.

- Honour Existing Commitments
- Maintain Existing Levels of Service
- Essential Renewals
- Deliver Critical Enablers for Existing and Future Priorities
- Comply with High Impact Regulatory Requirements

The Government Policy Statement on land Transport 2024 (GPS 2024) was published in June 2024 and has to impacted how council's final NZTA Waka Kotahi subsidised programme will look. QLDC's Transport Programme consists of the Continuous Programme, (how we will Maintain, Operate and Renew our network), road safety promotion, as well as our Improvement Programme (LCLR and capital works – these address key gaps in levels of service). The figure below demonstrates our full Transport programme (inflated to funding year), both subsidised and unsubsidised budgets.

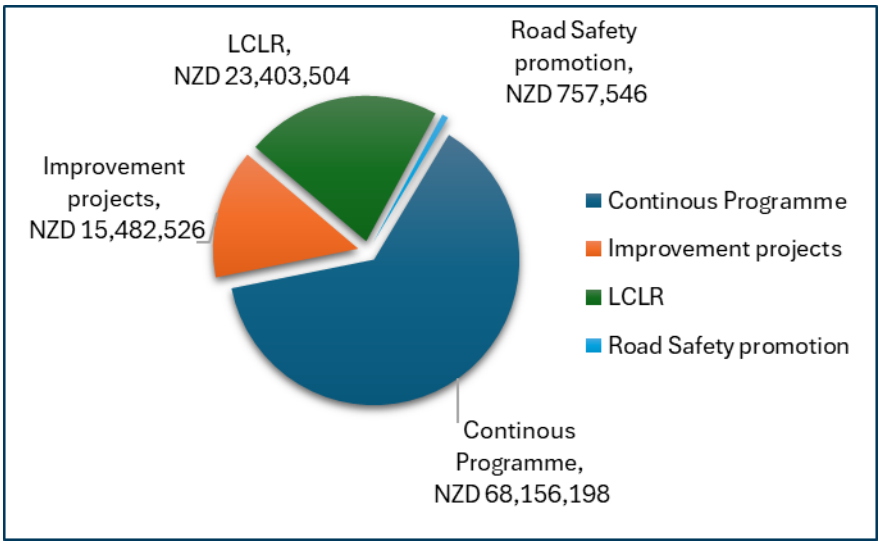
QLDC plans to invest $411.7m of capital expenditure and $127.1m of operating expenditure (to be updated in subsequent AMP updates) in transport assets and services over the next ten years (inflated to FY24/25).

Figure 4: Capital & operational Budgets 2024/25 – 2033/34 (includes unsubsidised projects (Opex budgets exclude overheads interest & depreciation)



QLDC's 2024-27 original NLTP bid amounted to a total of **$107.5m** (excluding project carry forwards from the 21-24 period). This can be broken down into four categories:

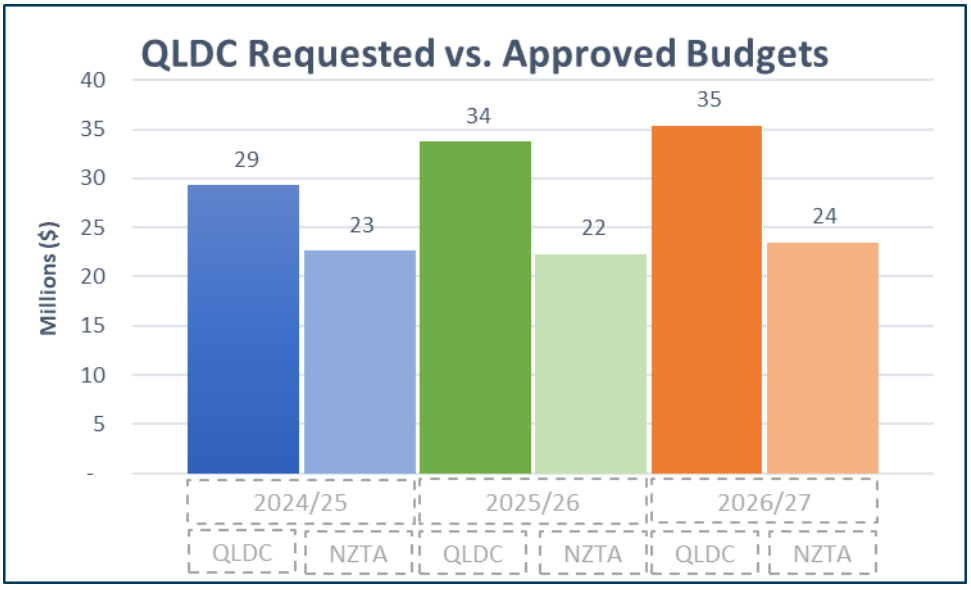
Figure 5: QLDC's 2024-27 original NLTP bid categories



QLDC received their approved allocation from NZTA Waka Kotahi in October 2024. Overall, there was a shortfall between requested and approved funding of $39.0m. Following an internal review, transport officers presented a recommended way forward to QLDC Councillors which focussed on maximising available funding assistance whilst maintaining a balanced expenditure approach across the programme.

The table below represents the QLDC requested budget vs. approved allocation over the three year period.

Figure 3: QLDC Requested vs NZTA Waka Kotahi approved budgets



1.6.1. CONTINUOUS PROGRAMME SUMMARY

Over the last three NLTP cycles, QLDC's maturity in transport asset management continues to improve and knowledge of our data and systems continues to increase. This greatly supports prioritisation of investment in QLDC's continuous programme and the high value, expanding and increasingly complex

transport asset base. This is supported with positive feedback from NZTA Waka Kotahi through the Technical Audit process.

Renewals budgets have been escalated to align with market rates to retain a best practice renewals rate, these will maintain current levels and not provide an increased level of service. Operational budgets are reflecting cost escalations and changing network complexities. The network is rapidly becoming signalised and there is an increased use of technology and monitoring.

Following the release of the NLTF approved budgets for the 24-27 period, QLDC are still working to confirm their budgets for the 100's work categories to ensure contract commitments are met and that the district is provided with adequate service levels across the programme. NZTA Waka Kotahi approved budgets are forecast to be utilised in full, however additional local share will be required in this funding period.

For the subsequent AMP update QLDC transport officers in tandem with the finance team will strive to ensure this is updated and representative of our programme for the period.

1.6.2. IMPROVEMENT PROGRAMME SUMMARY

With huge financial constraints impacting the delivery for significant strategic work for 24-34 NLTP, QLDC had hoped to improve its "toolkit" for planning. These projects were considered to be the bare minimum of tasks. These projects would not have enabled QLDC to keep pace with servicing growth, but place QLDC in a position to respond with clear evidence and programmes at a later date. Some of the projects below are enabling activities for the Improvement Programme and will be delivered through the Activity Management Planning funding categories.
The impact of this financial constraint on QLDC's improvement programme is severe. With the significant shortfall in expected NLTP allocation, QLDC are refocusing local share to achieve a balanced programme that will maximise NZTA Waka Kotahi funding opportunities, but continue to keep momentum on planning and pre-implementation on key projects such as the Arthur's Point Bridge duplication and the Capell Ave extension. There are no major physical transport projects being progressed under this baseline approach within the ten year plan (contrary to the sequences approved in high level business cases and masterplans), although there are some pre-implementation phases that may progress. Visibility of the full programme will be retained outside of QLDC's LTP and NLTP, and opportunities for alternative funding will be sought. QLDC is not alone in this issue, as its transport partners also face reduced budgets and uncertainties around timing of investments.

As the planned interventions in the full programme have been integrated and sequenced, then the high-level outcomes that QLDC and its partners aspire to, such as sustainable growth and climate protection cannot be achieved in the short and medium terms The lack of investment in the improvements programme has now moved past being a risk and into a serious issue. We are behind in servicing growth and long periods of inaction will exacerbate the gap between infrastructure and land use planning. The reduction in subsidy levels, along with numerous "reforms", and further organisational issues in recruiting key roles, is impacting not only key projects individually, but the ability to plan for the long term.Consequently, we are not not developing growth sustainably. This in turn may be putting additional pressure on existing assets – roading, footpaths, bridges – as alternative physical infrastructure and services (mode choices) are not being provided.

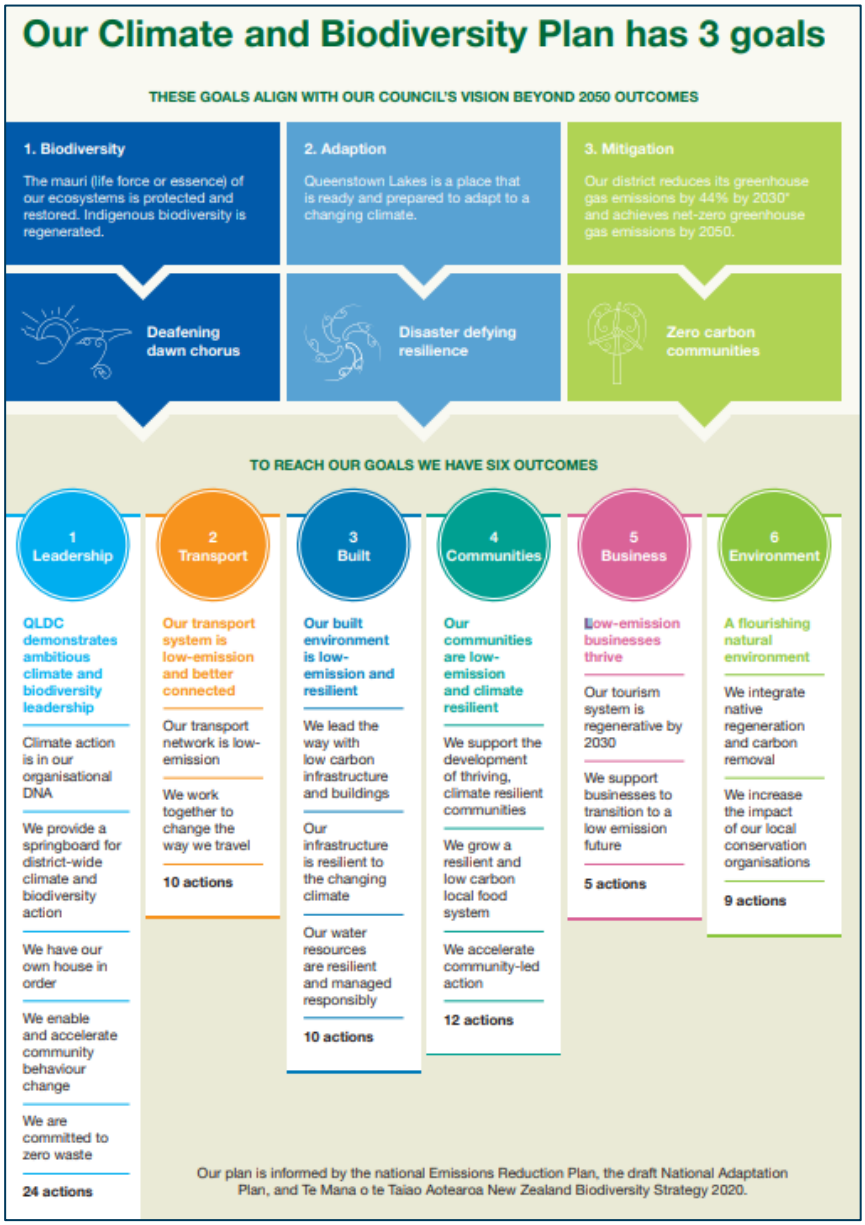
Following the release of the NLTF in October 2024, the improvement programme attracted minimal funding support from NZTA Waka Kotahi. QLDC's original submission requested a total $15.17m and funding support of $4.22m was provided.

The recommended and approved way forward will focus on maximising available funding assistance whilst maintaining a balanced expenditure approach across the programme. Various projects are continuing with local share only or have been deferred to future NLTP periods.

1.7. CLIMATE STATEMENT

QLDC's Climate and Biodiversity Plan highlights Transport as one of the highest emissions emitting sectors, with on- and off-road transport accounting for 60%. QLDC transport programmes are underpinned by the goals and outcomes set out in the Climate and Biodiversity Plan.

Figure 6: QLDC Climate and Biodiversity Plan



1.8. WHAT IT WILL COST

Table 1: Overview of the NLTP 24-27 requested vs 24-27 approved Submission

	QLDC Requested 24-27	NZTA Waka Kotahi Approved 24-27	Variance requested vs allocated
Road Safety Promotion	757,546	278,000	-63%
Local Road Operations	28,285,574	25,065,000	-11%
Local Road Pothole Prevention	38,124,610	37,263,000	-2%
Walking & Cycling	1,746,015	450,000	-74%

Capital Projects	15,173,756	4,218,368	-72%
LCLR	23,403,505	1,200,000	-95%
Total	**107,491,006**	**68,474,368**	**-36%**

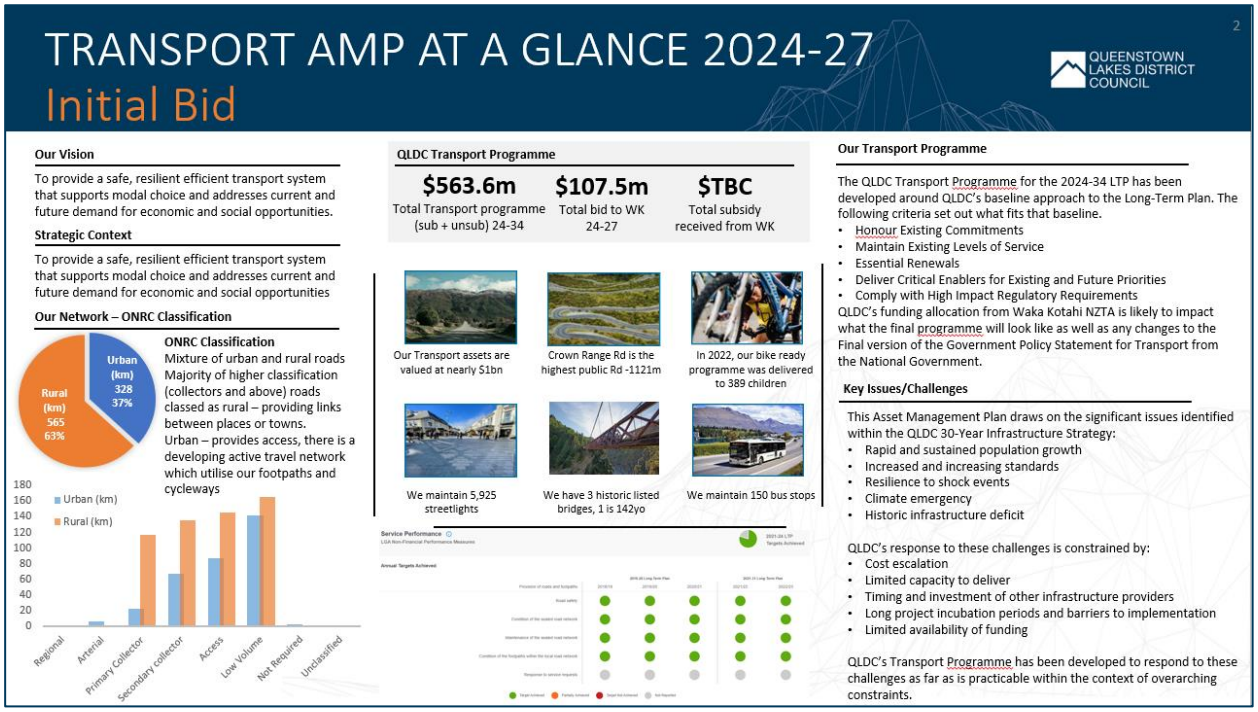
QLDC's original LTP24 (and associated AMP) also had budget provision for Transport projects which did not meet the NZTA Waka Kotahi funding specifications. This included budget lines such as Arterials stage 1 and Parking enforcement CCTV surveillance and maintenance.

Following the release of the NLTF, QLDC have internally reviewed the transport programme and reallocated budgets where required. Some projects will continue without NZTA Waka Kotahi funding delivering a reduced scope compared to what was originally intended.

Following the significant shortfall from the NLTP24-27 funding period, Council needed to reprioritise QLDC's residual transportation capital expenditure.

In December 2024, QLDC transport officers presented Councillors with a recommended option for providing the best way forward for our transport programme (for all work categories except for 100's & 432). The recommended and approved option offered a balance way forward focusing on maximising available funding assistance whilst maintaining a balanced expenditure approach across renewals, minor improvements, major projects, and planning activities.

Figure 7: Transport Investment 'At a Glance' 2024-2034 (to be updated mid 2025)



TRANSPORT AMP AT A GLANCE 2024-27
Our Bid

3

QUEENSTOWN LAKES DISTRICT COUNCIL

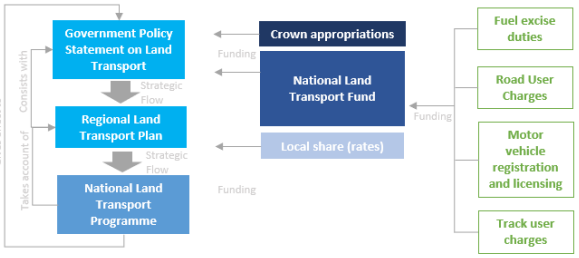
Our Programme

The QLDC Transport bid to NZTA is categorised into 4 separate bids:

1) **Maintenance, Operations & Renewals** – Investment in QLDC's existing local roads to deliver an appropriate level of service. For 24-27 period this is now split into Local Road Pothole Fund and Local Road Operations Fund.
2) **Road Safety Promotion, education and advertising** – Investment in activities that promote safe use of the land transport network.
3) **Low-Cost Low-Risk** - Construction/Implementation of improvements to a maximum approved total of $2m:
   a) Local Road Improvements
   b) Public Transport
   c) Walking & Cycling
4) **Capital Improvement Projects** – Investment in improving the levels of service for new or existing local roads.

The role of the GPS in land transport planning and funding

The GPS provides the strategic direction and sets the government funding contribution for Regional Land Transport Plans and National Land Transport Programme.



What our three-year investment will deliver

- Planning for Edith Cavell Duplication – active travel and two-lane road bridge
- Districtwide improvements to public transport including districtwide network optimisation improvements and an increase/upgrades to bus stop infrastructure.
- Local Rd Improvements – Safety ($18.63M) e.g. Intersections, roundabout improvements, guardrails
- Capell Avenue Road Extension
- Key resilience works for a more accessible and resilient network – Shepherds Creek & Bennetts Bluff
- Continued maintenance and renewals of our roads
- Approx 30km of road reseals
- Implementation of travel demand management strategies

Benefits of our investments

- With a reduced physical capital works budget, focus will be on planning and confirming our transport objectives for future investment.
- Progress towards a multi modal transport system, coupled with demand management measures aims to improve travel time and reliability across the network.
- Safety and access improvements across the network
- Arterial Road Improvements (unsubsidised) will improve economic activity , integration with the active travel network and reduce congestion.
- Reduction in QLD Transport carbon emissions by 2030

NZTA Timeline		QLDC Timeline	
Date	**Detail**	**Date**	**Detail**
6 June	Indicative allocations received from NZTA	27 June 24	Council adopts draft LTP and consultation doc
31 Aug 24	NTLP Adopted	27 Jun – 26 Jul 24	Consultation period opens
Early Sept	NLTP & RLTPs published	28 Aug 24	Council deliberations internal and external submissions
		19 Sept 24	Council adopts LTP24-34

Certainty around QLDC's subsidized transport programme will not be confirmed until September 24

TRANSPORT AMP AT A GLANCE 2024-27
Initial Bid

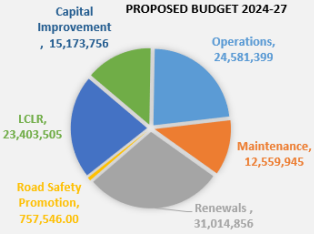
4

QUEENSTOWN LAKES DISTRICT COUNCIL

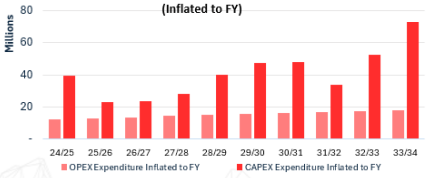
QLDC Transport Investment Programme

2021-24 ALLOCATED BUDGET VS 2024-27 DRAFT REQUESTED BUDGET

PROPOSED BUDGET 2024-27



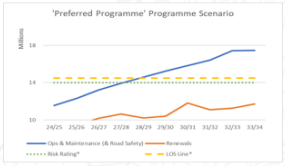
Transport Capital & Operational Expenditure 2024/25 - 2033/34 (Inflated to FY)



41%	53%	54%	34	$1m	-50%
INCREASE in budget compared to 21-24	**INCREASE** in Renewals budgets	**INCREASE** in Road safety budget	Proposed projects to be delivered in LCLR	For resilience Improvements	Decrease in Cap prog compared to 21-24 proposed prog

QLDC Programme Options:

Options	Description	Ops & Maintenance 24-27	Renewals 24-27	Total Cost 3 Year
Do Minimum Programme	Reduced preferred programme	31.1m	23.3m	54.4m
Preferred Programme	Programme meets evidenced based requirements to meet accepted LoS	37.1m	31.0m	68.2m
Aspirational Programme	Enabling a step change in some areas	43.1m	35.3m	78.4m



Our proposed preferred programme will ensure we are continuing to meet our minimum LOS, whilst maintaining risk as our network continues to grow.

QLDC Key Projects

A constrained funding environment has led to a vast reduction in one-off (capital improvement) transport projects for our TYP24-34, compared to our previous bid. However, key projects vital for the transport network are still planned for the period. These projects deliver key elements of a wider transport programme and demonstrate strong investment partner integration:

QLDC Shovel ready - CIP funded
Arterials Stage 1 ($50m) is due to be complete mid 2025

QLDC, NZTA & ORC
Transport Model – collaborative multi partner investment

Waka Kotahi delivery – State Highway Improvements
NZUP – BP Roundabout, Albert Town Bridge Improvement, Cromwell to Frankton & Frankton to Kingston Resilience

New Zealand Upgrade Programme | Otago Regional Council | WAY TO GO | WAKA KOTAHI NZ TRANSPORT AGENCY

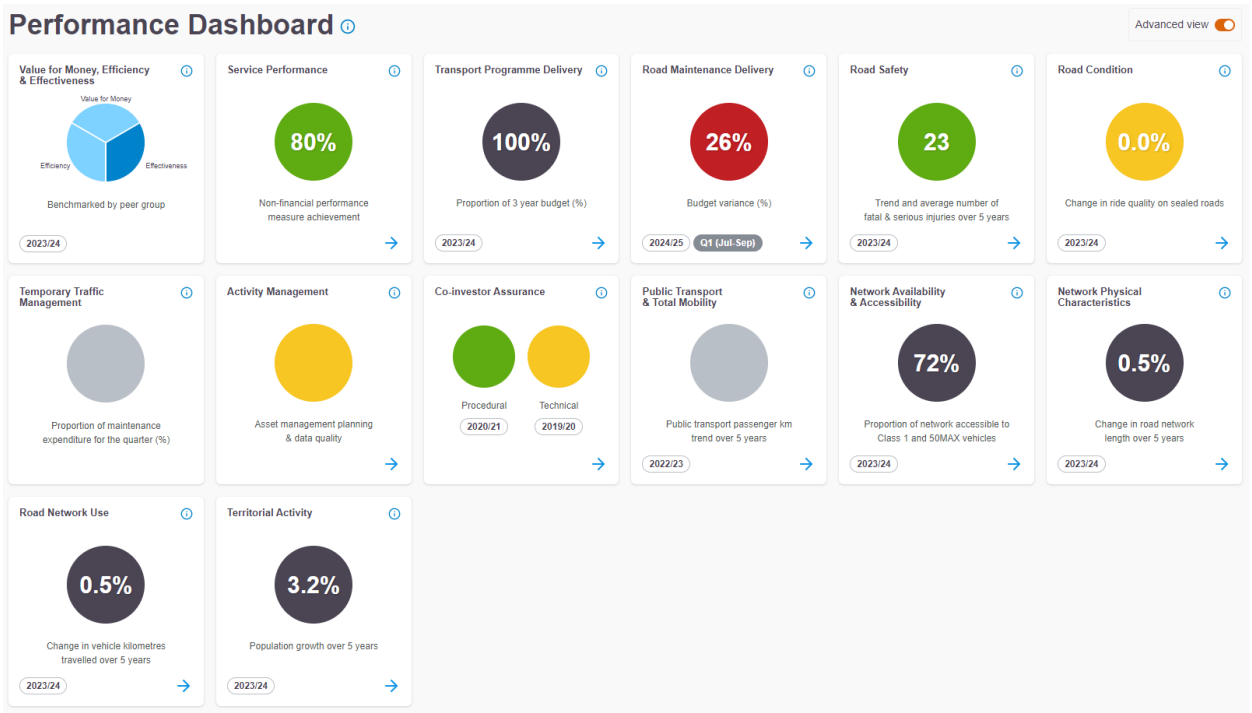
1.9. QLDC ASSETS & ACTIVITIES

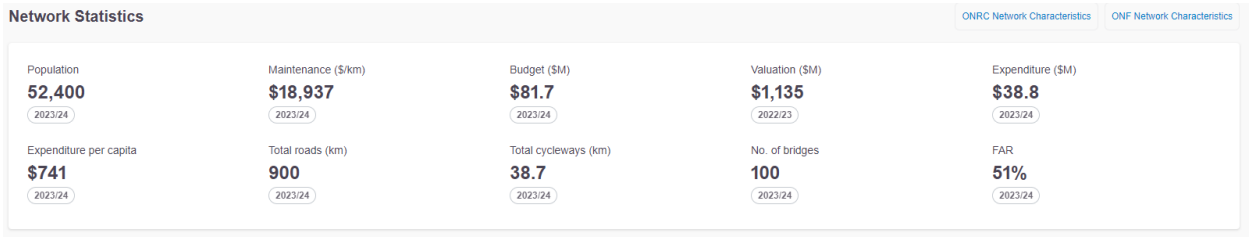
QLDC's vision is to provide a safe, resilient, and efficient transport system to support modal choice and address current and future demand for economic and social opportunities. This AMP details the assets we use, the activities we undertake, the challenges we face, and the programmes proposed.

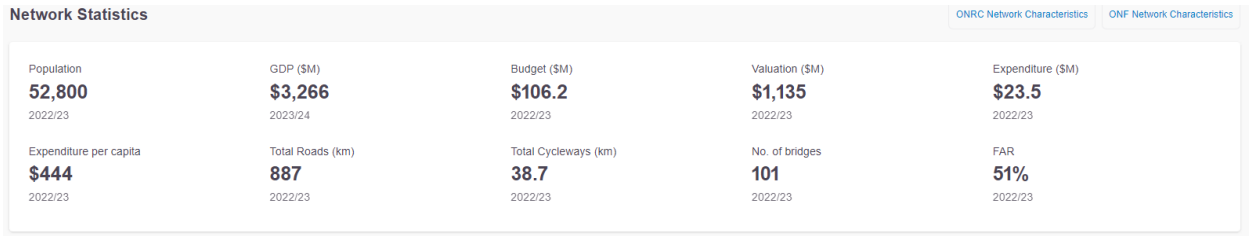
Figure 8: QLDC at a glance

Provisions and Assets	Interesting Stats	Key Activities
 We have 905km of roads (326km of unsealed roads).	 The Crown Range Road is NZ's highest local authority road at an altitude of 1121m.	 We resurface about 30km of roads per year.
 Our transport assets are valued at nearly $1Billion.	 Three bridges are listed as historic, the oldest one is 142 years old.	 We maintain 150 (PT and school) bus stops, 82 have bus shelters.
 We have 38.7km of cycleways.	 97% of Footpaths are in good or excellent condition.	 In 2023/24 our bike ready programme was delivered to 468 children.
 We own 100 roading bridges.	 46 DSI on L.A. roads over the last 5 financial years across the district	 We maintain 5,925 streetlights, inc. heritage ones.

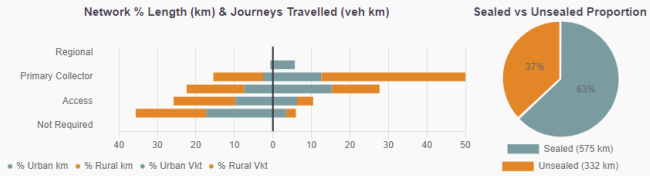
Figure 9: QLDC Stats | Transport Insights





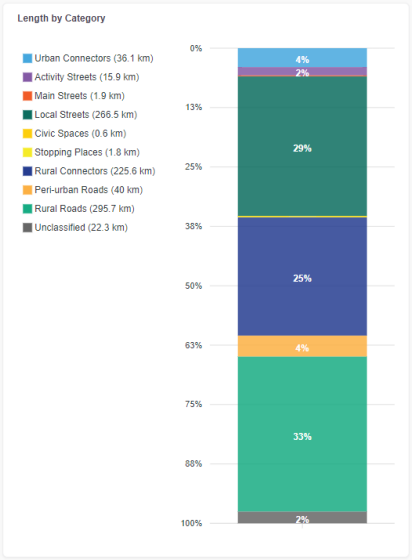


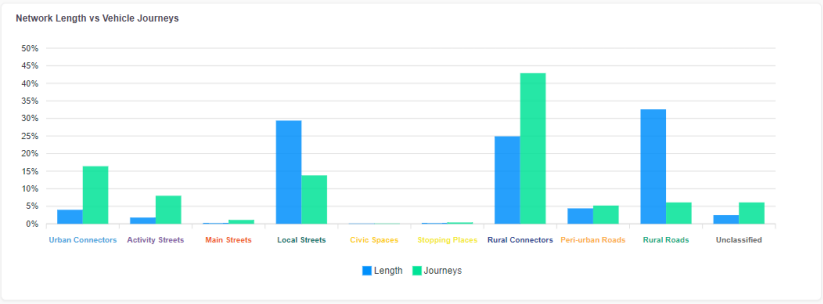
Network Characteristics

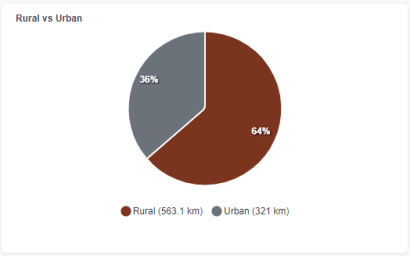


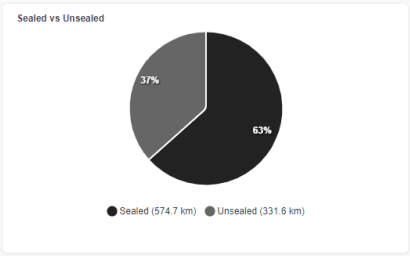
ONRC	Total Length(Km)	Urban (Km)	Rural (Km)	Sealed (Km)	Unsealed (Km)	Lane (Km)	Urban Journeys (M VKT)	Rural Journeys (M VKT)	Annual Total Journeys Travelled (M VKT)	Percentage of length
Regional	0.2	0.2		0.2		0.3	0.6		0.6	0%
Arterial	6.0	6.0		6.0		13.6	19.7		19.7	1%
Primary Collector	140.0	23.1	116.9	140.0		281.8	43.5	129.5	173.0	15%
Secondary Collector	203.0	67.3	135.7	158.9	44.1	403.7	52.7	43.1	95.8	22%
Access	233.7	88.1	145.6	111.2	122.5	407.5	21.7	14.4	36.2	26%
Low Volume	322.7	156.3	166.4	157.7	165.0	498.6	11.9	8.8	20.7	36%
Not Required	0.9	0.9		0.9		1.3	0.0		0.0	0%
Unclassified	0.3									0%
TOTAL NETWORK	**906.7**	**341.8**	**564.7**	**574.9**	**331.6**	**1,606.8**	**150.2**	**195.8**	**346.0**	

Network Characteristics









2. INTRODUCTION TO THE TRANSPORT AMP

This section provides an overarching strategy and approach for managing our transportation assets. It introduces the scope, purpose and framework for the Business Case AMP and shows alignment with our organisational Strategic Asset Management Plan.

2.10. AMP PURPOSE & FRAMEWORK

This asset and activity management plan (AMP) details QLDC's approach for delivering transportation services, cost-effectively to achieve long-term strategic goals and delivering the level of service desired by the community. The scope of the AMP demonstrates QLDC's role in supporting the transportation system to meet the community wellbeings and enable growth and economic productivity by enabling the efficient movement of people, goods and services. QLDC is actively working to ensure the transport system supports a multi-modal approach to movement around the district.

The pricipal outputs for this AMP are:

- A description of Transport assets, activities and intended outcomes
- Strategic assessment of service levels
- Discussion on demand and operational changes
- A proposed investment programme for the next 10 years
- Identification of opportunities to improve business processes and asset management maturity
- Continuous improvement and a prioritised improvement performance plan

The Business Case AMP Approach (BCA AMP) is embedded into our asset management planning and is reflected in this this document alongside the IIMM framework. We have combined some sections of the IIMM manual where it seems sensible e.g. the state of the assts/asset portfolio section and the lifecycle management sections. The Appendix shows the AMP structure relates to both the IIMM recommended AMP structure and the BCA AMP Approach.

QLDC works closely with partners and stakeholders to achieve the best for our network. Capital planning 'Improvement programme' is supported through the collaborative Way to Go partnership and the operational programme is closely linked with our contractors and suppliers.

This AMP has been prepared internally based on the principles of maintaining, renewing, and improving our multi modal transport system whilst considering a cost effective 'whole of life' approach, and understanding the impact of cost, risk and level of service. It brings in a breadth of work from asset management specialist from across the industry.

QLDC declared a Climate Emergency in June 2019 and since that time, QLDC has embarked on a journey towards a major organisational behaviour shift ensuring climate change considerations are reflected in decision making, policy setting, projects, and service delivery. We are starting to mature our view of how carbon and adaptation fit into this framework. Any changes in funding levels required by the community through the Long-Term Plan (LTP) process, will be captured in the LTP and used to inform subsequent annual revisions of the AMP.

Changes to the planned investment programmes will be documented and described in alignment with QLDCs Risk Management Framework. This process will ensure the implications of changes in funding (increases or decreases) are clearly understood and captured in a consistent method.

2.11. STRATEGIC ASSET MANAGEMENT PLAN

QLDC has had an **Asset Management Policy** in place for a number of years now and this has again been reviewed in line with the Long-Term Planning process. The latest Policy is expected to be adopted in early 2025 and sets out the vision and the strategic objectives by which Council intends to apply asset management to achieve its objectives.

In 2024 QLDC commenced the first iteration of a **Strategic Asset Management Plan** (SAMP), to be approved 2025. This SAMP is a step in improved organisational asset management and outlines how QLDC intends to achieve its asset management objectives. It serves as a bridge between organisational objectives and the tactical plans that guide asset management activities.

The SAMP is a crucial piece of documented information used in translating organisational objectives into asset management objectives and providing the framework for planning, prioritising and decision-making for implementing all other asset management activities to ensure alignment. It is a planning tool that clarifies intentions, priorities and specific practices to be adopted. It takes a long-term view and considers the combination of organisational needs, stakeholder expectations, and the realities of existing assets and asset management capabilities.

The SAMP is a companion document[1].

2.11.1. SAMP PURPOSE

The SAMP is a critical tool for top management to achieve its objectives while effectively managing its assets and asset management performance. The inaugural SAMP serves several critical purposes for QLDC as follows:

- Documents the role of asset management and the asset management system in supporting the organisation's objectives, providing clarity and direction to everyone in the organisation.
- Translates organisational objectives into strategic asset management objectives and reconcile them with other strategic objectives that may impact assets and asset management.
- Guides the approach for developing asset management plans and the asset management system, ensuring alignment with the asset management policy.
- Presents a plan for developing and improving the asset management system to ensure that the necessary capabilities and resources are available to achieve the asset management objectives.

2.11.2. RELATIONSHIP BETWEEN DOCUMENTS

The relationship between asset management objectives, SAMP and the Asset Management Plans (AMPs) is shown in figure below.

The SAMP typically includes:

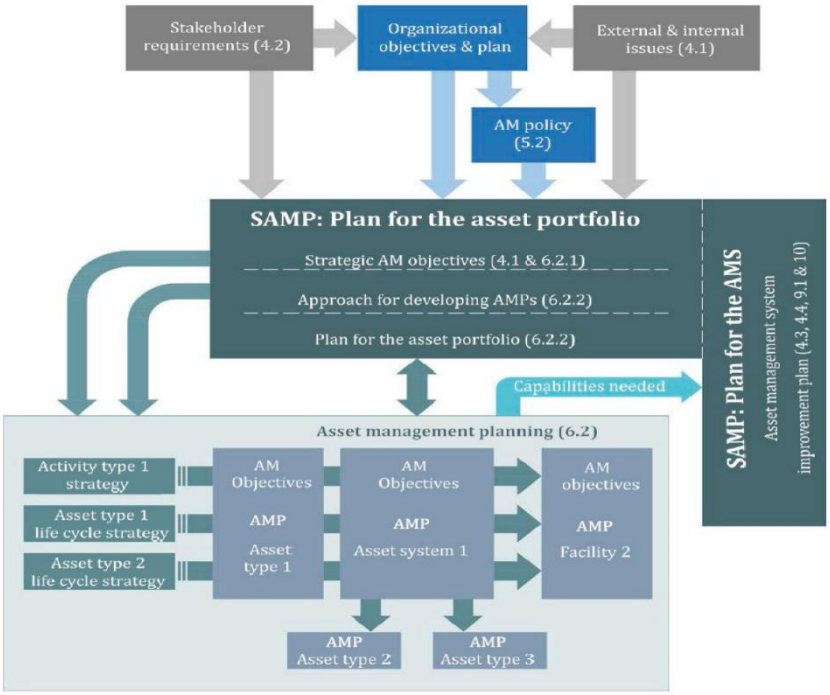
- the plan for the asset portfolio, i.e. the high-level activities to be undertaken on the assets to enable the delivery of organisational objectives;

[1] When this icon appears, further information is available in the companion document and not repeated in the AMP.

- the plan for the asset management system, i.e. the enhancements needed for the processes, resources and other capabilities necessary for the effective implementation of the SAMP and the AMPs.

Due to existing planning processes, the inaugural QLDC SAMP has an emphasis on the plan for the asset management system and building organisational asset management capability rather than the plan for the asset portfolio.

Figure 10: SAMP concept (Source: ISO 55002:2018)



2.12. IMPROVEMENT ACTIONS – STRATEGIC ASSET MANAGEMENT

Improvement Actions -Strategic Asset Management

A number of SAMP improvement items have been highlighted across all council activities. Transport has good maturity across many of these, but this includes corporate consistency:

1. Better align budgeting/financial planning with activity/asset management planning.
2. Establish a performance framework for the strategic asset management objectives.
3. Establish common asset management objectives – portfolio level.
4. Confirm activity asset management planning requirements and revise and align the amp structure and content across all activities.
5. Execute an asset portfolio condition assessment plan.
6. Review asset life cycle responsibilities and align O&M responsibilities.
7. Improve performance monitoring of the asset management system, processes and asset management through internal and external audits, asset portfolio performance monitoring, and management review.
8. Establish processes and procedures for continually improving the AM system and asset management, including appropriate programme management, monitoring, reporting and management review.

3. STRATEGIC CONTEXT

STRATEGIC CASE

This section provides an overview of the external factors and influences that impact our transportation planning and sets the context for QLDC's asset management decisions

Sections 0, 0, 5 form the Strategic Case

3.1. OUR PEOPLE – KĀI TAHU CONTEXT

Whakatipu-Wai-Māori, Wānaka and Hāwea are iconic lakes of cultural and statutory significance to Kāi Tahu. The lakes feature in the Waitaha iwi oral tradition of "Kā Puna Wai Karikari o Rākaihautū" which tells how the great lakes of Te Wai Pounamu (the South Island) were dug by the tūpuna (ancestor) Rākaihautū with his famous kō (Polynesian digging tool).

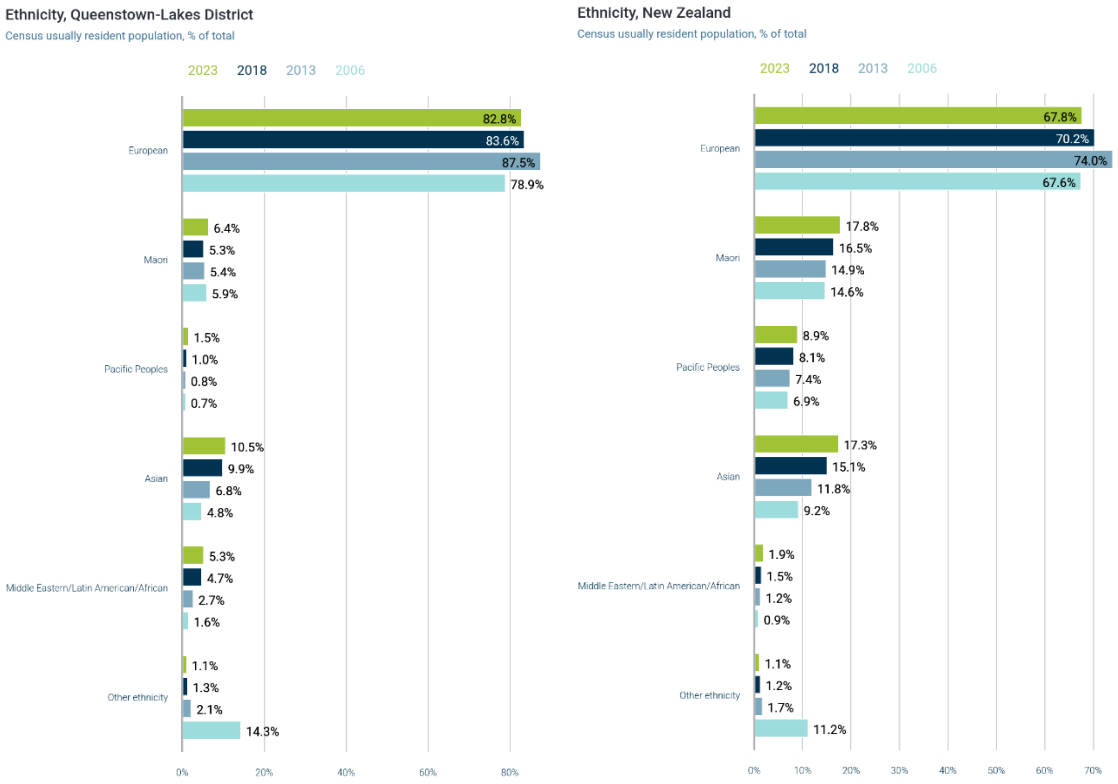
KĀI TAHU - Transport

Trails (ara tawhito) in the area included: the Clutha/Mata-au, used to transport pounamu and mahika kai (natural and cultural resources) back to the coast; the Waitaki River, Ōmakō/ Lindis Pass which connected the Waitaki with lakes Wānaka and Hāwea; the Matāura River, noted for its indigenous fishery; and Haast Pass/Tiori Patea. The Mātakitaki River provided an alternative route to the treasured pounamu resources of Te Tai Poutini/the West Coast. The Ōrau (Cardrona River) and the Kawarau were also part of this interconnected network of trails.

At Whakatipu-wai-Māori (Lake Whakatipu) a network of villages lay along the routes to access pounamu at Te Koroka, located beyond the head of the lake. Countless generations transported it back to coastal settlements in Otago and Southland on waka and mōkihi for fashioning into tools, ornaments and weapons. Settlements included the kāika Tāhuna (meaning sandy shore) near present-day Queenstown, Te Kirikiri Pā at present day Frankton; a Kāti Mamoe kāika near the Kawarau Falls called Ōterotu; Tititea Pā and another called Takerehaka at Kingston. Tititea was located on the south side of the Kawarau River, near Ōterotu.[2]

[2] https://www.qldc.govt.nz/your-council/council-documents/queenstown-lakes-spatial-plan/

Figure 11: Ref. Queenstown and Whakatipu Basin, Ethnicity. Source: Informetric Census



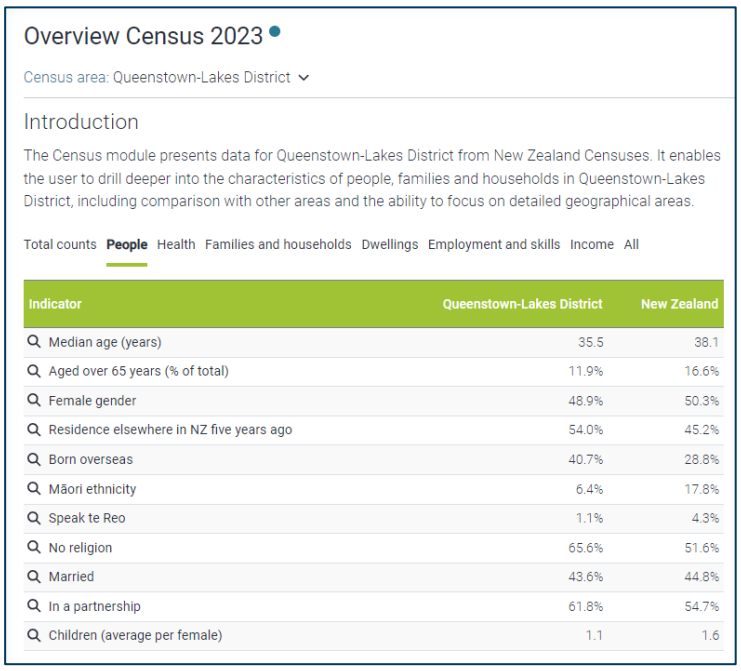
(To note: "Ethnicity" is the ethnic group or groups a person identifies with or has a sense of belonging to. It is a measure of cultural affiliation (in contrast to race, ancestry, nationality, or citizenship). Ethnicity is self-perceived, and a person can belong to more than one ethnic group, so the categories sum to more than 100%.)

Infometrics NZ shows that the Queenstown Lakes Districts resident population is fairly culturally diverse, with the majority of residents being of mainly European ethnicity. This decreased from the 2018 to 2023 census. Resident population in those of Maori descent and ethnicity increased 1.1% from 2018 to 2023. This compares to 1.3% in all of New Zealand.

QLDC are proud to be part of the Welcoming Communities | Te Waharoa ki ngā Hapori, a programme to support newcomers to feel welcome and able to participate in the economic, civic, cultural and social life of their new community.

The Queenstown Lakes Districts draft welcoming plan was endorsed in September 2024 and brings together local government and communities to make our district a more welcome place for everyone, contributing towards a healthier, happier and more productive community.

Figure 12: Overview Census, Queenstown Lakes District 2023; Source: Informetric Census



Overview Census 2023

Census area: Queenstown-Lakes District

Introduction

The Census module presents data for Queenstown-Lakes District from New Zealand Censuses. It enables the user to drill deeper into the characteristics of people, families and households in Queenstown-Lakes District, including comparison with other areas and the ability to focus on detailed geographical areas.

Total counts | **People** | Health | Families and households | Dwellings | Employment and skills | Income | All

Indicator	Queenstown-Lakes District	New Zealand
Median age (years)	35.5	38.1
Aged over 65 years (% of total)	11.9%	16.6%
Female gender	48.9%	50.3%
Residence elsewhere in NZ five years ago	54.0%	45.2%
Born overseas	40.7%	28.8%
Māori ethnicity	6.4%	17.8%
Speak te Reo	1.1%	4.3%
No religion	65.6%	51.6%
Married	43.6%	44.8%
In a partnership	61.8%	54.7%
Children (average per female)	1.1	1.6

The Queenstown Lakes District is made up of a variety of people. The overall census showssimilar findings in QLD to that in all of New Zealand. Where it greatly differs is with regards to 'Residence elsewhere in NZ five years ago' and the percentage of people 'born overseas', giving evidence towards our diverse, migrant community.

3.2. OUR DEMAND AND GROWTH

The demand projections are indicative of what QLDC's strategic decision making is based on, it is with awareness that the projected change may take shorter or longer than 30 years. Consistent and regular monitoring of demand and growth forecasts is a key response to the challenges that QLDC face and is explored further in our Strategic Assessment section. More details of population growth, projections and demand for services are given in https://www.qldc.govt.nz/community/population-and-demand.

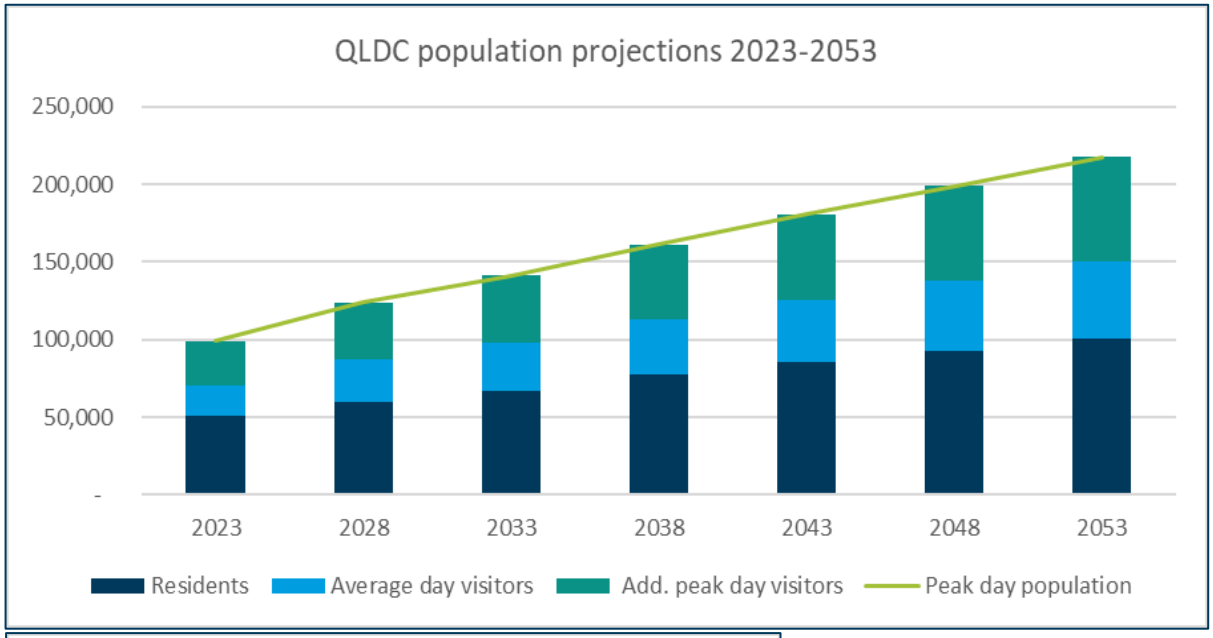
The following list identifies key areas of growth and demand, the impact of these changes in demand on the Three Waters network, and how Council proposes to deal with these.

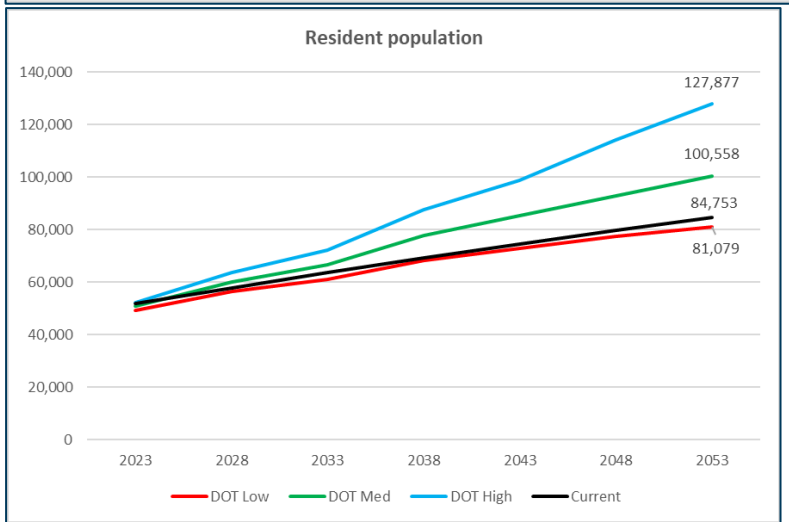
Factors that influence customer demand on the Transport network include:

- Population growth and decline
- Demographic change
- Visitor numbers
- Economic growth and decline
- Dwelling growth
- Changes in land use
- Development of recreational areas
- Future customer expectations

Figure 13: QLDC Demand Projections (Source: QLDC Demand Projections 2024)

The 2024 Demand Projections is a companion documents.





The extent and speed of this growth means the community is facing numerous opportunities but is also faced with challenges. Prior to COVID-19, the district was experiencing its third population growth spurt of over 7% per annum, with predictions of 7+% per annum for the next 7 to 10 years. An increase in productivity meant a thriving economy; however, this also leads to lack of affordable housing, with education and health facilities at capacity. Transport is at the heart of accessing and delivering these services across the District and region, and increased population leads to traffic growth, changes in land use and urbanisation has increased our asset base which is putting pressure on QLDCs current capacity to maintain the network.

The economy has performed very strongly, with GDP growth over double the NZ average and there has been very low unemployment. Residents enjoy access to more and better services, supported by a larger population and more visitors. However, investment in infrastructure and housing has not been able to keep up with the rate of growth, there are problems with housing affordability and congestion is worsening. The number of visitors before the COVID-19 pandemic was putting pressure on both the environment and community.

3.2.1. POPULATION / DEMOGRAPHIC

Huge increases in residential growth, alongside large visitor numbers had led to pressures on our Transport system. With a relatively small number of ratepayers supporting ever increasing visitor numbers, QLDC strives to address the issues stemming from rapid growth whilst protecting the liveability of our district. The consequences of changes in demand and growth are one of our biggest challenges and summarised below in specific areas. Further analysis can be seen in our Strategic Assessments Section.

- Queenstown-Lakes District's total population was 52,800 in 2023, up 8.0% from a year earlier. Total population grew by 2.1% in New Zealand over the same period.
- Population growth in Queenstown-Lakes District averaged 4.5%pa over the 5 years to 2023 compared with 1.3%pa in New Zealand.

Over the past 30 years, the Queenstown Lakes has grown steadily from 15,000 residents to its current population of 52,800, alongside significant growth in visitors to the area. Migration, both from overseas and within New Zealand, has been the key driver of population growth. Auckland, Southland, and other parts of Otago were the key sources of internal migrants. This growth has been driven by the attractive scenery and climate, clean environment, outdoor lifestyle, strong economic opportunities, and improved national and international connectivity.

- Migration is the main driver to population growth. The main difference between these projections and the Stats NZ projections is the use of migration rates, rather than numbers.
- 2023 saw a surge in international migration which led to that 8% population increase as visa rules were relaxed.

Figure 14: Stats NZ growth estimates. (Source: Stats NZ 1996 – 2023 & QLDC Population projects 2024)

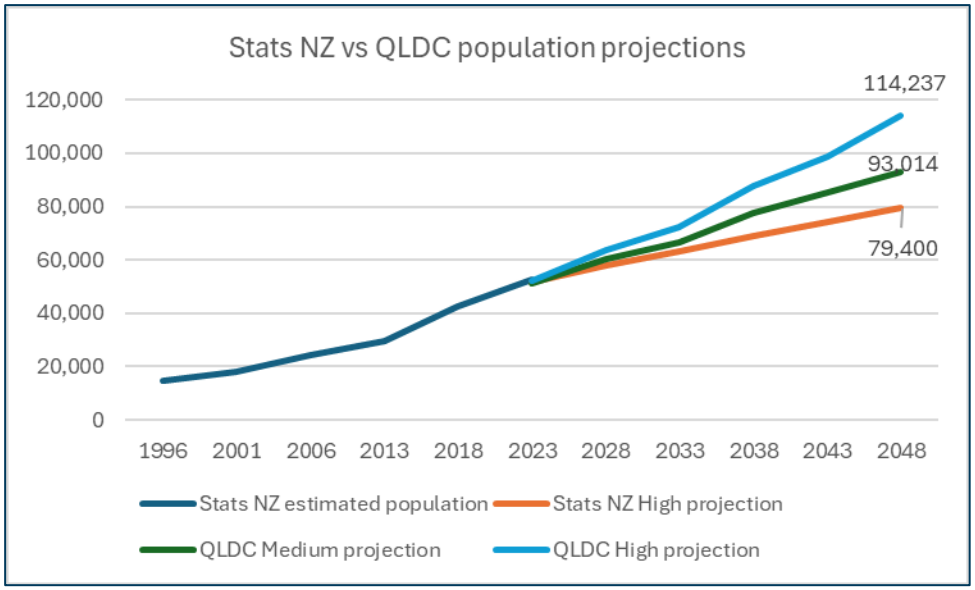
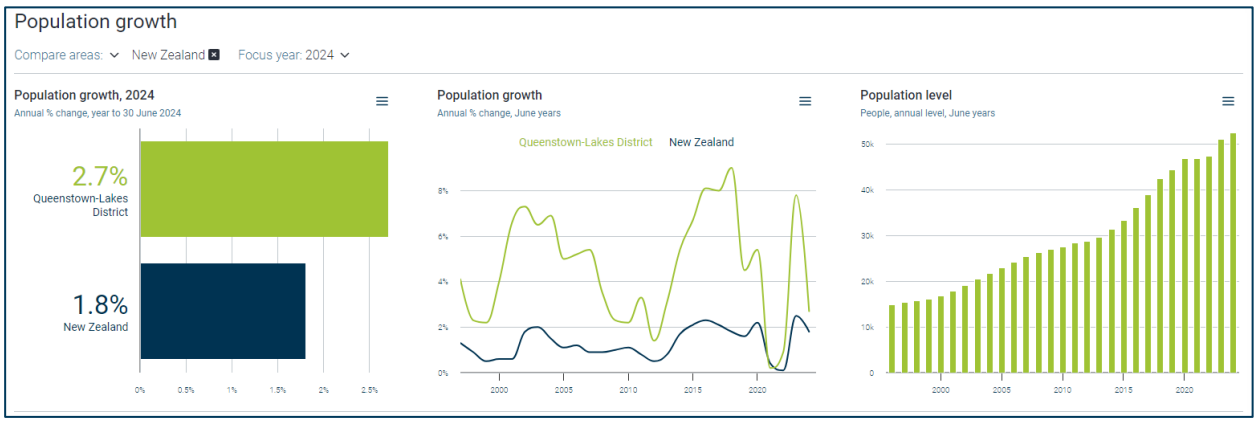


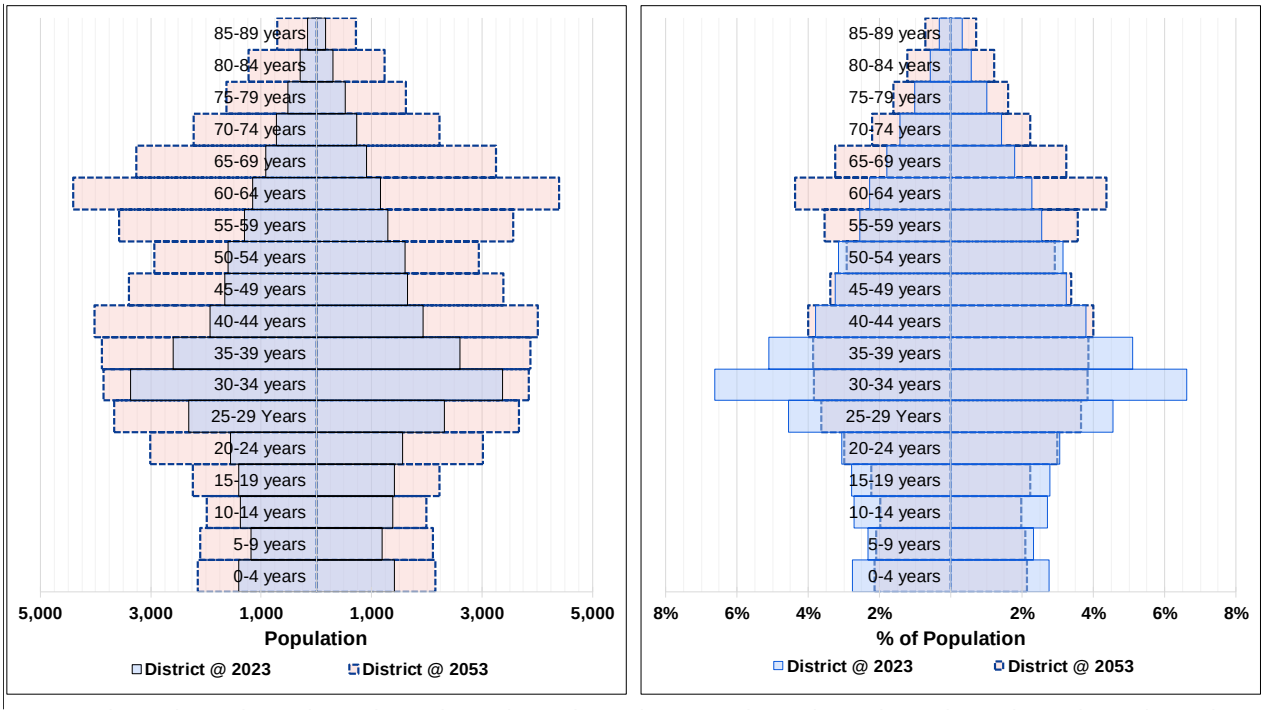
Figure 15: Population Growth (Source: Infometrics NZ)



Key points to note from the 2024 Projections are:

- By 2053 81,079 are forecast under the low projection, 100,558 under the medium projection and 127,877 under the hih projection. By 2053, 42,743 (low), 49,524 (medium) and 58,260 (high) visitors are forecast on an average day, and 101,850 (low), 116,904 (medium) and 136,299 (high)on a peak day.
- Housing projections are expected to continue to increase. Under the high projection there is a forecast increase of 245% from 25,868 houses in 2023 to 63,300 by 2053.

Figure 16: 2023 Queenstown Lakes Age Pyramid - Number and Portion of Residents Based on Age. (Source: QLDC Demand Projections 2023)



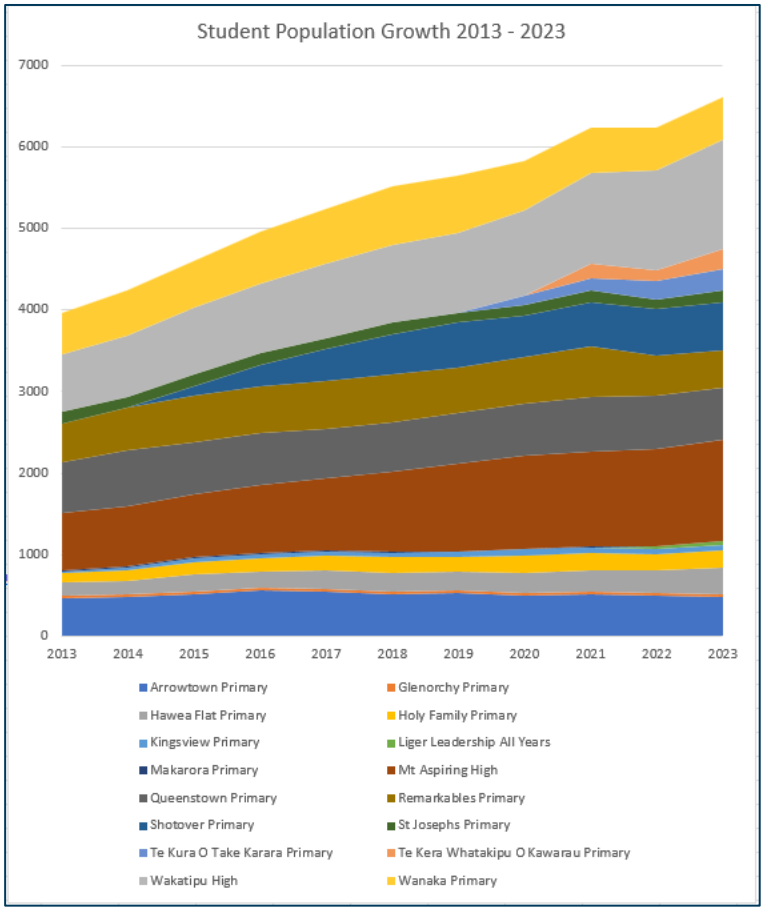
While the demand projections are indicative of what QLDC's strategic decision making is based on, it is with awareness that the projected change may take shorter or longer than 30 years. The projections are reviewed regularly and adjusted if required. More details of population growth, projections and demand for services are given in https://www.qldc.govt.nz/community/population-and-demand.

3.2.2. SCHOOL GROWTH

Growth in school rolls is an indicator of population and change. The Ministry of Education (MoE) is working alongside the QLDC Spatial Plan team to provide indicative capacity and timing of new schools in the Whakatipu and Upper Clutha catchments. The requirement for new schools is captured with the Spatial Plan Gen 1.0 in 2021 in relation to Strategy 12 and Design to grow well, this recognises that both education and health facilities are an important part of building new neighbourhoods that are both attractive and liveable and meet the needs of our people.

Spatial Plan Gen 1.0 notes that in the Whakatipu area, additional primary schools may be needed to service growth in both the Southern and Eastern Corridors, along with additional secondary schooling to service the wider Whakatipu area. Elsewhere in the Whakatipu, the expected growth is likely to be accommodated through expanding existing schools. In the Upper Clutha, additional primary and secondary schooling is likely to be needed in Wānaka to accommodate the growth expected over the next 30 years. The Ministry is in the process of acquiring land in Lake Hāwea to service growth, which may include the option of relocation of the current school.

Figure 17: Student Population Change 2013:2022



The Ministry of Education will continue to engage with schools and communities on the school network as part of its response to managing growth in the area. Over the last ten years there have been four new schools built, however with high growth in the District, some schools are reaching capacity. Expansions have recently occurred at Mt Aspiring College, and Whakatipu High School as a planned response to growth.

These increasing numbers create challenges around the schools to manage congestion and road safety which can impact on active travel choices such as biking and walking. Increases in developments such as the HIF where potentially 2,000 homes will be constructed near Ladies Mile and will be in the zone for Shotover Primary. The Ministry is in the process of acquiring land for both primary and secondary schooling in this area. Increased numbers of children leads to greater numbers driving (the ratio is often around 65% in higher traffic areas), leading to congestion, reduced visibility and sightlines, illegal parking, making it difficult for children to cross roads safely and for children to walk/bike to school.

There is strong correlation between increased traffic volume and discouraging walking/cycling. Perceptions of safety (for parents) change and they feel it is less safe and do not want children to walk/cycle. Conversely separated shared path infrastructure that is continuous and connected between home and school will result in greater walking/cycling numbers especially if the children are aged 9+.

3.2.3. HEALTH SERVICES

The future population of the Southern and Eastern Corridors may support new general practices. Hāwea may also support a general practice depending on the scale of growth that occurs. Residents in smaller settlements will need to continue to travel Queenstown and Wānaka to access primary health care facilities. The populations of Wānaka, Queenstown and Cromwell may support development of community health hubs that deliver a range of services, including outpatients, diagnostics, sexual health, maternity (incl. primary birthing) and population health. These locations will require good access for emergency services by road and helicopter.

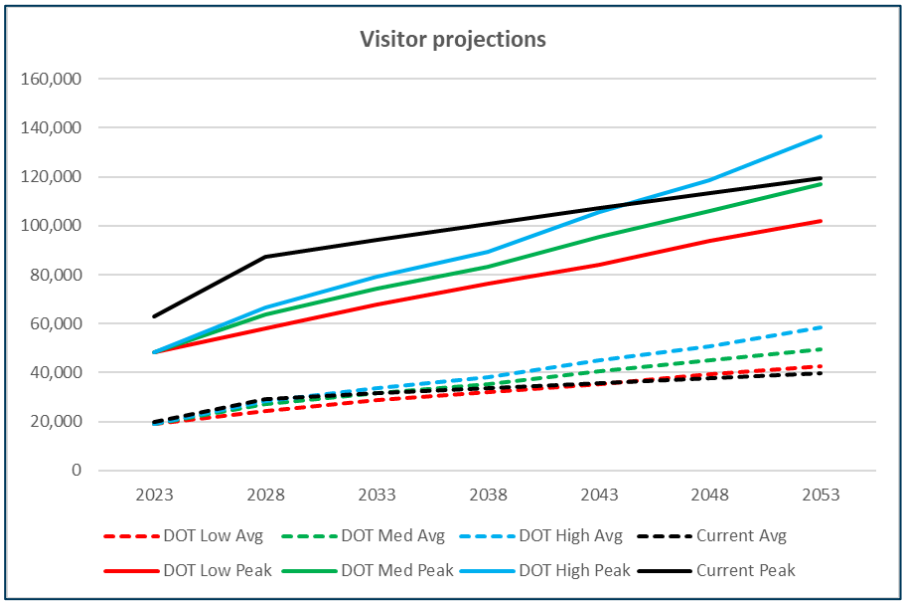
3.2.4. VISITOR DEMAND

Queenstown's economy is heavily dependent on the tourism market, within which there has been significant recent growth. This growth has stimulated an increase in resident population, which is forecast to continue growing. Infrastructure has struggled to keep up with this surge in demand. The below figure demonstrates the difference between peak demand and resident population and drives home the scale of financial pressure on the ratepayer base to subsidise visitors' use of infrastructure.

QLDC have produced a Regenerative Tourism Plan as an output and priority initiative of the Grow Well | Whaiora Spatial Plan. A Destination Management Steering Group (DMSG) comprised of Destination Queenstown, Lake Wānaka Tourism, and Queenstown Lakes District Council developed this plan with input from the Department of Conservation and Kāi Tahu. The process has ensured that the values and vision of local communities, including iwi, are strongly represented in the resulting strategy.

As a heavily touristed area, relying on resident numbers alone would result in an undersupply of key infrastructure. A truer reflection of the actual demand on infrastructure needs to include both the resident and visitor numbers.

Figure 18: QLDC estimated resident population and visitors 2023-2053 (Source: QLDC Demand Projections 2024)



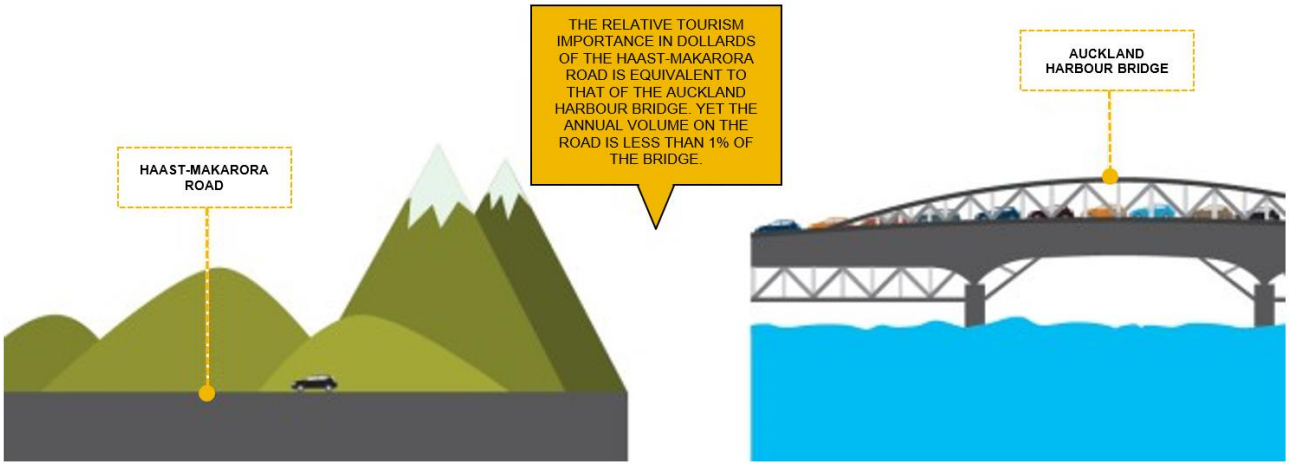
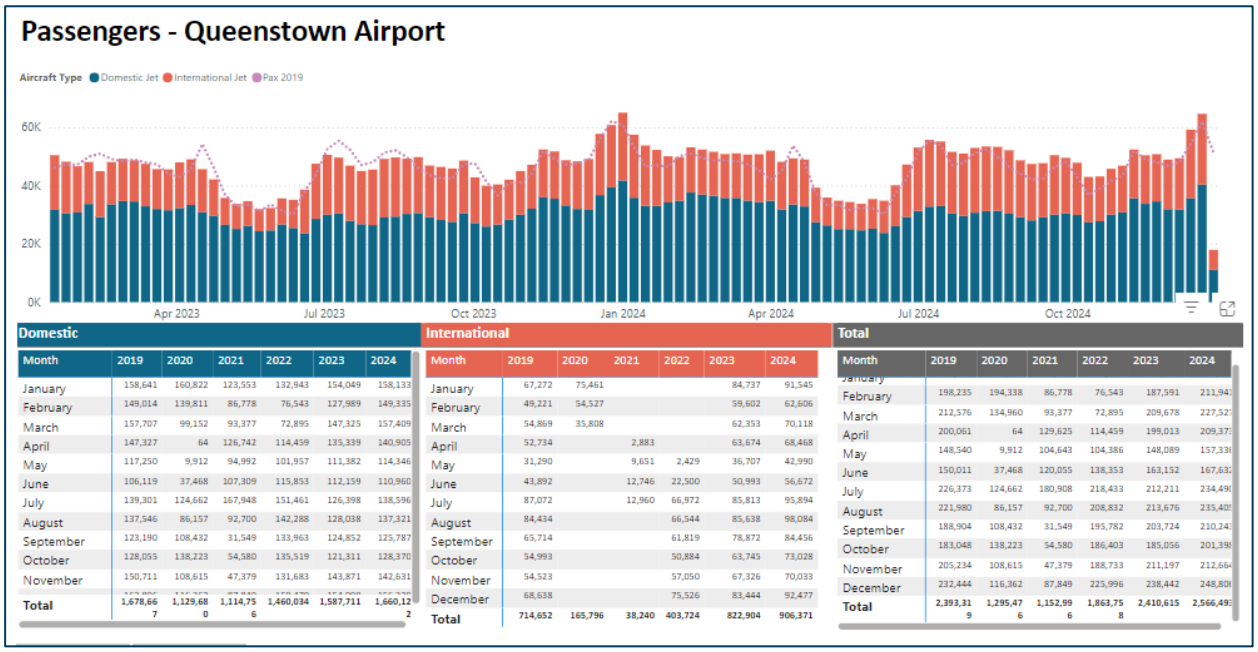


Figure 19: Tourism Impact (Source: QLDC LTP 2021-31)

Airport passenger movements are often used as a proxy for the health of the tourism industry in Queenstown, and airport numbers show the impacts of and bounce back from COVID-19.

Economic forecasts used at the time of the previous projections predicted mass job losses for the district and a subsequent large-scale departure of residents. These didn't occur and the Queenstown Lakes District population has continued to grow. Domestic tourism has been greater than expected, offsetting the delayed international border reopening. The result is greater than previously forecast average day visitation, with a lower peak.

Figure 20: Queenstown Airport Passenger Movements (Source: Queenstown Airport)



Domestic

Month	2019	2020	2021	2022	2023	2024
January	158,641	160,822	123,553	132,943	154,049	158,133
February	149,014	139,811	86,778	76,543	127,989	149,335
March	157,707	99,152	93,377	72,895	147,325	157,409
April	147,327	64	126,742	114,459	135,339	140,905
May	117,250	9,912	94,992	101,957	111,382	114,346
June	106,119	37,468	107,309	115,853	112,159	110,960
July	139,301	124,662	167,948	151,461	126,398	138,596
August	137,546	86,157	92,700	142,288	128,038	137,321
September	123,190	108,432	31,549	133,963	124,852	125,787
October	128,055	138,223	54,580	135,519	121,311	128,370
November	150,711	108,615	47,379	131,683	143,871	142,631
Total	1,678,667	1,129,680	1,114,756	1,460,034	1,587,711	1,660,122

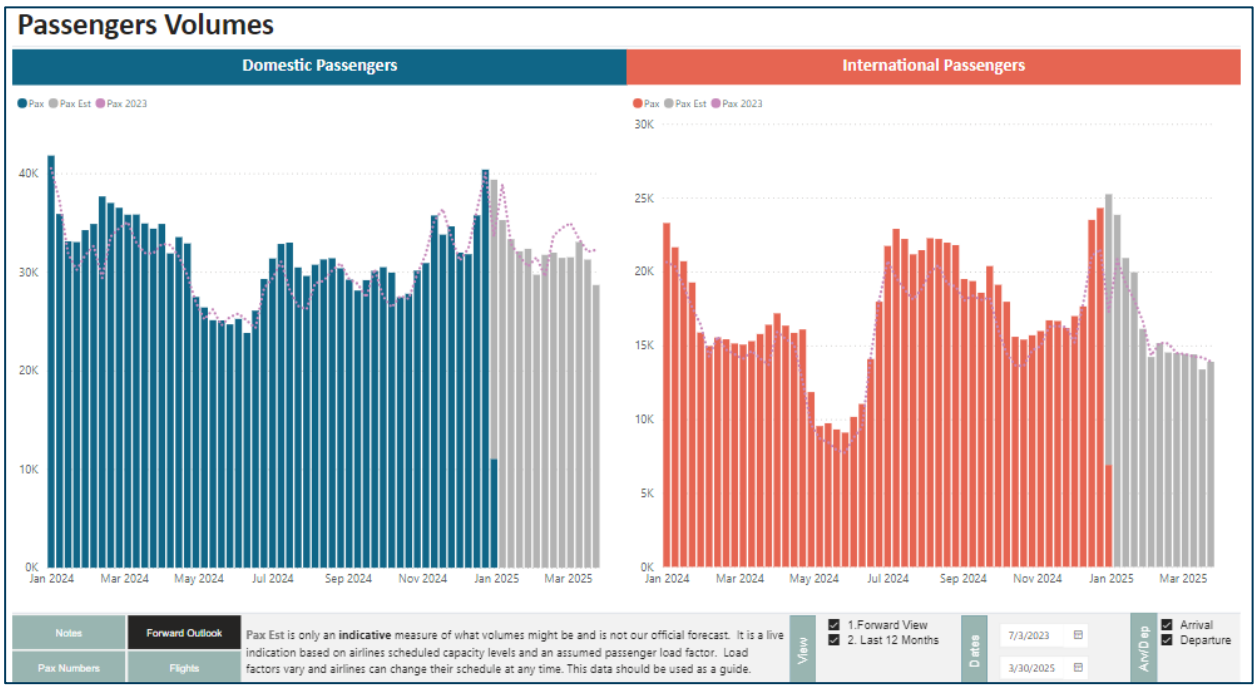
International

Month	2019	2020	2021	2022	2023	2024
January	67,272	75,461			84,737	91,545
February	49,221	54,527			59,602	62,606
March	54,869	35,808			62,353	70,118
April	52,734		2,883		63,674	68,468
May	31,290		9,651	2,429	36,707	42,990
June	43,892		12,746	22,500	50,993	56,672
July	87,072		12,960	66,972	85,813	95,894
August	84,434			66,544	85,638	98,084
September	65,714			61,819	78,872	84,456
October	54,993			50,884	63,745	73,028
November	54,523			57,050	67,326	70,033
December	68,638			75,526	83,444	92,477
Total	714,652	165,796	38,240	403,724	822,904	906,371

Total

Month	2019	2020	2021	2022	2023	2024
January						
February	198,235	194,338	86,778	76,543	187,591	211,941
March	212,576	134,960	93,377	72,895	209,678	227,527
April	200,061	64	129,625	114,459	199,013	209,373
May	148,540	9,912	104,643	104,386	148,089	157,336
June	150,011	37,468	120,055	138,353	163,152	167,632
July	226,373	124,662	180,908	218,433	212,211	234,490
August	221,980	86,157	92,700	208,832	213,676	235,405
September	188,904	108,432	31,549	195,782	203,724	210,243
October	183,048	138,223	54,580	186,403	185,056	201,398
November	205,234	108,615	47,379	188,733	211,197	212,664
December	232,444	116,362	87,849	225,996	238,442	248,808
Total	2,393,319	1,295,476	1,152,996	1,863,758	2,410,615	2,566,493

Figure 21: Queenstown Airport passenger volumes and forecast (Source: Queenstown Airport)



Pax estimate is only an indicative measure of what volumes might be and is not our official forecast. It is a live indication based on airline scheduled capacity levels and an assumed passenger load factor. Load factors can vary and airlines can change their schedule at any time. This data should be used as a guide.

3.2.4.1 QUEENSTOWN AND WĀNAKA AIRPORT

Queenstown Airport is one of the main gateways into the District. There are a number of considerations going forward around the future of both Queenstown Airport and Wānaka Airport. QLDC has entered into a long-term lease and management arrangement with Queenstown Airport Corporation (QAC), which is a council-controlled trading organisation. The QAC Statement of Intent was finalised for year ending June 2023 whilst QAC is currently consulting on their draft Master Plan to meet the rapidly developing needs of the community, tourism operators, scheduled airlines and the Wānaka Warbirds airshow and museum.

Figure 22: ZQN Master Plan (May2023)

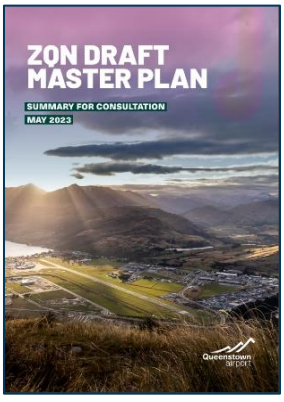
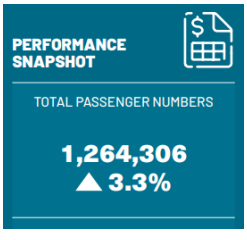


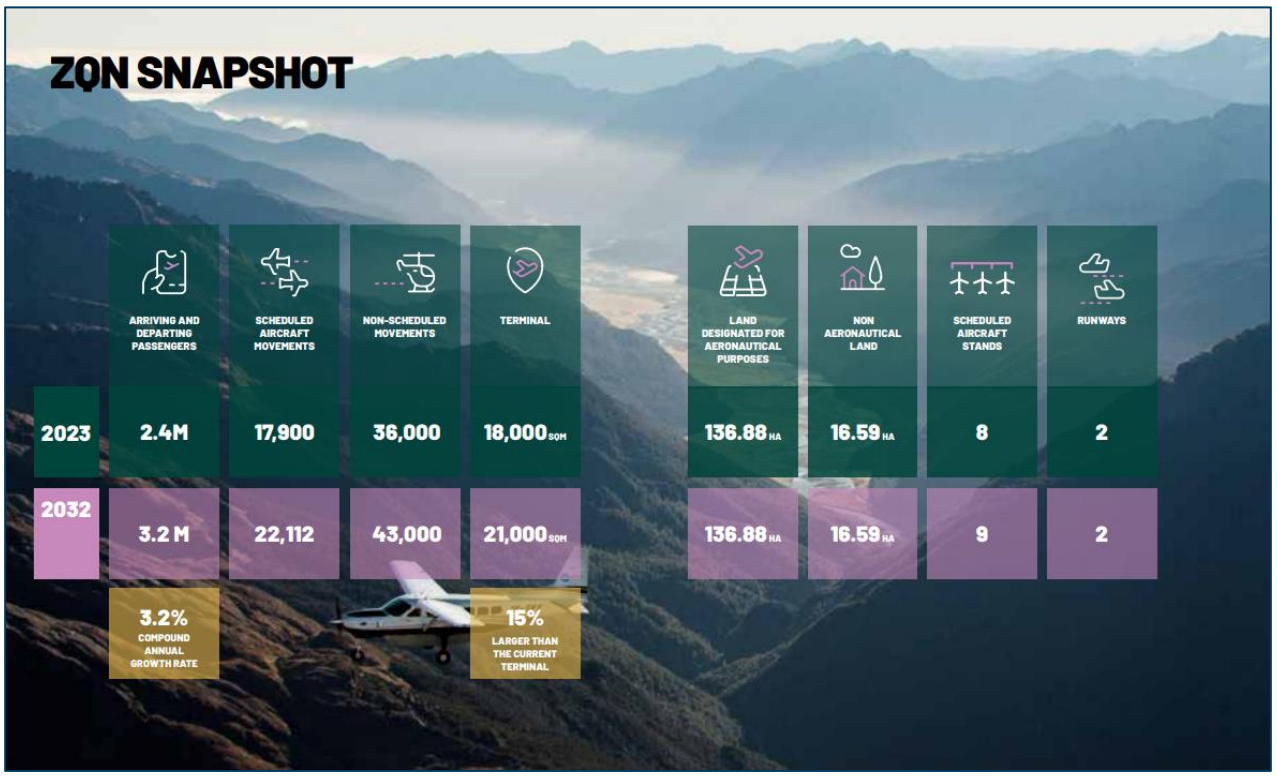
Figure 23: Performance Snapshot



Queenstown Airports Interim Report for the six month period ending 31 December 2023 showed passenger movements (arrivals and departures) were 1,264,306 – 3.3% up compared to the same period in 2022 and up 0.5% relative to pre-COVID 2019.

Scheduled aircraft movements were 9,459 – 5.4% higher than the same period of the previous year.

Figure 24: Snapshot of projections (Source: Queenstown Airport Draft Master Plan 2023)



3.2.4.2 CENTRAL OTAGO AIRPORT

Figure 25: Christchurch Airport

The announcement by Christchurch Airport of their investment into a land purchase in Tarras for a potential airport raises further questions on the future transport system in the region. An 800-hectare site that is bordered by two State Highways, it's accessible to multiple regions and large enough to meet their aviation needs for the next 50+ years while meeting New Zealand's Net Zero 2050 goal.

QAC's strategic planning will consider Christchurch International Airport Limited's (CIAL) proposal to plan and seek approval for a new international wide-body jet capable airport with the intention of safeguarding the operational and financial position of the company within the frameworks of the Commerce Act.

Figure 26: Artist rendering of the proposed Central Otago Airport (Source: Central Otago Airport website)

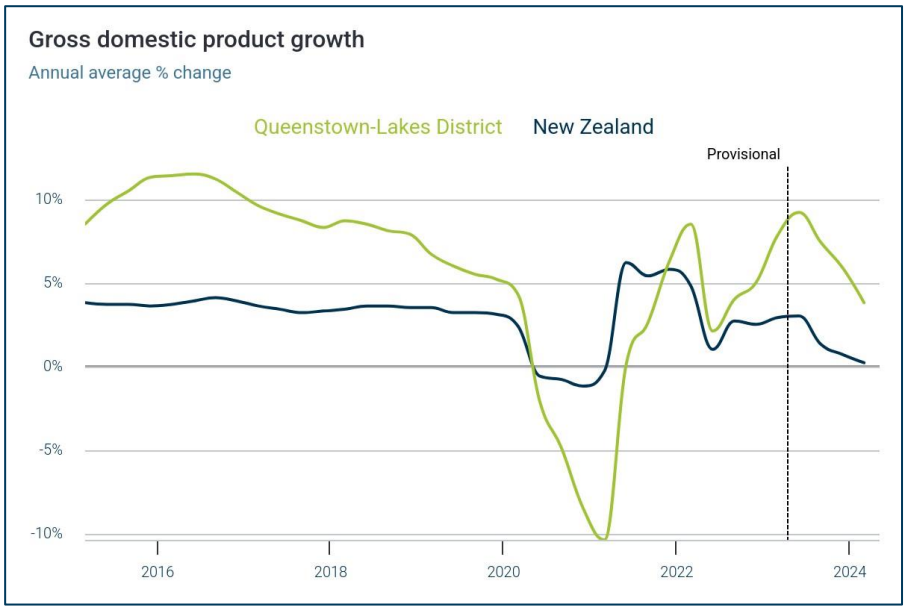
3.2.5. THE ECONOMY

Queenstown Lakes has been the fastest growing part of the country over recent years, both from a population and employment growth perspective.

Figure 27: Gross Domestic Product Growth (Source: Infometrics March 2024)

The post-COVID bounce back has been substantial and above the overall New Zealand levels.

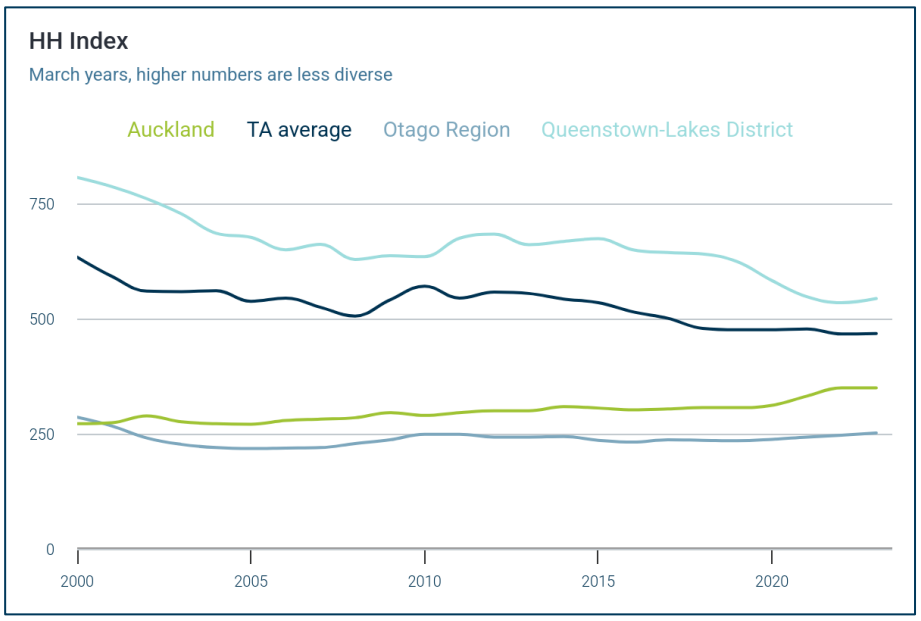
Figure 28: Queenstown-Lakes GDP Growth (Source: Infometrics March 2024)



Tourism GPD shows the post-covid tourism recovery is well underway, however, still highlights our lack of economic diversification.

The graph below shows that QLDC are making small steps to diversify the local economy, however there is still a long way to go.

Figure 29: Industry Diversity (HH Index); 2000-2023 (Source: Infometrics March 2024)



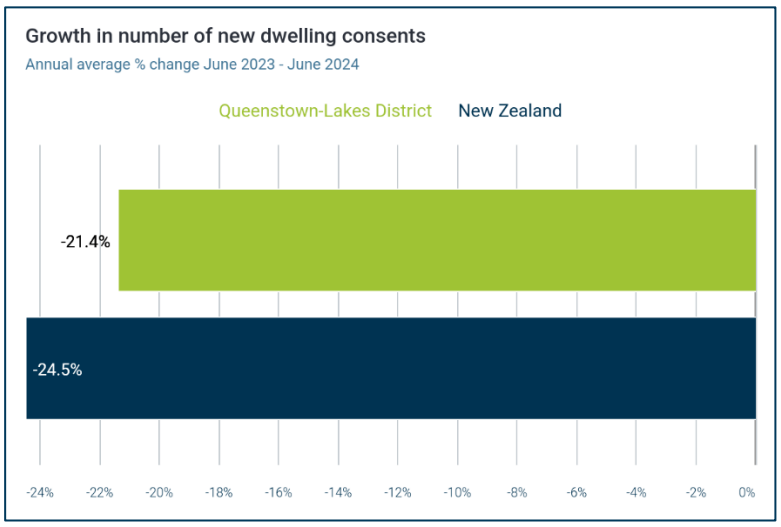
- With a HH index of 544 in 2023, QLD's economy was less diverse than the average. The average HH index across all 66 TA's was 468. It was less diverse than the Otago region (252) and region (314).
- The largest industry was accommodation and food services which contributed 14.1% to the regions GDP.
- The second largest industry was construction which contributed 10.6% to GDP in 2023. This is lower than the average contribution of 11.2%.

3.2.6. LAND AND DEVELOPMENT GROWTH

Subdivision demand has been strong over the last few years and has a big impact on our transport network. It increases our asset inventory and with urbanisation comes a more complex network. Development in Queenstown and surrounding area has also seen urbanisation on terrain that is steeper and harder to access. This has impacts on our operational network management and associated costs.

Although residential building consent numbers have decreased compared to the June 22 – June 23 period, numbers are still higher than the New Zealand average.

Figure 30: Building Consents June 2023-June 2024 (Infometrics NZ)



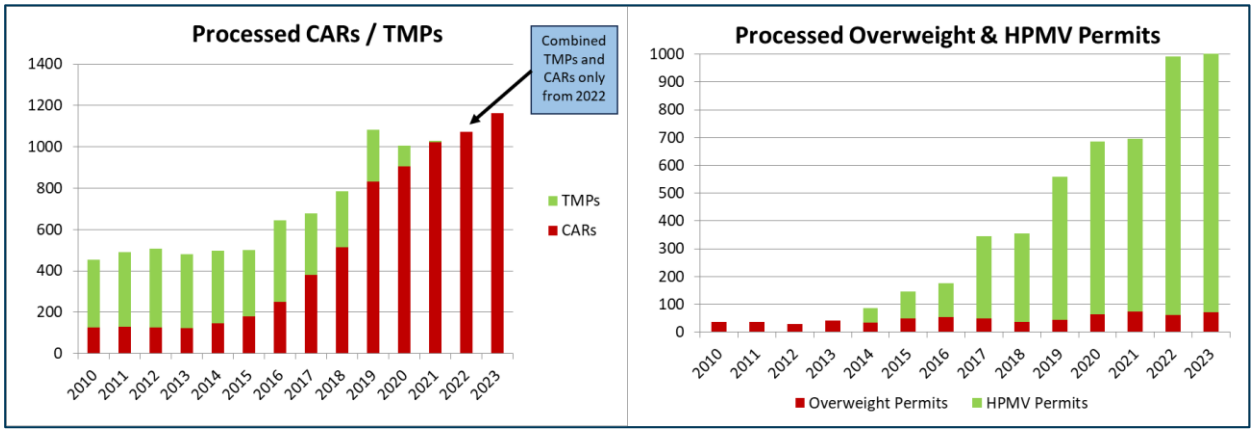
Despite building consent numbers down compared to the year previous, house prices within QLD continue to grow. The average house value in the June 2024 quarter was $1,847,277, this compares with $923,899 in New Zealand.

Compared to a year earlier, June 2023 house value has increased 11.1% in the region. This compares to 2.5% New Zealand wide.

The number of corridor access requests has also risen, which is indicative of our construction market. The decline in TMP numbers is due to the fact that TMPs have been increasingly coming through in the CAR system and so are included in the CAR Application numbers.

All new-builds need to have a CAR and it should be noted that the below numbers don't reflect the true volume of CAR work/time spent due to the complexity of large Capex projects, e.g. the Alliance, which covers more than the entirety of the CBD in Queenstown is only under one CAR.

Figure 31: No. of processed Corridor Access and TMPs | No. of processed overweight permits and HPMV



3.2.7. TRAFFIC DEMAND AND MODE SHIFT

The growth in population and visitor numbers is supported by traffic count evidence from the NZTA Waka Kotahi Waka Kotahi. Pre COVID-19, on key State Highway corridors, there has been an up to 25% increase on the number of vehicles visiting the District in the past 2 years. Evidence of traffic growth can be found in numerous sources. This rate of growth was potentially leading to a doubling of traffic every 5 years.

When considering the historic response to growth the new capacity of any upgraded corridors could be consumed well before physical works are actually completed. In line with population growth and growth in visitor numbers, it is anticipated that there will be an increase in freight task over time, particularly growth in the movement of manufactured and retail goods, construction materials and waste. The Frankton Business Park will likely provide the hub for the construction and commercial activities to support Queenstown's future growth, and remain the focus for heavy vehicle movements into Queenstown. This has led to an increase in customer concerns around congestion, travel time reliability and safety.

Figure 32: State Highway Indicative Traffic Volume Trends

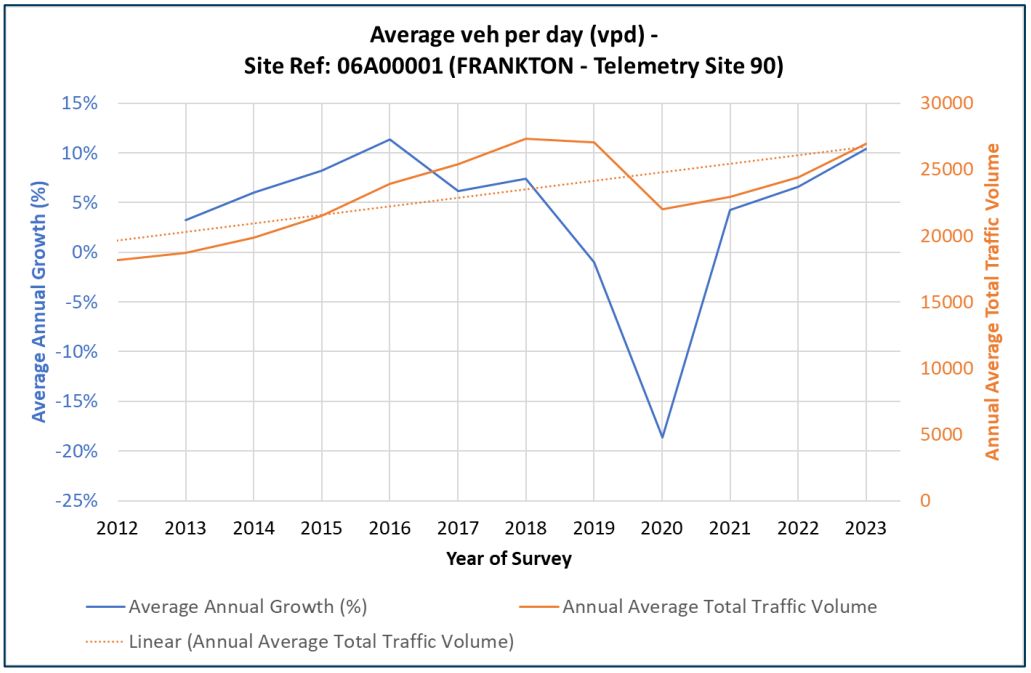


Figure 32 State highway graph above shows there is an increasing linear trend (dotted orange line) since the beginning of the monitoring. Results show that the post covid recovery is progressing.

3.2.7.1 PARKING OCCUPANCY / DEMAND

Queenstown experiences exceptionally high parking demand, which is exacerbated during peak holiday periods including over the summer, and during the winter ski season.

The Queenstown Parking Management Plan (PMP)(draft) provides an overview of how public parking in Queenstown is currently managed and used and includes a range of actions to address some of the key parking issues in the town centre and surrounding fringe. Key issues raised by the community during a recent consultation were public transport, the provision of more parking, local resident prioritsation, emissions reduction, the requirement for an increase in coach parking and the need to increase enforcement. These concerns and feedback will be used to inform the actions in the PMP.

A survey conducted in October 2023 show that during peak times there was a high demand across most of the town centre, where most street exceeded 90% occupancy. On average across the parking area (combined on and off street) during the daily peak the average demand for parking was 78%, while demand in the inner town centre 72%.

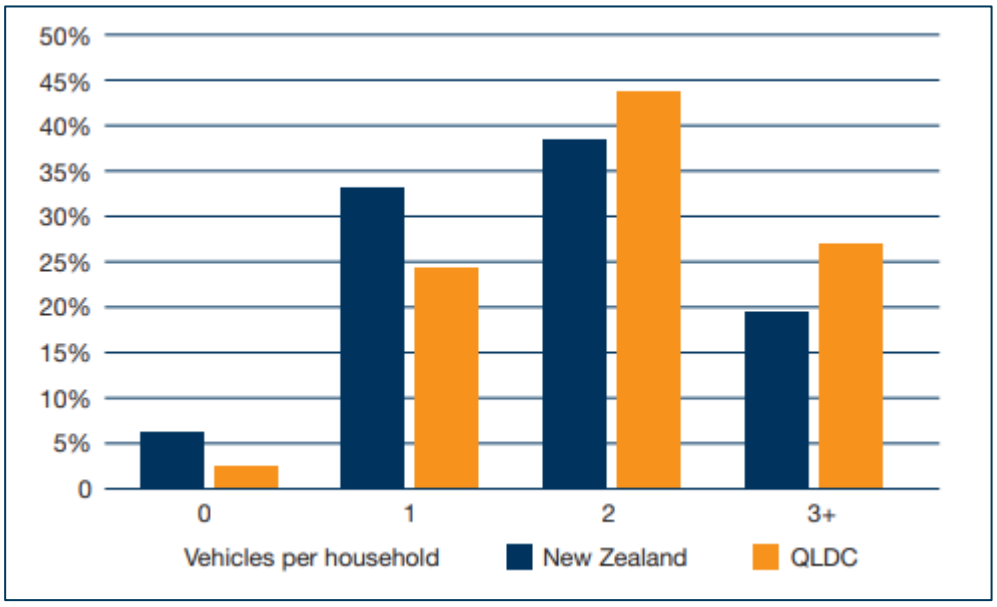
In general, parking demand during the school holiday period experienced much higher demand and occupancy rates.

3.2.7.2 CAR OWNERSHIP

High levels of car ownership may mean some households are unable to accommodate all their vehicles on their property, resulting in spill over onto local streets. This can lead to competing demands for on-street parking between residents, as well as between residents and users of other nearby destinations.

While car ownership across the district is increasing, 3% of households in 2018 did not have access to a vehicle. These households rely on public transport, going by foot or bike to get around, which may limit their opportunities to participate in social and economic activities. While some households may actively choose not to own a car, providing practical transport options for residents and visitors, and proactively managing parking demand will provide benefits for everyone.

Figure 33: Car Ownership in QLDC v NZ (Source: Stats NZ via 2018 Parking Strategy)



3.3. FUTURE DEMAND FOR OUR ASSETS AND SERVICES

3.3.1. OVERVIEW

Asset demand forecasting provides information around expected changes in demand for assets and services that drive the need for growth-related new works. It is intended to inform asset acquisition planning to meet growing demand as well as disposal planning where there is low or declining demand. It may also drive demand management strategies which are 'non-asset' solutions (do not require a capital asset investment) such as increasing opening hours or promotional activities if the aim is to increase use of under-utilised assets.

3.3.2. DEMAND FORECASTS

3.3.2.1 FORCASTING CAPACITY

To meet a range of national and local strategic policy objectives, including the Aotearoa Climate Change response, Queenstown must encourage a significant modal shift from car to public transport and active travel (walking and cycling). The Queenstown Lakes Mode Shift Plan sets out the Council's approach to

meeting both national strategic direction and work emerging out of other regional processes and programmes, particularly the Regional Land Transport Plan (RLTP) 2021-2031.

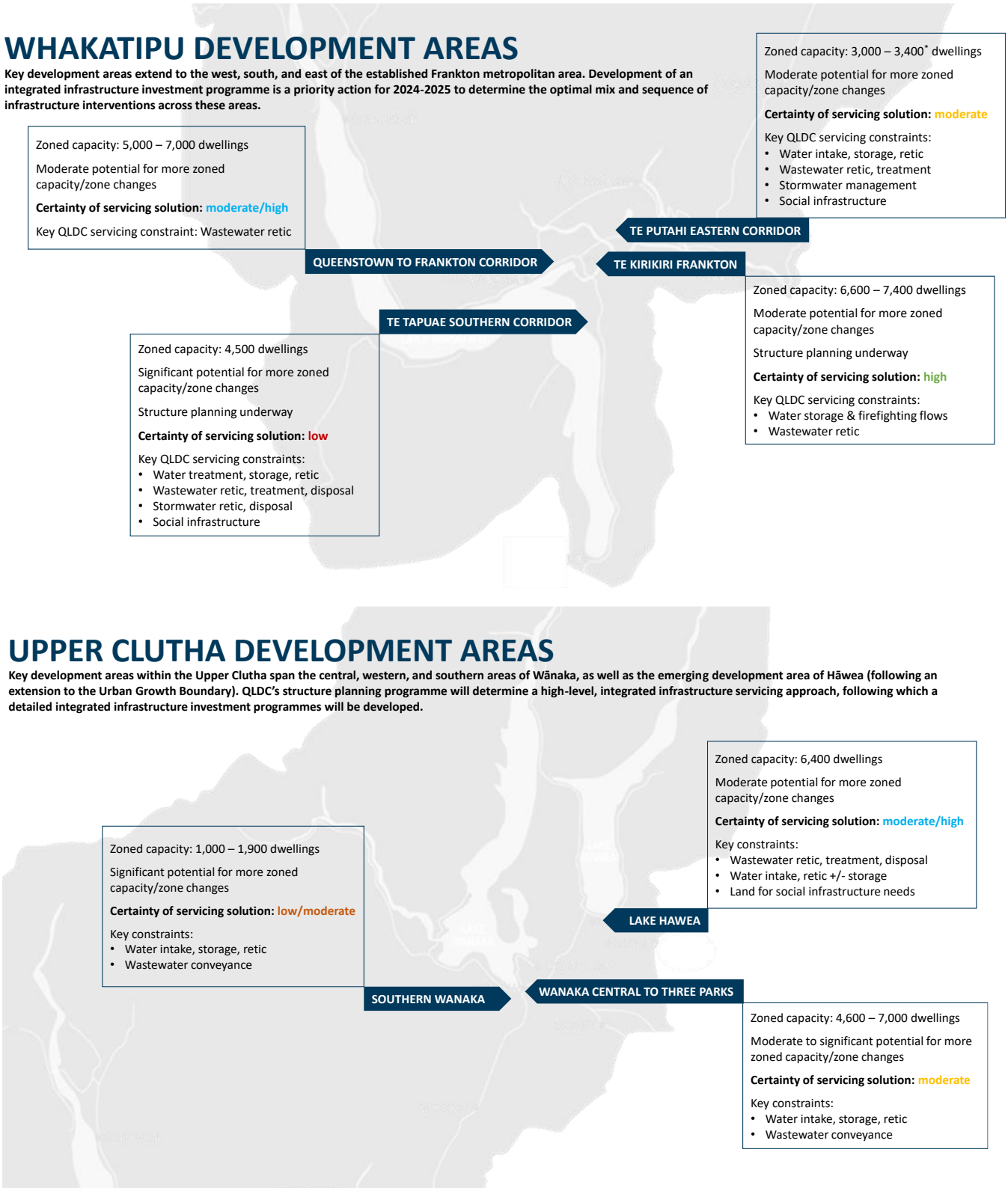
Underpinning this is a suggested amendment to the District Plan, which will require developers to assess the potential impact of their development on the highway network and local road network by taking a corridor approach, and to develop sustainable walking and cycling provisions, through the form of Integrated Transport Assessments; whilst not essential, a new traffic model will assist developers with a good quality evidence base, from which to assess their development within the context of other existing and proposed developments in Queenstown. There is currently a significant gap in the requirements by QLDC of the existing transport model in relation to Queenstown Lakes District. The existing transport models have been developed in Tracks and Paramics. Tracks is a macroscopic demand modelling program, which supports the development of three-stage demand modelling. Public transport is currently assessed outside of the modelling software in spreadsheets. The current set-up is mainly managed by external contractors and provides a strategic level model. Inputs are on a project-by-project basis which means that QLDC do not have a clear involvement in the model build, scenario testing or analysis of model results.

Council intend to undertake an update of the District transport model to enable the capability and functionality to provide greater confidence in transport forecasts and sufficient flexibility to allow decision makers to be provided with multiple scenarios representing potential futures. Given the nature of the project and technical services required, Council have identified the need for a specialist advisor to assist in the procurement and establishment of this updated District transport model through management of the scoping, model build and establishment of an operational framework for the updated District Transport model.

3.3.2.2 QLDC DEVELOPMENT AREAS

Through the Spatial Plan, QLDC have a focus on future growth. The Spatial Plan provides a long-term framework for managing growth. It directs growth in a way that will make positive changes to the environment, housing, access to jobs and opportunities, the wellbeing of the community and the experience of visitors. It recognises that solving these challenges will require central and local government working together with the community and private sector. The charts below provide the latest view of key development areas with associated information about capacities, servicing constraints, and status of servicing solution.

Figure 34: Whakatipu and Upper Clutha Development Areas



3.3.3. TE TAPUAE SOUTHERN CORRIDOR

Guiding new development in the Southern Corridor south of Kawarau River, around Hanley's Farm, Jack's Point, and Homestead Bay.

QLDC are drafting a structure plan for Te Tapuae Southern Corridor, the land that sits south of Kawarau River around Hanley's Farm, Jack's Point and Homestead Bay. It's one of six Priority Development Areas identified in the Queenstown Lakes Spatial Plan 2021 (QLSP).

This piece of work is one of the priorities of the Grow Well Whaiora Partnership, which is made up of representatives from QLDC, Kāi Tahu, Ministry of Education, Ministry of Business, Innovation, and Employment, NZ Transport Agency NZTA Waka Kotahi Waka Kotahi, Ministry of Housing and Urban Development, Department of Internal Affairs, Otago Regional Council, and Kainga Ora.

Key priorities for Te Tapuae Southern Corridor include:

- Well designed neighbourhoods that provide for everyday needs, including the increased provision of housing and housing choices, the supply of community infrastructure and reserves, and the future commercial needs of the area;
- Future proofed access to more public transport routes and a network of walking and cycling trails;
- Protect public access and biodiversity, and create new and enhanced green open spaces that connect people with Lake Whakatipu, the Remarkables, and Kawarau River;
- Ensure the area is developed in a way that minimises emissions, embodied carbon and waste through good urban design;
- Improve community resilience in a changing climate.

3.3.3.3 TE TAPUAE SOUTHERN CORRIDOR - TRANSPORT

Our transport network's capacity is a key part of delivering what communities in Te Tapuae Southern Corridor and the wider Queenstown Lakes need now, and will need in the future.

We're working to identify how transport investment can be appropriately planned, staged, and funded through this structure planning process, which includes further investigation with our Grow Well Whaiora Partners and significant landowners on:

The level of commercial activity and community infrastructure within easy reach of residents:

- Commercial land and the location of community infrastructure (sport fields, event centres, community hubs) will help to provide everything residents need nearby and reduce the number of people crossing Kawarau Bridge during peak times.

Public transport and active travel mode share:

- The realistic maximum number of people likely to use public transport and active travel, and how many people would continue using private vehicles to move around.

An alternate bridge crossing:

- The land use, transport network, accessibility, and environmental implications of an alternate crossing on development in Te Tapuae Southern Corridor.

Staging and triggers:

- The staging, triggers, costs, and delivery considerations for transport infrastructure interventions within Te Tapuae Southern Corridor.
- Given the rapid growth occurring in and around the Whakatipu and its constrained transport network, we will continue to investigate alternative public transport solutions required in the area.

Active travel

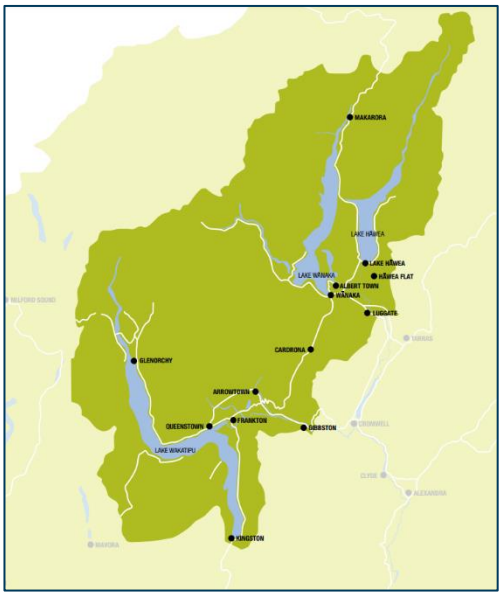
- The A7 active travel route proposes to connect Frankton and Jack's Point using a pathway separate from State Highway 6, and responsibility of the project currently sits with NZ Transport Agency NZTA Waka Kotahi.

- The overall strategic direction of the Government Policy Statement for land transport prioritises economic growth and productivity through creating more capacity on our roads and travel time improvements. There is a significant carry-forward of projects from the previous 2021-24 NLTP, meaning there is no available funding for new projects, or funding to top up existing ones. Therefore, it is unlikely the A7 route is able to proceed to construction in this NLTP period.

3.4. OUR LAND – OUR NATURAL ENVIRONMENT

The dramatic landscape and environment that draws people to the District, provides challenges in delivering transport services. The constraining nature of our physical landscape (valleys, gorges, lakes and mountains) limits viable alternative options to avoid congestion at peak times as well as impacting the types of travel modes. The topological relief of the District is often steep and winding and with a climate of extreme temperatures and weather patterns provides challenges to users and maintenance activities on the network. The risk and consequences of natural disasters hugely impacts our resilience and ability to respond.aA major part of our Districts economy is reliant upon the transport network being accessible, resilient and safe during and quickly after snowfall, ice and wet weather events. Some of the New Zealand's premier winter activities are in our district; Treble Cone, Cardrona, Coronet Peak, and The Remarkables ski fields. Geopolitics is about how our environment influences our decision-making and in QLDC many of the transport issues facing our network are exacerbated by the form of our natural environmental and have been explored further in our Strategic Assessments. We have acknowledged the impact of geopolitics on our strategic responses as we developed both our continuous and improvement programmes. With the increasing risk of climate change, QLDC have made a bold commitment to the QLDC Climate and Biodiversity Plan to seek to understand how this will impact our community and our infrastructure, with the transport system playing a key part.

Figure 35: Queenstown Lakes District - map

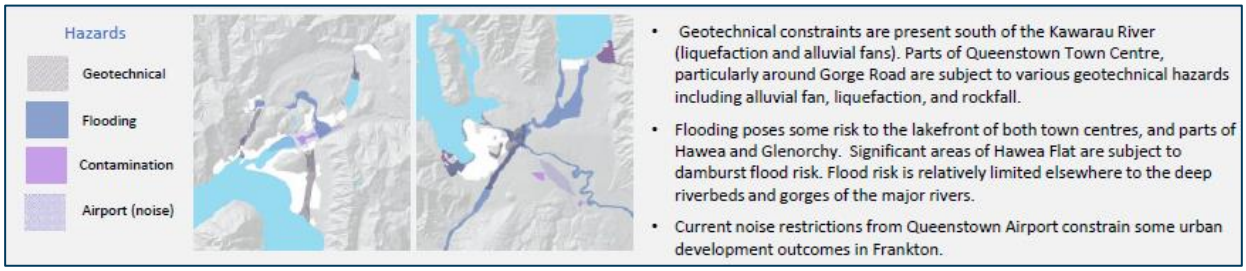


Topography: The Queenstown Lakes District covers a total area of 9,357 km² and includes a number of significant lakes (Lake Hāwea, Lake Whakatipu, and Lake Wānaka). The District is world-renown for its unspoiled natural environment and commerce-oriented tourism, especially adventure and ski tourism and has New Zealand's highest public sealed alpine pass. The natural environment of the Lakes District consists of a variety of systems including rivers, lakes, basins, wetlands, bush remnants, uplands and shorelines. The hilly nature of parts of the district and urbanisation is leading to much more asset density. **Settlements**: Wānaka and Queenstown. Other towns in the district include Arrowtown, Kingston, Glenorchy, Lake Hāwea , Cardrona, Makarora and Luggate.

- **Geology:** Queenstown Lakes District is a geologically unstable area given the proximity to the Alpine Fault and various other (moderate) faults through the District situated within the Southern Alps, part of the Pacific Ring of Fire. Uplift has been most rapid during the last 5 million years, and the mountains continue to be raised today by tectonic pressure, causing earthquakes on the Alpine Fault and other nearby faults.
- **Climate:** The climate is cold with snow and ice year-round at the highest points, as one of the coldest places in New Zealand with an average temperature of 10.7°C ranging from - 10°C to 35°C with ground frosts over 130 days per year. The clear winter days have a low average rainfall of 636mm per year and create a unique climate within New Zealand. It is expected the climate will become less predictable, winters and summers may become colder and warmer. Average

temperatures have increased by 0.7°C over the past 50 years and are expected to increase by 0.9°C within the next 30 years. It is expected that soils will dry out and irrigation will be less effective. The District is a semiarid climate (all day sun, good drainage and little traffic) to lake side/swamp (damp, poor drainage, little sun, heavy frosts, heavy traffic).

Figure 36: Land Hazards map



3.5. CLIMATE CHANGE IMPACTS

Council recognises the challenges of climate change and commissioned Bodeker Scientific to report on climate change implications for the Queenstown Lakes District to increase understanding and help council prepare and adapt. The report includes an analysis of both historical and projected changes in the district's climate, an assessment of potential implications for council services (including transport), potential changes in the snowpack, and implications for industries including tourism. Potential impacts identified in the report for that will impact our transport system include (Bodeker Scientific, 2019):

- An increase in annual maximum temperatures of between 1-7 degrees Celsius.
- Occurrence of snow melt occurring earlier in each season
- Increase in intensity of extreme rain events
- On average a reduction in frost days and an increase in 'summer days'
- Warmer winters and summers in QLD with an increase in both seasonal maximum and minimal temperatures

One of the key considerations for roading is the projected increase in extreme flooding events caused by extreme rainfall, snowfall or snowmelt run off. This has the potential to cause greater damage to bridges and roads near rivers.

3.6. OUR TRANSPORT SYSTEM

As a custodian of our district and its pristine and nationally treasured landscape, we aim to provide a transport network which supports movement of people and goods across our network, this provides a key social and economic benefit for the district. We are focussed on exploring alternative modes to mitigate congestion, minimise the footprint on the planet and provide a positive experience in our district.

Table 2: Our Transport System and Infrastructure

General Traffic
The majority of movements within the district are general traffic, people and goods in private cars.
Active Travel (Walking and Cycling)
The Way to Go partnership has developed a Mode Shift Plan alongside the Whakatipu Active Travel Programme Business Case. The active travel network is being developed as part of the overall mode shift programme for management and addressing the congestion issues.

Public Transport

Queenstown has an urban bus network provided by ORC. Although not under the control of QLDC, the public transport network is a key part of our transport network. Way2Go enables a collaborative approach to use PT to address traditional transport issues. QLDC is investing in PT infrastructure by increasing the number and quality of bus stops and shelters and providing facilities to carry or secure biking and winter equipment.

There is a long-term view that Mass Rapid Transit may provide solutions for Queenstown and NZTA Waka Kotahi are looking to explore this further in the 24-27 NLTP.

Some outlying townships are connected via commercial operators, such as Intercity bus. Between Queenstown and Milford Sound, tourist buses have operated in high numbers at the beginning and end of each day. These types of commercial/tourist focused connections may present an opportunity to facilitate public transport in the future.

Ferry services in Queenstown remain commercially operated at this stage.

Shaping Urban form

The location, timing and shape of urban development can have an enduring impact on the way people choose to travel. Development has frequently been developer led, via plan changes and ad hoc resource consents, often resulting in land use development that is not always integrated with existing or planned transport infrastructure. The proximity of households to the places we regularly go for work, school, shopping and recreation can be a key determinant of whether we choose to walk, bike, bus or drive.

Airports

International and regional flights operate out of Queenstown. Wānaka provides a small local airport with some regional flights between Wānaka and Christchurch. Access to these airports is via the road network, and only the Queenstown airport is serviced by public transport.

In mid-2020 Christchurch Airport announced the purchase of land in the small farming settlement of Tarras on the southern side of Lindis Pass, with the intention of developing a new international airport. Timing and details of this development are not known. Should this project eventuate there are likely to be consequences for the transport network.

3.7. IMPROVEMENT ACTIONS – STRATEGIC CONTEXT

Section 0 Improvement Actions – Strategic Context

1. Review to ensure clear and more concise context is provided.

4. STRATEGIC DIRECTION

STRATEGIC CASE

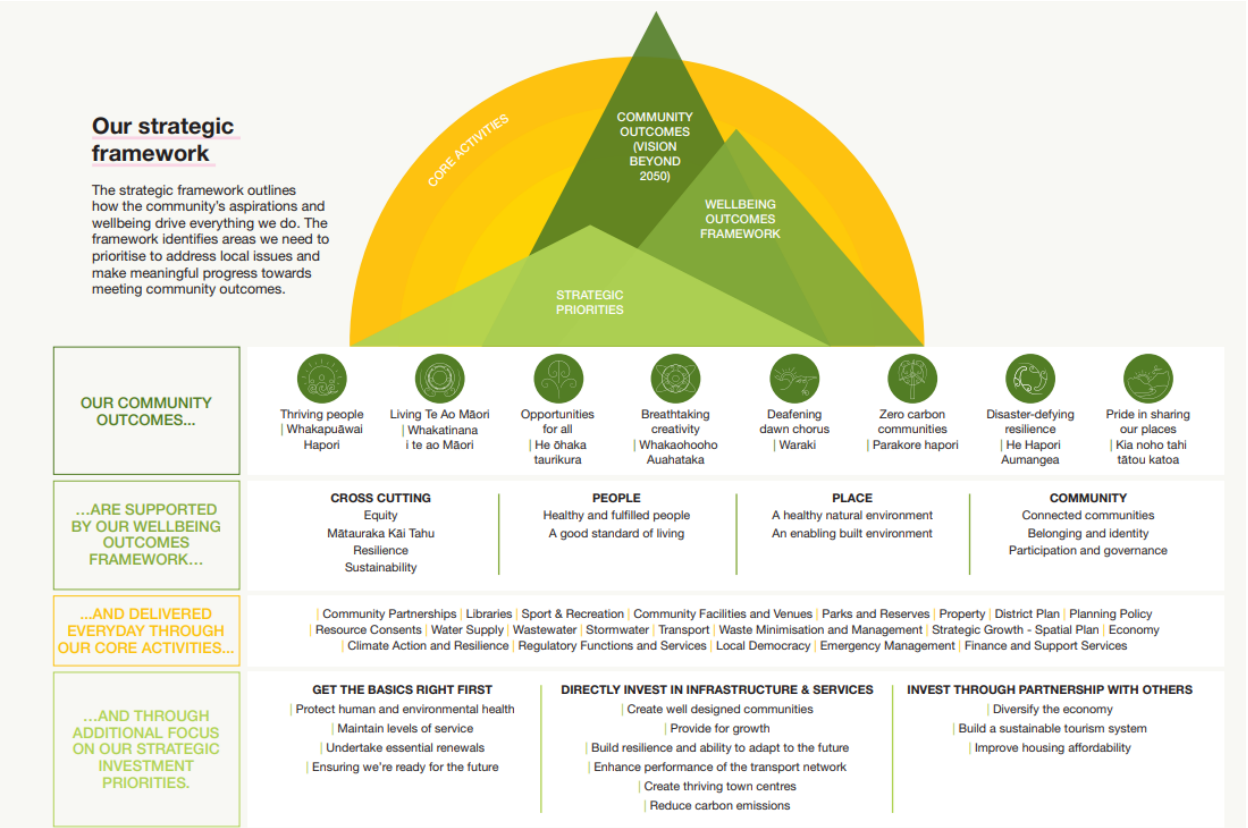
Section 0, 5, 6 form the Strategic Case

This section outlines the overarching strategic drivers, vision and high-level objectives that guide the management and development of our transportation assets.

In 2024, QLDC's new Strategy and Policy Directorate developed a Strategic Framework help council to:

- prioritise resources and actions in a way that advances the community's long term well being,
- ensure councils work is aligned with the broader vision for the district, regional objectives and national policies,
- promotes transparency and accountability to residents and stakeholders in the region.

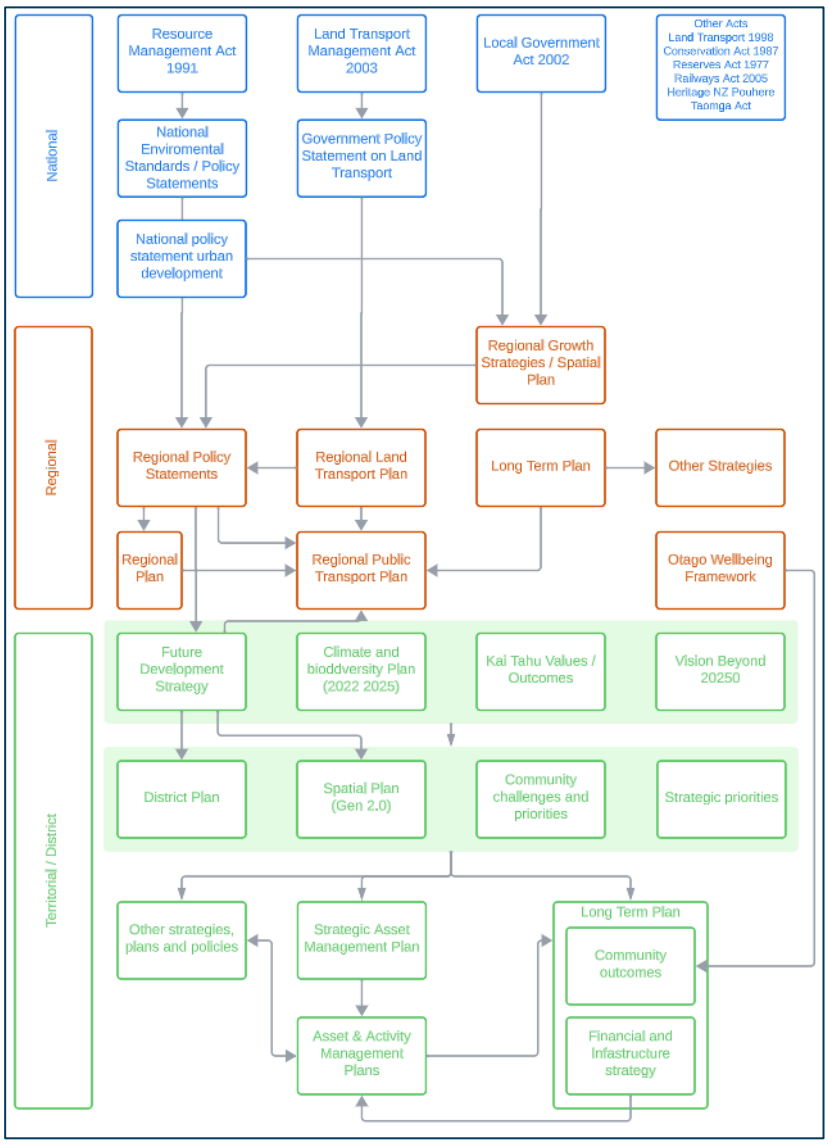
Figure 37: Our Strategic Framework



This section demonstrates the linkages from these drivers through to QLDC's Continuous and Improvement Programmes. These strategic drivers are crucial in defining the required outcomes for our customers.

Council's Planning Framework brings together all the national, regional and district strategic direction and sets out priorities for the next ten years to support the development of the 2024-34 LTP.

Figure 38: Relationship between key drivers

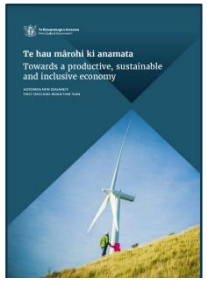


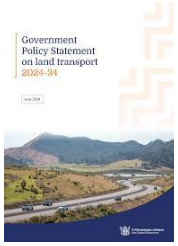
4.8. NATIONAL DRIVERS

Table 3: National Drivers

NATIONAL DRIVERS		
Strategic Element	**Summary**	**Relevance**
Local Government Act 2002 	Provides a legal framework for councils in NZ which outlines their roles, responsibilities, powers and functions (city, district, regional). It requires councils to future plan, engage with communities and be accountable and transparent whilst providing infrastructure and services that benefit the community. The Act also ensures that authorities act responsibly and sustainably focusing on the long-term interests of their communities.	The Act provides the framework for how councils must operate when planning, managing and delivering transport infrastructure and services over the long term. It ensures decisions are made that align with community wellbeing, sustainability and transparency.
Resource Management Act 1991 (RMA) 	RMA is a key piece of environmental legislation in NZ. IT provides a framework for the sustainable management of physical and natural resources. The Act seeks to both promote environmental protection whilst also allowing for the development and use of resources to meet present and future generations.	The act governs how land and resources are used, managed and developed. Huge influence on land use, transport infrastructure such as roads, public transport networks, active travel networks and other infrastructure have significant land and environmental use implications. The RMA will provide the legal framework through which the impacts are managed.
National Policy Statement on Urban Development 2020 (NPS UD) National Policy Statement on Urban Development	The NPS UD is about ensuring New Zealand's towns and cities are well-functioning urban environments that meet the changing needs of our diverse communities. It removes overly restrictive barriers to development to allow growth 'up' and 'out' in locations that have good access to existing services, public transport networks and infrastructure. A framework to guide urban development with key objectives to ensure sufficient development capacity, improve housing	Stipulates closer working between planning and infrastructure. Requires local authorities to ensure development capacity is plan-enabled, infrastructure-ready, and commercially viable. Tier 2 councils like QLDC must create a Housing Business Capacity Assessment (HBA) to plan for future housing needs. HBA informs the Spatial Plan, (outlines the district's strategic growth, identifying key development areas and required infrastructure) and SP ensures growth is well-coordinated and supported by services, aligning QLDC's Long-Term Plan and

NATIONAL DRIVERS

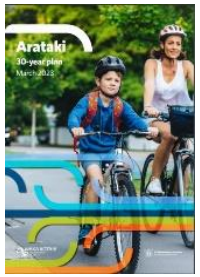
Strategic Element	Summary	Relevance
	affordability, enable more diverse housing types, support sustainable, inclusive growth and address climate change and resilience.	Infrastructure Strategy to prioritize investment in areas needing infrastructure, particularly for transport and three-waters.
National Emissions Reduction Plan (NERP) 	Sets the direction for climate action for the next 15 years. Transport is one of our largest sources of greenhouse gas emissions and is responsible for 17% of NZ's gross emissions. More sustainable transport options can also reduce the cost of transport and reliance on global fossil fuel markets. By 2035, Aotearoa New Zealand will have significantly reduced transport-related carbon emissions and have a more accessible and equitable transport system that supports wellbeing.	As QLDC are responsible for managing many aspects of urban and regional development, transport, infrastructure and public services, they play a critical role in implementing NERP strategies.
National Infrastructure Plan (NIP) 	The IPP identifies the top infrastructure issues and solutions in NZ. The process highlights projects and proposals that will meet the strategic objectives set for NZ, represent good value for money and are deliverable. Projects and proposals that are assessed as meeting the IPP criteria will be published and included in the NIP, indicating to both decision makers and the public that these projects are of high priority.	QLDC should align to the national framework and use it to guide planning, funding and development of transport infrastructure. QLDC submit our programme to the **Infrastructure Priorities Programme (IPP)**
Regional Deals 	The governments initiative for establishing long term agreements between central and local government. The programme unlocks funding and resource opportunities to support councils to make improvements in their region.	QLDC are required to identify regional priorities, coinvesting in projects and ensuring that developments reflect local needs. By collaborating with central government and other relevant

NATIONAL DRIVERS		
Strategic Element	**Summary**	**Relevance**
	Each regional deal is unique and built around the shared goal of supporting communities across NZ to grow and thrive. By forging partnerships between councils, engaging the private sector and Maori organisations, each region can prioritise its unique needs to work towards long term, localized economic resilience and strength,	stakeholders, QLD may be able to secure funding for key transport infrastructure projects.
New Zealand Infrastructure Strategy & Action Plan	A comprehensive framework developed to guide the planning, development, and maintenance of the country's infrastructure over the long term. A key part of NZ's broader effort to address its infrastructure needs and ensure critical infrastructure systems including, water, transport and energy can support the region's growth sustainability. The action plan outlines specific actions and steps that should be taken to achieve the objectives in the strategy. This includes prioritizing infrastructure projects, setting clear timelines and identifying responsible agencies.	QLDC are directly responsible for planning, maintaining and funding many of the district's key infrastructure services. As a result, the infrastructure strategy directly impacts how council plans, invests in, and manages infrastructure in alignment with the broader national objectives.
Government Policy Statement for Transport 2024 (GPS24) 	Governments primary tool to communicate what it wants to achieve in land transport, and how it expects to see funding allocated across the likes of road policing, road safety promotion, State Highways, local roads and public transport over the next 10 years. The GPS 2024 sets out 4 strategic priorities for investment: Economic growth and productivity, increased maintenance & resilience, safety and value for money.	QLDC must ensure transport policies and initiatives align with the GPS and NLTP. Doing so is critical to secure funding, ensure efficient and sustainable transport networks, and contribute to national goals. By aligning with the GPS and NLTP QLDC can access financial resources for local transport projects, improve integration with national transport systems (where possible) and adopt innovative technologies. Alignment also assists council with supporting economic growth, meet regulatory standards and future proof infrastructure.

NATIONAL DRIVERS

Strategic Element	Summary	Relevance
National Land Transport Plan (NLTP) 	A Three-year plan that outlines how the New Zealand Transport Agency (NZTA Waka Kotahi) will invest in the National Land Transport Fund (NLTF) to improve NZ's land transportation system. The plan is guided by the GPS24and the Land Transport Management Act (2003).	
New Zealand's Road Safety Objectives 	Aims to tackle NZ's most challenging road safety issues and reduce the number of fatalities and serious injuries on the roads by improving user behaviour, enhancing infrastructure and ensuring that all road users are treated equitably. (Replaces Road to Zero)	QLDC play a central role in implementing and contributing to the NZ's road safety goals. The objectives are key in road safety governance, infrastructure management, community engagement and behaviour change. By aligning with national objectives, council should also reach the overall aim.
Ministry of Transport (MoT) Transport Outcomes	Defines a set out of outcomes for NZ's transport system and explains how government should work toward them through a guiding principle of mode neutrality. It states that the purpose of the transport system is to improve people's wellbeing, and the liveability of places. It does this by contributing to five key	It is important for QLDC to align with the TOF to ensure consistency with national objectives. By aligning with this framework, council ensures their local transport projects and initiatives are consistent with national objectives, contributing to the overarching goals for the country's transport system. Alignment may also increase the likelihood to secure government funding, assist with measuring

NATIONAL DRIVERS

Strategic Element	Summary	Relevance
Framework (TOF) 	outcomes: Inclusive access, healthy & safe people, economic prosperity, environment sustainability and resilience & security.	accountability and performance measurement, ensure councils transport plans are coordinated and integrated, and help with sustainability and long-term planning.
NZTA Waka Kotahi Arataki 	A strategic document developed by NZTA Waka Kotahi, which outlines the agency's vision, priorities, and direction for transport in NZ over 30 years. The strategic objectives are: safety, sustainability, resilience and access & inclusion. The document also provides key national transport outcomes that guide future transport policies and investment. These include: (1) a safe and resilient transport system, (2) sustainable and low emission transport options, (3) improved access to jobs, and opportunities and (4) economic growth through efficient movement of goods and people.	The document serves as a strategic guide to infrastructure development and transportation planning, which directly impacts local communities, economies and environments. NZTA Waka Kotahi Arataki provides a framework and strategic direction that QLDC will use to guide transportation planning, align with national priorities, and secure funding and resources for regional transport projects.
REG Te Ringa Maimoa 	The Road Efficiency Group (REG) was established as a response to the Road Maintenance Task Force Report in 2021. REG was specifically identified in the GPS 2024 the mechanism to ensure that all investment in maintaining and improving resilience on the state highway, local and rural road network is spent in the most efficient manner. Its goal is to improve roading asset management efficiency and ensure Central Government receives value for money. Te Ringa Maimoa's approach focuses on four key areas: (1) Smart procurement, (2) Increased sector capability, (3) Advanced asset management and data and (4) One Network Framework Classification (ONF).	QLDC aligns with REG and supports it collaborative approach through key staff involvement in the programme. QLDC support these principles, emphasizing evidence-based investments that focus on customer outcomes rather than just asset condition. This is reflected in their transport strategies like Way to Go and the Spatial Plan. QLDC is also reassessing service levels to match ONF guidelines and aims to measure transportation services based on the outcomes they deliver to customers.

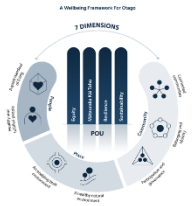
NATIONAL DRIVERS		
Strategic Element	**Summary**	**Relevance**
Fast Track Approvals Bill	The bill proposed by central government seeks to establish a permanent fast-track approvals regime for projects of national and regional significance. This regime involves several Central Government Ministers who will determine projects that will be referred to an expert panel. The panel will then consider and make decisions on approvals sought.	Local governments are able to apply for projects to be considered and assessed. Those appropriate will be selected for inclusion under the bill. This could mean that certain projects or initiatives for example, new roads, schools or other public facilities be delivered earlier than originally planned.

4.9. REGIONAL DRIVERS

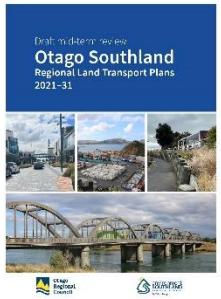
Table 4: Regional Drivers

REGIONAL DRIVERS		
Strategic Element	**Summary**	**Relevance**
Regional Policy Statement (RPS)	Sets out the framework for managing the regions natural and physical resources, providing guidance to local authorities, businesses and the community. The RPS sets the context for land use, infrastructure, water management, biodiversity, and other critical areas in Otago. It is a high-level planning document that ensures that decisions about resource use are consistent with national, regional, and local objectives for sustainability and environmental protection.	The RPS provides the policy framework that guides the districts regional and district plans (which must be consistent with the RPS). It sets the broad policy direction for managing natural resources and land use within Otago and is used by councils to inform decisions on resource consents, zoning, environmental protection measures and infrastructure development.

REGIONAL DRIVERS

Strategic Element	Summary	Relevance
Wellbeing Framework for Otago 	The framework refers to a set of goal and principles aimed at enhancing the wellbeing of the Otago Community. Physical, mental, environmental health and social aspects are incorporated, and the framework aims to support sustainable and equitable development in the Otago region.	QLDC has adopted the Otago wellbeing framework as part of the QLD Strategic framework (refer local drivers). Integrating transport and transport infrastructure with the Wellbeing framework ensures that QLDC are supporting the broader goals for Otago and benefiting the QLD. There are several documents that are influenced by this framework including the RLTP, RTPT and other relevant regional documents.
Regional Land Transport Plan (RLTP)	Typically covers a 10-year period, developed by each regional transport committee to guide planning, investment and management of the transport system in the region. Outlines the regions priorities and the actions required to meet the needs of the region. Some of these objectives include: Road safety, asset condition, connectivity and choice, environmental sustainability and future focused. QLDC is a member of the Otago Regional Transport Committee, which works in alignment with Environmental Southland to provide a joint Regional Land Transport Plan (RLTP).	The plan and the programme are two distinct but closely related documents. They form part of the Land Transport Management Act 2003, which requires councils to prepare long term plans for managing their transport networks as well as investing in transport infrastructure. Integration with the regional plan ensures transport planning across the region is integrated and that investment and developments are coordinated. It ensures projects are prioritised in a way that best serves the needs of the community, businesses and environment.

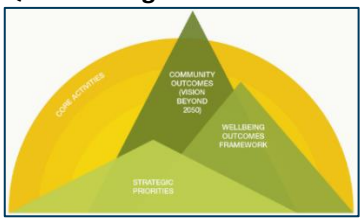
REGIONAL DRIVERS

Strategic Element	Summary	Relevance
Regional Land Transport Programme (RLTP) 	The Regional Programme outlines the specific transport projects and initiatives that will be implemented in the short to medium turn, typically 3-6 years. The programme lists these projects in detail, listing cost, timing and funding requirements.	QLDC play a central role in managing, delivering and funding the projects listed in the programme, ensuring alignment with both local needs and regional priorities. Both documents ensure QLD are aligned with regional goals, contributing to the efficient and effective development of the transport systems that serve the community.
Regional Public Transport Plan (RPTP) 	A strategic document developed by the Otago Regional Council (ORC) with its partner agencies, that outlines the vision, objectives and strategies for public transport services within the Otago region. The vision "Inclusive, accessible, and innovative public transport that connects Otago and contributes positively to our community, environment and economy." This vision is supported by key priorities which are customer focus, Environment and health, innovation and funding.	The plan directly impacts transportation services, community wellbeing and the development of local infrastructure in the district. QLDC are key stakeholders in the planning, funding and implementation of public transport systems. The plan ensures: integration with local development plans, alignment in sustainability and climate goals as well as future planning for transport service delivery. Regional and local collaboration as well as shared responsibility for funding and investment.

4.10. LOCAL DRIVERS

QLDC has a number of strategic plans and frameworks that form part of the asset planning ecosystem, these should be read in conjunction with this BCA AMP and can be found in summarised form in the SAMP:

Table 5: Local Drivers

LOCAL DRIVERS		
Strategic Element	**Summary**	**Relevance**
QLDC Strategic Framework 	The framework outlines how the community's aspirations and wellbeing drive everything QLDC do. The framework identifies areas we need to prioritise to address local issues and make meaningful progress towards meeting community outcomes.	The document helps council to (1) prioritise resources and actions in a way that advances the community's long term wellbeing, (2) ensure councils work is aligned with the broader vision for the district, regional objectives and national policies, (3) promotes transparency and accountability to residents and stakeholders in the region.
QLDC 30 Year Infrastructure Strategy	A Long-term document to plan, manage, and invest in the district's critical infrastructure over the next 30 years. It is crucial for ensuring that the infrastructure necessary to support the districts growth, economic development and community well-being is in place. The sectors covered include transport, three waters (stormwater, water supply and wastewater), solid waste and community facilities.	Aims to ensure the critical infrastructure required keeps up with the growth and demand of the district while being sustainable, resilient and financially viable.
Long Term Plan (LTP)	Outlines QLDC's priorities, goals and projects for the next 10 years. The document is reviewed and updated every 3 years, ensuring that it reflects the current needs, aspirations, and challenges of the QLD community. The LTP highlights how QLDC will allocate resources, invest in infrastructure and implement policies to achieve long term outcomes. It covers a wide range	Demonstrates how QLDC effectively manage growth and deliver the services and infrastructure needed for the region's future.

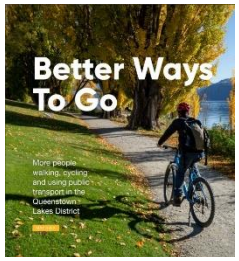
LOCAL DRIVERS

Strategic Element	Summary	Relevance
	of areas including infrastructure, services, community development, and sustainability.	
Spatial Plan 	The Plan sets the vision and framework for how and where the QLD will grow, to 2050. The idea is to ensure that future growth happens in the right place and is supported by the right infrastructure, whether that's pipes in the ground, ways of getting around, access to schools, healthcare or other community facilities.	The Spatial plan is a critical document for district development within the transport sector, it helps shape how future transport infrastructure should be planned for and developed.
QLDC's Operative District Plan (ODP) and Proposed District Plan (PDP)	The ODP is the current version of the plan which contains objectives, policies and riles for resource management across the district. The provisions still apply until there are no more appeals on the PDP provisions**.** The PDP sets to provide a more accessible and transparent plan that provides more certainty to property owners and a clear strategic direction for the district as well as additional scope for intensification on suitable locations.	The ODP and PDP serve as guiding documents for land use, development and infrastructure decisions in QLD. The documents inform how transport systems and infrastructure should be planned, implemented and integrated with other aspects of both urban and rural land use and development.
Queenstown Lakes Regenerative Tourism Plan	Aims to achieve regenerative tourism and a carbon zero visitor economy by 2030. An output of the QLDC Grow Well Whaiora Spatial Plan. It offers opportunities for the region and greater wellbeing for people and the planet as a regenerative tourism	Transport plays a key role in the plan as it directly impacts how tourists access and travel around the district. Transport planning needs to align with the goals of the plan by promoting and prioritizing sustainable

LOCAL DRIVERS

Strategic Element	Summary	Relevance
	benefits communities, the environment and the economy. Aiming to transform tourism in the district by making it regenerative rather than sustainable. By prioritising responsible and regenerative practices, the plan seeks to ensure tourism leaves no hams and actively contributes to the long-term health and vitality of the districts ecosystems, economy and communities.	and efficient transport systems that minimize environmental harm, reduce congestion, support residents and enhance visitor experience.
QLDC Economic Diversification Plan 	Supports economic resilience and sustainability of the district. Focuses on reducing QLDs reliance on tourism and aims to create a more robust, diverse and future proofed economy that can withstand economic and environmental changes.	Aims to ensure long term prosperity, job creation and environmental sustainability. Focuses on workforce development, infrastructure enhancement and collaboration with stakeholders to create an economy that is diverse, thriving and able to withstand future challenges.
QLDC Climate & Biodiversity Plan 	Addresses challenges of climate change and decline in biodiversity in the district. Outlines how QLDC will work to mitigate the impacts of climate change and protect and enhance the unique environment. Key actions include reducing green house gas emissions, transitioning to renewable energy, promoting sustainable transportation, supporting low carbon construction and building climate resilience.	Aims to ensure a sustainable and resilient future for the district through strategic actions, community engagement, and strong partnerships. The plan aims to safeguard the regions unique environment while promotion low carbon, sustainable practices across the economic sectors.

LOCAL DRIVERS

Strategic Element	Summary	Relevance
QLDC Traffic and Parking Bylaw 2018 (Update due 2025)	The bylaw was created to regulate parking and the use of other vehicles on roads and other public places in the district.	The Bylaw directing impacts how transport systems are managed, how road safety and efficiency are managed and how public spaces are utilised. The Bylaw will play a key role in transport planning with regards to optimisting parking, improving road safety, sustaining transport and an efficient and functioning transport system
Better Ways to Go (Mode Shift Plan) 	Sets out how QLDC, ORC and NZTA Waka Kotahi will work together and with others to increase the share of travel made on foot, by bike and bus.	Improves transport options, reduce car dependency and promote sustainable, active modes of transport. Be improving infrastructure, encouraging behavior change and reducing congestion the plan aims to create a more sustainable and accessible district while contributing to climate change.

4.11. IMPROVEMENT ACTIONS – STRATEGIC DIRECTION

Improvement Actions – Strategic Direction

- Ensure review of updated GPS on Transport and other strategies are carried out when they are released.
- Continuously monitor RMA and Three Waters Reform legislation for changes and review internal systems/documentation where required.
- ORC's Draft PT BC is due late December for review- Update AMP with details.
- Traffic & Parking Bylaw update 2025
- Parking Management Plan Update (Following approval)

5. STRATEGIC ASSESSMENT

STRATEGIC CASE

The Strategic Case evaluates the broader issues, objectives and priorities related to our transport infrastructure. It considers the consequences, responses and benefits of addressing these.

Section 0, 5, 6 form the Strategic Case

QLDC have a new Strategy and Policy Directorate with the remit to deliver better strategic clarity across the organisation.

5.1. KEY STRATEGIC ISSUES AND RESPONSES

The district's attractive scenery and climate, clean environment, outdoor lifestyle, strong economic performance and opportunities, and national and international connectivity makes the area a highly desirable place to live and visit. This attractiveness also comes with challenges; the 30 Year Infrastructure Strategy distils these challenges into the following five significant issues for QLDC's infrastructure:

- Rapid and sustained population growth
- Increased and increasing standards
- Resilience to shock events
- Climate emergency
- Historic infrastructure deficit

The strategic assessments to follow focus on how the five key issues in the 30YIS directly impact our Three Waters networks. The intent is to capture the problems, benefits, consequences as well as our strategic responses and programmes to these issues.

5.1.1. RAPID AND SUSTAINED DEMAND GROWTH

Understanding growth is a key challenge for QLDC; fluctuations, whether increases or declines impacts on many parts of QLDC's assets and activities. Demand drives a huge number of our responses and programmes, many of which were developed to address gaps in level of service arising from our recent rapid growth. The key strategic response for QLDC is monitoring and understand demand and usage of our assets and being agile to the impacts.

RAPID AND SUSTAINED DEMAND GROWTH

Strategic Response

- Organisational co-ordination
- Regular monitoring of population and visitor demand, consistent use of figures across Council including scenario planning
- Promote and integrate multimodal transportation solutions, including public transport, cycling and pedestrian infrastructure to offer diverse options that cater to evolving mobility patterns.
- Ensure the Land and Subdivision Code of Practice supports multi modal mobility.
- Implement robust risk management strategies to address potential disruptions in supply chains, economic fluctuations and other uncertainties associated with growth
- Prioritising high growth area infrastructure upgrades
- Optimising operational efficiency
- Fostering collaboration with local communities
- Promote continuous public engagement and education to manage community expectations, garner support for transportation initiatives and ensure transparency in decision making

Benefits of Addressing

- **Improved infrastructure** – upgrading transport infrastructure that enhances systems reliability, and ensures efficient service delivery, contributing to long term sustainability.
- **Operational efficiency** – optimising operations through technology and efficient practices leads to cost savings and more effective resource utilisation.
- **Community engagement** – building positive relationships with communities fosters trust, encourages public support and provides valuable insights for better decision making.
- **Environmental sustainability** – adhering to environmental standards and sustainable practices safeguards natural resources, supporting long term health.
- **Resilience** – strategic responses help build resilience against challenges like climate change, population growth and unforeseen disruptions, ensuring continuity in roading provision.
- **Regulatory compliance** – staying compliant with regulations promotes legal adherence, mitigates risks, and enhances Councils credibility and reputation.
- **Innovation and technology** – embracing technology and innovation can lead to more efficient monitoring, data driven decision making and overall improvement in roading services.
- **Financial stability** – a well-planned approach to growth ensures financial sustainability, attracting potential investors and securing funding for necessary initiatives.

RAPID AND SUSTAINED POPULATION GROWTH

Issue	Consequence	Programme Response
Population Demand	• Demographic change at both ends of age scale with increased number of retirement villages impacting walking facilities and public transport services Demographic change-under 5's increasing: growing pressures on school transport and out of school activities along with more demand for walking and cycling facilities	• Awareness of mobility issues for young and old, locations of vulnerable users and type of provision of line & signs, kerb crossings • Consistency of demand data projection across the organisation Tailored Public Transport services and infrastructure
Visitor Growth	• Increasing emissions • Perceived safety issue with visitor drivers • Visitors less familiar with network, driving conditions, misconception over NZ journey times with a focus on the destination rather than challenges of the journey • Visitor experience may be decreased due to tension with locals stemming from road use interaction • High visitor causing peak day demand on a network with low-rate payer base • Growth in tourism, specifically self-drives and • High profile destination for events brings short periods of intense visitation i.e. marathons, triathlons, War Birds	• Provision of more and differing styles of traffic facilities i.e. signs, line markings, barriers may have to increase to support visitor drivers • Improve tourist routes and education e.g. use of wayfinding e.g. signs, lines etc. • Target road safety promotion at visitors. Provide cross regional advice on amenity stops and facilities to support safe and enjoyable travel decisions • Developing a strategic road safety programme
Traffic Growth	• Increasing congestion and travel time reliability • Network capacity is consumed before infrastructure can be constructed • An increased risk of discharge and contaminants off the road into storm water and potentially water supplies • Dissatisfaction with liveability	• Develop non-infrastructure solutions such as demand management and behaviour change initiatives • Expanding a multimodal transport network
Active Travel Growth	• Increased congestion during drop-off and pick-up locations and increased safety risks in schools zones can discourage walking and cycling • Safety concerns for vulnerable users amongst general traffic Recreational growth for outdoor activities such as cycling leading to more vulnerable road user interaction	• Way to Go working on a Mode Shift Plan with NZTA Waka Kotahi

Construction Growth	• Heavy construction vehicles impact road pavement and footpath crossings Additional stresses on the network, not built for these demands, reduce expected life, increase in maintenance	• Monitor emerging issues • Policy changes through the COP • Ensure consent condition protect assets or restrict movements.

5.1.2. CLIMATE EMERGENCY

Climate change is the biggest environmental challenge of our time. It affects our communities, businesses, native ecosystems, infrastructure, health, and biosecurity, and if left unchecked, will have broad and ongoing implications for all New Zealand. The most recent Intergovernmental Panel on Climate Change (IPCC) special report SR15 (2018) confirms we must target 1.5°C with 'no or limited overshoot', and underscores the need for urgent and transformative climate action as climate impacts increase in scale, frequency, and intensity. The Climate Change Response (Zero Carbon) Act 2019 was recently adopted in New Zealand. The purpose of this Act is to provide a framework by which New Zealand can develop and implement clear and stable climate change policies that limit the global average temperature increase to 1.5°C. The Climate Change Commission (CCC) was also established and has the role of providing the government with independent advice from experts on achieving targets set in the Zero Carbon Act, as well as monitoring them. QLDC have declared a Climate Emergency and developed a Climate & Biodiversity Plan in response.

There have been various changes to climate change policy and legislation over the past three years, with more to come. The Climate Change Response (Zero Carbon) Amendment Act 2019 enacted several key changes including establishing a Climate Commission and national emissions budgets and directing the development of New Zealand's first National Risk Assessment and National Adaptation Plan, all of which provide guidance and direction for local infrastructure provision.

Table 6: Climate Change Mitigation & Biodiversity

CLIMATE CHANGE MITIGATION & BIODIVERSITY
Strategic Response • Climate emergency declared – Climate and Biodiversity Plan Adopted • QLDC to integrate carbon reduction into all decisions regarding infrastructure, exploring / understanding / futureproofing through the Business Case • Update QLDC Land Development & Subdivision Code of Practice to meet new requirements. • Implement carbon accounting framework. • Increased monitoring of at-risk assets • Increased awareness of emergency management and improved alignment • Engage in advocacy for supportive policies at local, regional, and national levels, advocating for climate friendly regulations and measures that promote diversity and inclusion in the transportation network • Develop strategies to adapt transport infrastructure and management practices to the changing climate, considering factors like altered precipitation patterns and extreme weather events. • Implement resilience measures to mitigate the impacts of climate change such as improving road durability, preventative rather than reactive works and enhancing emergency response capabilities. • Promote and implement low carbon travel choices such as active travel routes, public transport and car sharing. • Investigate greener infrastructure solutions such as lower embodied carbon materials, local import of materials and use of recycled materials

CLIMATE CHANGE MITIGATION & BIODIVERSITY
• Develop and implement policies that align with climate change goals, addressing issues like changing precipitation patterns and temperature variations in the planning and management of water resources. • Educate communities about impacts of climate change on the transport system and involve them in sustainable practices, fostering a sense of shared responsibility for a climate-resilient transport

Benefits of Addressing

- **Resilience -** enhancing infrastructure and implementing resilience measures increases the system's ability to withstand and recover from the impacts of climate related events, ensuring a continuous transport provision.
- **Sustainability –** embracing a low carbon transport network supporting active travel, public transport services and the implementation of travel demand management initiatives.
- **Adaptability –** climate responsive policies and adaptation planning allow for flexibility in managing transport resources, accommodation shifts in precipitation patterns and other climate related changes.
- **Community wellbeing –** educating and engaging community sustainable practices fosters a shared sense of responsibility and promotes overall community wellbeing.
- **Reduced Risk –** proactive measures help mitigate risks associated with climate change, reducing the likelihood and severity of disruptions to the transport network.
- **Environmental protection –** a lower emission transport system will contribute to the protection of our ecosystems, maintaining biodiversity and mitigating the environmental impacts of carbon.
- **Operational efficiency** – implementing advanced monitoring and modelling techniques enhances data driven decision making, optimising operational efficiency and resource allocation.
- **Policy alignment** – aligning policies with climate change goals ensures regulatory compliance, enhances credibility, and positions the Council as a responsible steward of resources.
- **Public trust** – demonstrating a commitment to addressing climate change instils public trust, creating a positive perception of the council's dedication to environmental and community wellbeing.

CLIMATE CHANGE MITIGATION & BIODIVERSITY			
URGENT	**Issue**	**Consequence**	**Programme Response**
	Reduce Emissions	• Invest in options that provide modal choice and reduce vehicle kilometres travelled.	• Behaviour change • Mode shift

CLIMATE CHANGE MITIGATION & BIODIVERSITY			
			• Travel demand management
	Protect and promote biodiversity	• Additional planning and cost for structures replacement	• Structures over waterways must enable fish migrations
	The targets for waste diversion that are set within the Waste Minimisation Strategy are not met	• Increasing the value of carbon credits due.	• Carbon credits will be effectively managed in accordance with the Emissions Trading Scheme. Carbon accounting under way

5.1.3. RESILIENCE TO SHOCK EVENTS

Resilience covers a number of activities, from societal and economic resilience down to resilience in our transport system. The post COVID-19 economic situation highlighted the vulnerability of the economy in our district, although a previously known risk; the reality of COVID-19 has caused the district to make significant changes and strategies. The QLDC Emergency Management Recovery Team purpose has been to address the fallout from social-economic situation and to drive Community led initiatives for a more resilient economy. Understanding risks and planning and adapting to future scenarios.

Table 7: Resilience & Adaptation

RESILIENCE & ADAPTATION
Strategic Response • Adherence and delivery of the Climate & Biodiversity Plan and Emissions Masterplan • Infrastructure upgrades – invest in robust infrastructure improvements to withstand extreme weather events, ensuring the continued functionality of roading options, particularly with regards to more remote areas of the district. • Climate resilient design – incorporate climate resilient design principles in infrastructure projects to adapt to changing climate conditions, such as increased

precipitation, drought, and wind.

- Integrated planning – adopt an integrated approach to planning that considers the interconnections with three waters projects allowing for a holistic and coordinated response to climate challenges.
- Smart technology implementation – utilise smart technologies for real-time monitoring and data analysis, enable proactive responses to changing conditions and optimising the efficiency of the transport system.
- Community Engagement and education – engage with communities to raise awareness about the climate related challenges and educate residents on travel demand management practices fostering a sense of shared responsibility.
- Emergency response planning – develop comprehensive emergency response plans that address potential disruptions to our transport system, ensuring swift and effective actions during crises.
- Green infrastructure integration – incorporate green infrastructure solutions such as low carbon options – e.g. Blue-Green network development for active travel.
- Policy development and compliance – establish and enforce policies that align with climate resilience goals, ensuring regulatory compliance and creating a framework for proactive adaptation measures.
- Collaboration and stakeholders – foster collaboration with other councils, environmental organisations, and other stakeholders to share expertise, resources and knowledge, enhancing collective resilience efforts.
- Staying informed about and adapting to changes in regulations and policies – ensuring compliance with evolving safety standards, emissions and infrastructure development
- Continue to explore and integrate diverse transportation modes, such as bike sharing, ride sharing and micro mobility options to provide a more resilient and adaptable network
- Establish systems for continuous monitoring, modelling and evaluation of transportation programmes, allowing for timely adjustments based on emerging trends and challenges

Benefits of Addressing

- **Community of Service –** robust infrastructure upgrades and integrated planning ensure the continued provision of transport services during and after extreme weather events, minimising disruptions.
- **Risk Mitigation –** proactive measures such as climate resilient design and emergency response planning, help mitigate risks associated with climate change, reducing the potential impact of transport and management disruptions.
- **Operational efficiency – s**mart technology implementation and real time monitoring optimise operational efficiency, allowing for timely responses to changing conditions and improving overall system performance.
- **Resource Conservation –** implementing green infrastructure contribute to resource conservation
- **Community well-being** - community engagement and education foster a sense of shared responsibility, enhancing public awareness of climate-related

challenges and promoting alternative travel options for the well-being of local communities.

- **Environmental Protection** – carbon reducing travel options such as active travel, car sharing and public transport patronage helps protect ecosystems, mitigate flooding, and reduce water pollution and contamination from transport systems, contributing to overall environmental health and biodiversity.
- **Adaptability** - integrated planning and collaboration with stakeholders foster adaptability, allowing the transport system to evolve in response to changing climate conditions and emerging challenges.
- **Regulatory Compliance** - establishing and enforcing policies aligned with climate resilience goals ensures regulatory compliance, enhancing the credibility of the organization and its commitment to implementing a sustainable transport network.
- **Community Trust** - demonstrating a commitment to resilience and adaptation builds public trust, garnering support for the organization's efforts
- **Cost Savings** - while initial investments may be required, the long-term benefits include potential cost savings through efficient operations, reduced emergency response expenditures, and minimized damage to infrastructure.

RESILIENCE & ADAPTATION		
Issue	**Consequence**	**Programme Response**
CLIMATE CHANGE Projected increases in frequency and size of weather events, daytime temperatures, increased wind and decreases in snow days.	• Additional costs required to mitigate their impacts, such as improving protection of critical infrastructure or increased maintenance costs. • Quicken the set-in speed and intensity of droughts. • Increased likelihood of landslides and flooding which may increase the potential for greater damage to bridges and roads • Stretch the capacity of storm water infrastructure. • Increased variability in river flows and lake levels. Lake level and valleys prone to flooding and alluvial re-direction i.e. Kinloch. • Sections of the network are impacted by thermal variation. • A reduction in the number of winter frost days is likely to see a reduced hazard from ice and snow	• Adaptations and mitigations Into Land Development & Subdivision Code of Practice and all design -such as allowing for more stormwater capacity. • Dangerous trees – species chosen for their autumnal colours such as poplars, but vulnerable to internal rot, not visible to the eye, risk of failure in high winds. • Monitoring and modelling of risks • Increased cleaning and maintenance of drainage infrastructure, focus on high-risk assets • Emergency management awareness

	• Roads may undergo more freeze thaw cycles, leading to pressure of the placement layers. • Increased overflows into storm water and road drainage systems • Drier landscapes with higher drought or wildfire risk. Reduction in volume of water from snowmelt being available through spring melt season.	• Increased monitoring of structures • Better understanding of stormwater catchments and risk
NATURAL HAZARDS, PANDEMICS Natural hazards impact on transport network	• Pressure on existing infrastructure	• Develop resilience, criticality for prioritisation • Monitor known risks and weakness'
ECONOMY RELIANT ON TOURISM Heavy reliance on tourist economy (over 60% of population directly/ indirectly employed by tourism)	• More exposed to the economic fallout from pandemics / border closures such as COVID-19 than the rest of New Zealand.	• Diversification initiatives in place such as Destination Management Plans and 'Diversifying the Queenstown Lakes District economy'.

5.1.4. RESOURCE CONSTRAINTS

QLDC is constrained by a number of factors, from financial limitations (our funders and the community), to available land for development or alternative routes, available suppliers, equipment, and people.

With an economy and many livelihoods founded heavily in tourism, the impact of border closures was unprecedented. QLDC's ability to fund our programmes has been reduced through the loss of tourist related revenue streams, QAC dividends, and development contributions, alongside a decision to acknowledge the community struggles by limiting rates increases. This highlighted how our economy drives many of the behaviours, activities and opportunities, and indicates the strategic importance of our economy to achieving our outcomes.

Table 8: Resource Constraints

RESOURCE CONSTRAINTS
Strategic Response • Engagement with other government agencies and suppliers (visibility and informative of road map of projects) to potentially pool resources, share expertise and enhance project feasibility • Develop and implement strategic plans that prioritise projects based on available resources, focusing on critical initiatives that align with overall goals • Embrace technology solutions to optimise, improve efficiency and reduce costs • Explore innovative financing solutions to secure additional resources • Workforce development initiatives and strategic planning to address skill gaps Prioritise sustainable and cost-effective design and construction practices to maximise the longevity and efficiency of transportation infrastructure within budgetary constraints
Benefits Statement • Resource limitations may drive the adoption of cost effective and innovative technologies to optimise transportation operations and infrastructure, promoting efficiency despite constraints • Diversified funding sources and innovative financing models contribute to the sustainability of the programme reducing reliance on single revenue stream and enhancing overall resilience • Prioritising sustainable practices contributes to reduced environmental impact, aligning programmes with broader goals environmental conservation and resilience Integration of technology leads to improved efficiency, reliability and safety in transportation systems, providing long term benefits in terms of performance and user satisfaction

RESOURCE CONSTRAINTS		
Issue	**Consequence**	**Programme Response**
AFFORDABILITY & DOABILITY Huge potential programme of works, but constrained finances.	• Delayed in delivering proposed programme, affecting timelines and delivery schedules • Pressure on struggling communities • May necessitate a reassessment of project priorities with some initiative postponed or scaled down in favour of more financially viable option	• Weight low-cost solutions • Challenge the actual need and solutions for projects. • Council reviews its budget annually in the Ten-Year Plan/Annual Plan process, may adjust work programmes & budgets to smooth any fluctuations in the Ten-Year Plan revaluation amounts.
LAND USE The alpine terrain, extent of Natural Landscapes and Features protections as well as open space Limit urban development	• Constrains the number of alternative routes for roads or pipes. • Intensification increases asset density	• Develop criticality and resilience plans
LOCATION & SUPPLY CHAIN The terrain and remoteness add challenges to infrastructure investment and delivery.	• Higher cost, fewer tenderers	• Non transport solutions – mode shift, travel demand management • Smart procurement
WORKFORCE Workforce shortage impact market capacity to deliver infrastructure projects on time	• Vulnerability of workforce • Higher cost to entice • Lower skilled workforce	• Diversification initiatives in place

5.1.5. GOVERNMENT SETTINGS

Uncertainty and change caused by central government reform and other settings such as immigration and health service decisions. The uncertainty stemming from reforms can influence the overall direction and effectiveness of transportation initiatives.

Table 9: Government Settings

GOVERNMENT SETTINGS		
Strategic Response • Introduction of QLDC Reform Manager to keep oversight of change • Engagement and advocacy – this will be crucial from our elected members, involving themselves in policy discussions, providing insights and influencing decisions to align with local direction • Flexible planning – programme to adopt for flexible planning approaches, allowing for adjustments based on policies or funding priorities • Scenario planning – considering multiple potential outcomes of reforms, to enable us to develop strategies that are adaptable to different policy directions		
Benefits Statement • Improved efficiency – reforms may streamline processes, reducing bureaucratic hurdles and enhancing overall efficiency of transportation systems • Reforms often encourage collaboration between local, regional and central government agencies and community stakeholders, fostering a more integrated and cohesive transportation system		
GOVERNMENT SETTINGS		
Issue	**Consequence**	**Programme Response**
3WATERS REFORM	• 3Waters reform may impact debt headroom which leads to uncertainty around available finances for transport programmes	• Alignment of data with stormwater • Delayed investment
RMA Reform	• Changes to consenting etc	• Parking management Strategy and Management Plans Parking strategy.
NZTA Waka Kotahi INITIATIVES	• A huge number of changes place pressure on RCA's to undertake additional work. ONF, AMDS, new speed management etc. • Pressure on staff to undertake work without additional resources or funding • More complexities to work programmes	• Prioritisation, scenario and flexible planning • Utilise networks such as Te Ringa Miamoa to support this work

5.2. IMPROVEMENT ACTIONS – STRATEGIC ASSESSMENT

Improvement Actions – Strategic Assessment

1. Work with corporate strategy team to align with changes to strategic framework
2. Utilise monitoring programme to quantify assessments where possible
3. Work with Business case team for alignment

6. ASSETS AND ACTIVITIES – LIFECYCLE MANAGEMENT

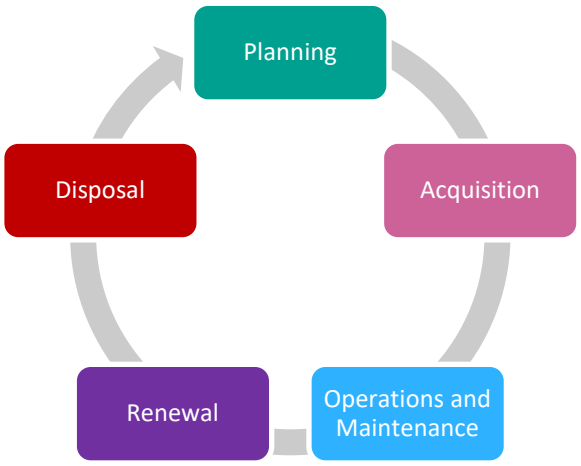
The Programme Business Case (PBC) section covers the portfolio of transport assets and activities, including the strategies and lifecycle management applied by QLDC.

Sections & 7 form the Programme Business Case

Lifecycle asset management is about considering all activity management options and strategies to deliver the agreed level of service and to inform decision-making for asset renewal, replacement, upgrades and disposal. With a move to activity management rather than just asset management this now includes focusing on the outcomes and benefits achieved through this planning. Effective lifecycle planning is about making the right investment at the right time to ensure that the asset delivers the desired level of service over its full-expected life, at the minimum total cost.

The lifecycle management plans detail how the Council plans to manage the network of assets and key activities at the agreed levels of service across the asset lifecycle shown below.

Figure 39: Asset Lifecycle



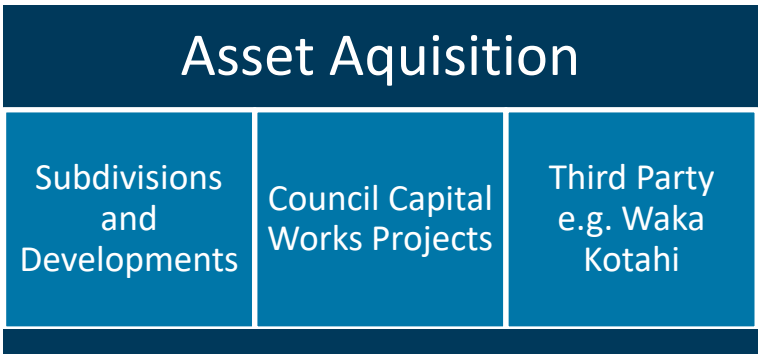
6.1. ASSET ACQUISITION

6.1.1. ACQUISITION PROCESSES

New assets may be acquired by Council as part of a Council Capital works project, subdivision or land development, or as part of a third party such as NZTA Waka Kotahi. These create new assets that did not previously exist or works which upgrade or improve an existing asset beyond its existing capacity.

Some of the Council projects are supported with external funding, such as NZTA Waka Kotahi (through the National Land Transport Plan or through Central Government initiatives such as the Climate and Emergency Relief Fund (CERF) Transport Choices, Infrastructure Acceleration Funds, or Tourism Infrastructure Fund. Others are undertaken by other Council departments such as Parks and Reserves for the roading team to manage such as when track are upgraded to Active Travel commuter routes.

Table 10: Asset Acquisition



6.1.1.1 CAPITAL PROJECTS

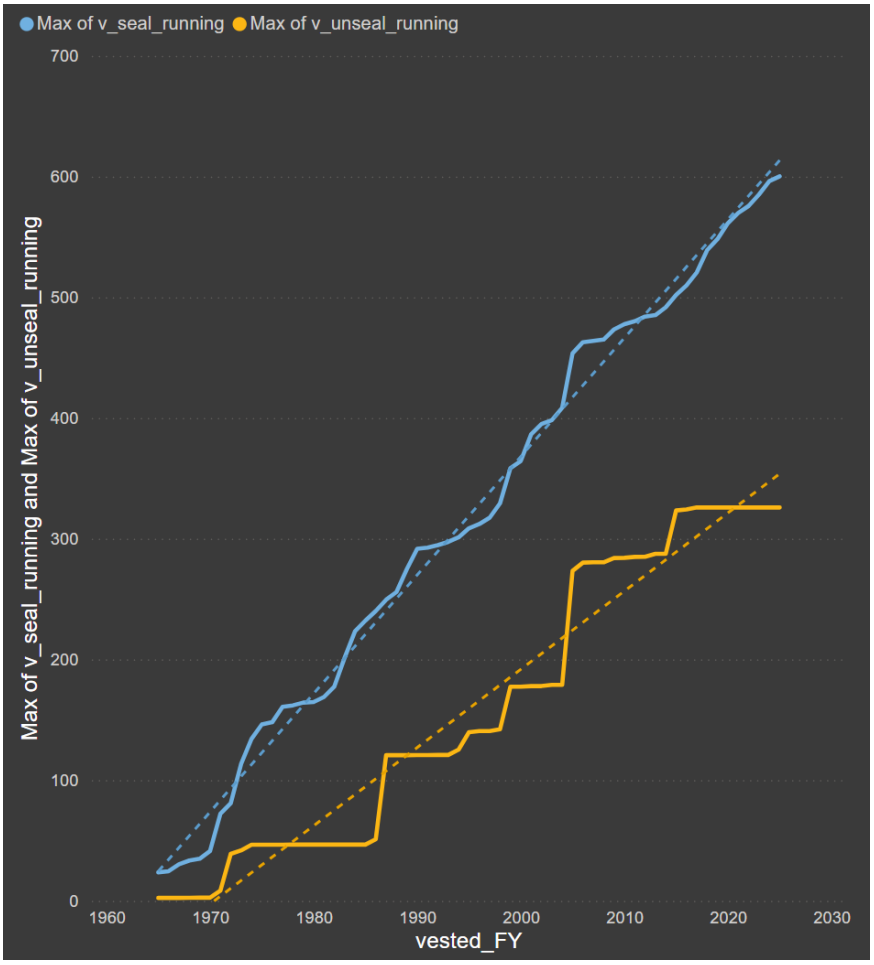
A large proportion of QLDC's asset acquisition is made up from the Capital Improvement Programme, as well as the Low Cost Low Risk Programme. These projects are informed from a wide variety of planning, political and community engagement processes, including:

- Master Planning and Strategies
- Annual plan submissions
- Community Associations
- Subdivision standards
- Political projects
- Engagement with other relevant Council departments over needs
- Asset network assessments

6.1.1.2 VESTED ASSETS

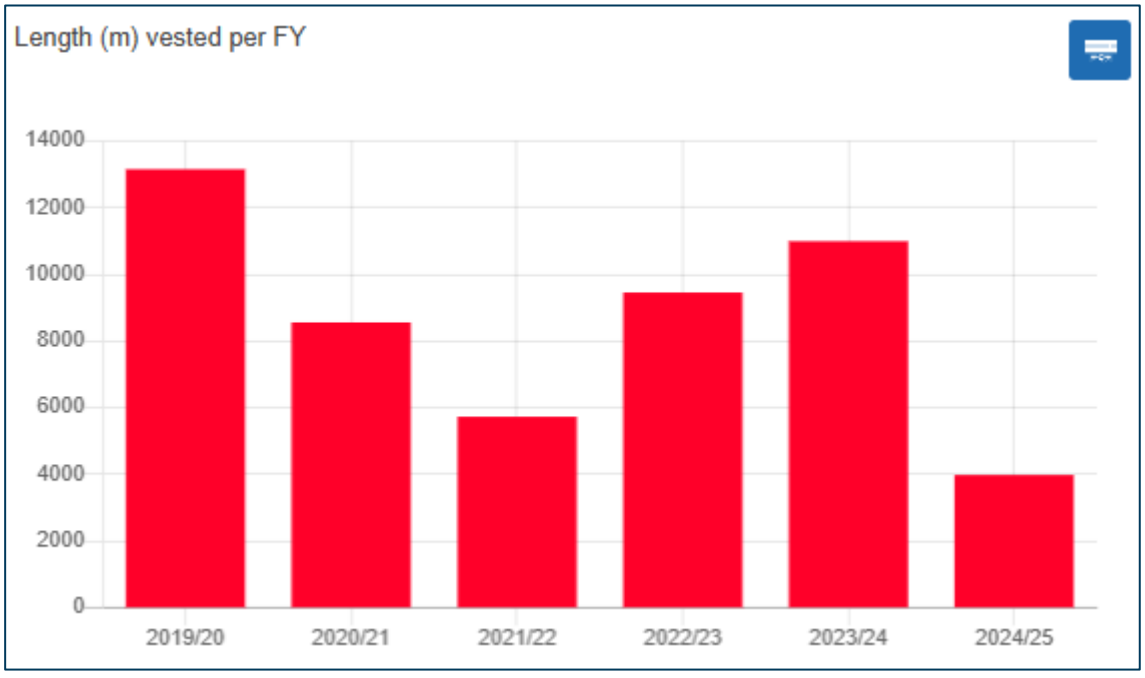
A large number of assets are acquired from land and subdivision development. Over the last few years there has been a concerted effort to ensure that the process is improved and the handover and receipt of warranties and as-builts and asset data is timely and accurate. QLDC now required delivery of transport data for RAMM import from the developers prior to 224c being issued. Council has seen a significant growth in assets over the last ten years.

Figure 40: Growth of road length by seal type Source: QLDC AWM



Vested last FY	Vested this FY	Prospective Roads
11K	4K	20K

Figure 41: Length of road vested per financial year (Jan 2025)



6.2. TRANSPORT ASSETS & ACTIVITIES

6.2.1. OVERVIEW OF NETWORK AND ASSETS

The QLDC transportation network consists of range of assets and activities that support a safe and multi modal network. These support key national, regional and local priorities which are reflected in our Strategic Context and assessments.

The QLDC network is a mixture of urban and rural roads with the majority of higher classification (collector and above) roads classed as rural which provide links between places or townships. The lower classification roads are largely urban, representing the access and 'place' function and there is a developing active travel network, mostly within the urban areas which will utilise our footpaths and cycleways. Entry to the district is via three key entry points; on State Highway 6 and 8, and the airport. Our local roads connect the community to residential, commercial or visitor destinations enabling customers to make their journeys.

This BCA AMP has been developed around our assets and activities and how they link to the current NZTA Waka Kotahi funding category's to deliver our customer outcomes.

The Programme Business Case in this AMP shows the journey we have started on and how we intend to increase our capability and capacity to deliver our services. Our generational approach to our AMP development will show further integration of these activities as we more directly understand the linkages between assets, outcomes and funding categories.

Table 11: ONRC Classification by Length and Demand 2023/24 (Source: Transport Insights, Jan 2024)

ONRC	Total Length (Km)	Urban (Km)	Rural (Km)	Sealed (Km)	Unsealed (Km)	Lane (Km)	Urban Journeys (M VKT)	Rural Journeys (M VKT)	Annual Total Journeys Travelled (M VKT)	Percentage of length
Regional	0.2	0.2		0.2		0.3	0.6		0.6	0%
Arterial	6.0	6.0		6.0		14	19.7		19.7	1%
Primary Collector	140	23	117	140		282	43.5	129.5	173.0	15%
Secondary Collector	203	67	136	159	44	404	52.7	43.1	95.8	22%
Access	234	88	146	111	122	408	21.7	14.4	36.2	26%
Low Volume	323	156	166	158	165	499	11.9	8.8	20.7	36%
Not Required	0.9	0.9		0.9		1.3				0%
Unclassified	0.3									0%
TOTAL NETWORK	907	342	565	575	332	1,607	150.2	195.8	346.0	

Table 12: Asset Details (Source: AWM database Dec 2024)

Asset*	AMP 18-21 Total	AMP 24-37 Total	% change
Sealed Road (km) **Unsealed Road (km)**	534 345	566 327**	
Total Roads (km)	880	893	+1.5%
Bridges and Structures (No)	99	100	+1%
Retaining Walls (No)	375	387	+3.2
Drainage Culverts (No)	4,899	4,943	+0.9%
Storm water Channels (km)	1,863	1,932	+3.7%

Footpaths (km)	315	349	+10.8%
Guard Rail (km)	35	39	+11.4%
Sign (No)	13,945	16,360	+17.3%
Streetlight (No)	4,241	5,925	+29.0%

*Please note that for 2024-34 the assets are described using the AMDS Data Structure

** Ballantyne Road Seal Extension

Figure 42: Urban/Rural Network (at MM 2023/24), (Source: Transport Insights, Jan 2024)

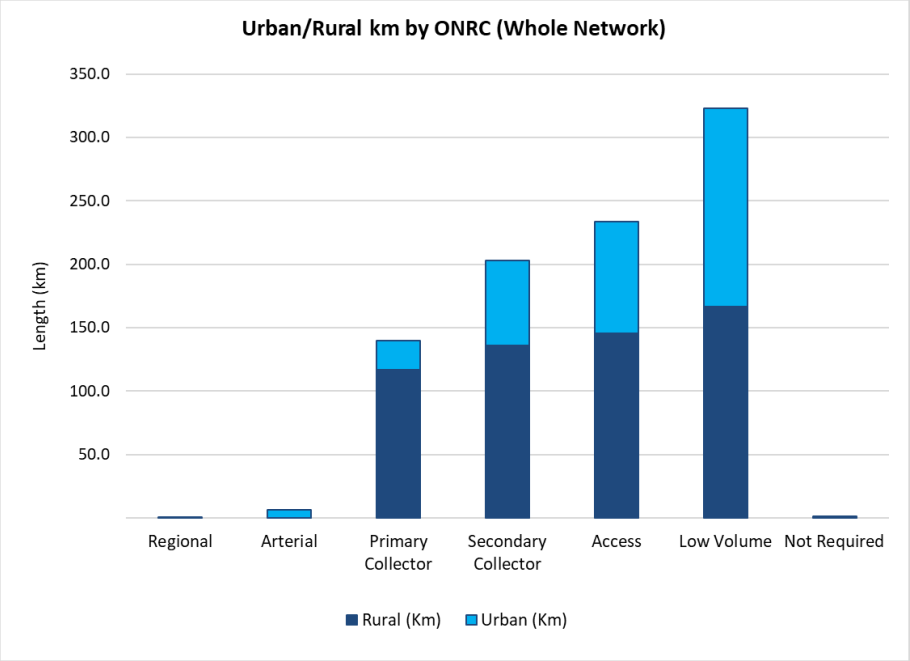
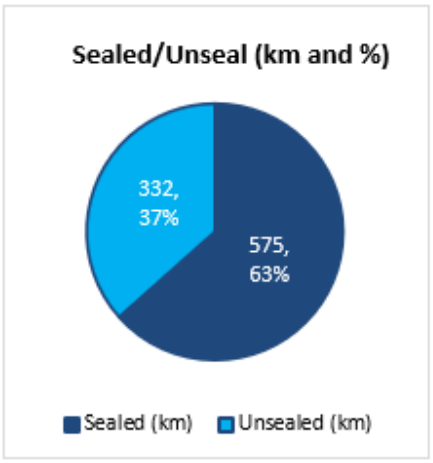
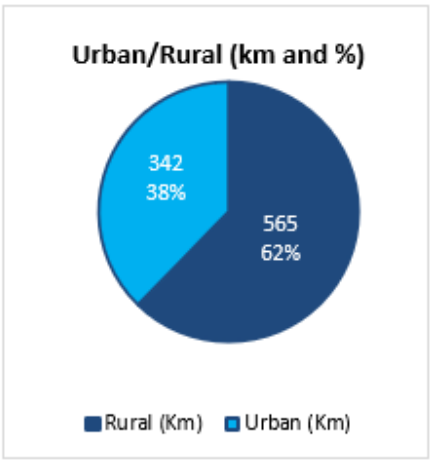


Figure 43: Network: Sealed vs. Unsealed | Urban vs. Rural (at 2023/24), (Source: Transport Insights, Jan 2024)



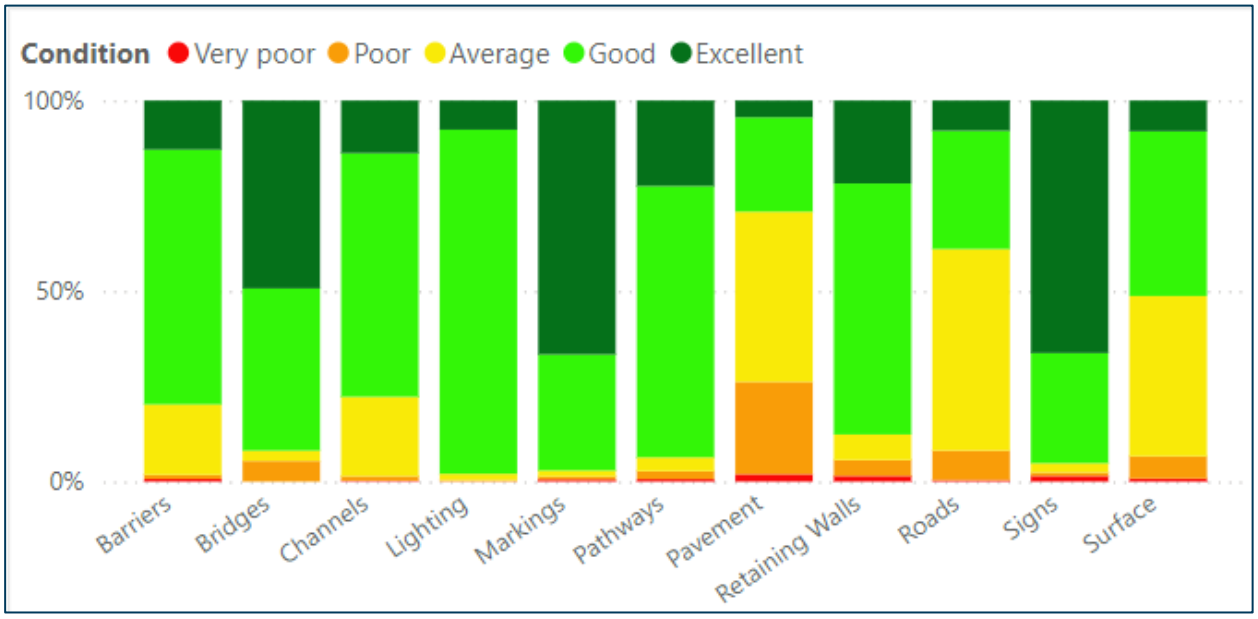


The following sections provide further detail on our network assets and activities, and further information can be found in the relevant appendices.

Asset Condition

As a relatively young network, with a high level of growth of new assets, the overall all condition of eh network is pretty good, of greatest concern is the pavement and surfacing network that is moving towards poorer condition. Given the climatic extremes especially the colder climates, makes the roading network sensitive to frost heave, which can result in rapid and extreme failures where water ingress has happened.

Figure 44: Overview of Asset Condition

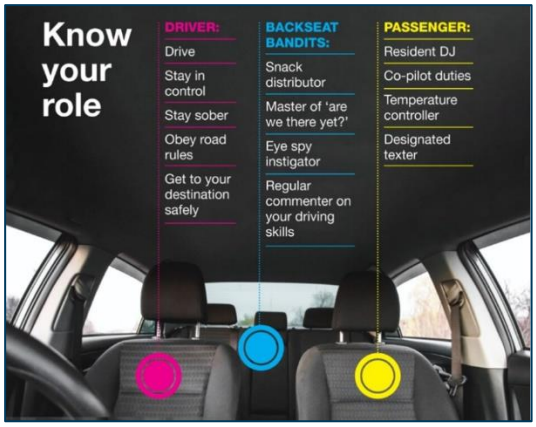


6.2.2. TRANSPORT SAFETY AT QLDC

6.2.2.1 INTRODUCTION

Safety outcomes are important for Queenstown-Lakes, with a clear line of sight from our strategic drivers, through to how we invest, manage and maintain our assets and activities: the Goverment introduced a new set of objectives that replaced Road To Zero, the'New Zealand's road safety objectives' that focus on safety roads, safer drivers, safer vehicles and resetting speed, along with guiding principles. QLDC also follows the internationally recognised Safe System approach ,and aligns with the World Bank approach 'What works and what does not work' that encourages improvementsin the roading system to recognise that people make mistakes, and that the system should be forgiving and reduce the likelihood of death and serous injury when crashes occur.

Figure 45: Know your role – Road Safety



QLDC are taking a coordinated approach to delivering the safety outcomes and integrating focus areas into our programme development where appropriate.

QLDC collaborates with a range of partners including Central Otago District Council, Police, Lions, Community groups, Age Concern, Plunket and internal teams to enhance road safety initiatives such as school traffic safety, bike ready education, older driver refresher courses, car seat safety, community events, high school education programmes and alcohol checkpoints.

6.2.2.2 ROAD SAFETY ACTION PLAN

This Safety section is an amalgamation of the QLDC Road Safety Action Plan (RSAP) and the AMP to create better line of sight between documentation that covers safety within Council. QLDC has historically had a disjointed approach to road safety and this approach is attempting to reflect a better safety strategy to encourage a change in QLDC practices to better align operational management, investment in improved physical infrastructure, as well as to support the people who use our network and to promote behaviour change.

This Road Safety Action Plan is following a best practice approach for collaborative planning to implement safety interventions. We are building better relationships with our local, regional, and national road safety partners, comprising the Accident Compensation Corporation, NZTA Waka Kotahi, Otago Regional Council, and the New Zealand Police.

If road safety was simple, it would be solved. Council has adopted the Safe System Approach, which recognises that people will make mistakes, but we as Council need to reduce the severity of those mistakes, we are doing this by reviewing speed in line with the new Setting of Speed Limits by working with the police highlighting high speed areas from our tube counts and assisting in more joint alcohol check points partnership with the local Students Against Dangerous Drivers (SADD) and the Council Road safety co-ordinator for long weekend check points.

This action plan represents Council's biggest area of road safety concern, the plan outlines what we want to achieve with our actions (the goals), where investigations can focus on Safety, one of the Goverments four strategic priorites for the transportation network by working with several agencies across the country, the mains one being NZTA Waka Kotahi, ACC, Police and Plunket to deliver our road safety action plan.

To do this QLDC will:

- Identify the crash risks within the district, including State Highways,
- Identify a programme of road safety education activities that will be delivered over the next three years to help reduce serious and fatal injuries,
- Work with the community to improve safety and wellbeing.
- Encourage collaboration on road safety initiatives with road safety partners.
- Align our Infrastructure improvements and speed management.
- Monitor the progress of the programme over NLTP period of 2024-2027.

6.2.2.3 OUR ROAD SAFETY PARTNERS

The Road Safety Action Plan and its programs are monitored internally and discussed at the lower South Island Joint Road Safety Coordinators meeting, where information is shared between Road Safety partners and provides opportunities for collaboration. QLDC also have 6 weekly catch ups with the local police to see where we can both add value to each other's work and discuss changes coming up in the Network, e.g., the Speed Management Plan, joint delivery of programmes – SADD police checks etc.

Figure 46: Road Safety Partners

Working with:

- Central Otago District Council on fatigue stops over long weekends supporting the Police and Lions.
- Police on school traffic safety training and thanking the primary school students at the end of year for their mahi on pedestrian crossings and kea crossings.
- Bike Ready education to make sure every child knows how to ride a bike.
- Age Concern to deliver refresher courses for older drivers.
- Plunket to assist in the education of car seat safety and safe travelling with young children.
- RYDA to high schools within the district and supporting the programme on site.
- SADD connecting and assisting Police at alcohol check points
- Central Otago Trust for delivering the Right track education programme

6.2.2.4 ROAD SAFETY EDUCATION PROGRAMME

Council provides community education to encourage safe travel behaviour. The objectives of the 2024-27 programme are to:

1. Reduce the number of crashes which occur on both state highways and local roads within the District, by targeting identified priority areas.
2. Reduce fatalities and injuries resulting from crashes.
3. Ensure that people feel safe when using roads for all types of transport modes.
4. Ensure that children feel safe travelling to school using active transport modes.

These ideologies are:

- **People are vulnerable** – our bodies have not evolved to withstand high-speed crash forces. In addition to this, humans lack the ability to naturally comprehend velocity.
- **People make mistakes** – this factor is present 24 hours a day, 365 days a year. We're naturally prone to be distracted and make bad decisions. We increasingly have our attention diverted by music, phone calls, passengers and events outside the car, so we must recognise that some crashes are inevitable, no matter what.
- **We need to share responsibility** – those who use the road system and those who design the roads and vehicles must share responsibility for creating a safe road system. It is not just the problem of 'the Council' or 'the NZTA Waka Kotahi'. There is no 'they' there is only 'we'. This is the community's problem and to achieve our vision, we must all take ownership of it. For this reason, this action plan deliberately focuses on the safety of local roads and state highways in our district.

Table 13: Road Safety Programmes

Type	Activity	Description
Advertising Education	Promoting safe behaviour around drinking, driving and drug use.	50% of all DSI's in the Queenstown Lakes District have alcohol listed as a contributing factor. Promoting sober driving, raising the awareness of substances and driving via QLDC social media channels.
	Promotions for visitor drivers	Visitor drivers lack awareness of the conditions and availability of key routes in our district.

Type	Activity	Description
	Right Car	Promoting www.rightcar.govt.nz to permanent residents, tourists, students and parents. Right Car highlights the safety features of a vehicle.
Education Event	Bike Ready	Teaching Tamaraki to be safe on the roads while biking. QLDC transport strategies encourage active travel, and modal choice for children travelling to/from school or a friend's house. However, this increases the exposure of children to vehicles, especially at peak times.
	Promoting walking and bus safety for all primary school students.	School numbers in our district is rapidly growing, this program focus on proactively teaching Tamariki to be safe on the roads whilst walking and using the school bus to and from school.
	Promoting scootering and skating safety for all primary school students.	There is an increased use of push scooters and skateboards in the school age community, promoting safe scootering, skateboarding to/from school and on local roads. Educating young children on road rules. There is an awareness that the Bike Ready skills need to be applied to this growing group **Figure 47: Promotion scootering and skating** 
	Drive my life	Offers those who have left school or facing barriers to get their driver's license.
	Ride Forever	Motor cyclists in the district are at risk on our network; the opportunity to upskill and improve skills and awareness, especially for riders who have re-started their motorcycling.
	Bike Education Training	QLDC's Quality of life survey found that the community had concerns with regards to bike safety in the district. There is an extensive network of bike tracks and trails along with on/off road cycle lanes across the district, many users found it dangerous getting to these trails from urban roads. In particular, the ability for cyclists to cross busy roads is of concern. **Figure 48: QLDC Giveaway Safety Training**  The 2023 Communities at risk register recorded that the QLD has a personal risk (DSI) of 19. This means that the number of deaths and serious injuries is of increasing concern and is a high priority for QLDC.

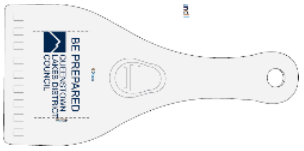
Type	Activity	Description
	Promoting car seat safety in conjunction with Plunket	Vehicle crashes are a leading cause of unintentional child fatality in New Zealand. It's important that we continue to reduce the risks by educating whānau and the community about the correct use and installation of child restraints. Between 85-95% of all restraints are incorrectly installed and/or used. Correct use and installation includes having the right child restraint for the child and vehicle, not used beyond expiry date etc. Most drivers are unaware they are making errors. Figure 49: Road Safety Car Seat 
	Promoting RYDA in high schools	Upskilling young people around the safety risks that come with getting your driving licence. Figure 50: RYDA Promotion 
	Winter Driving	Many parts of our community and visitors are not used to driving in our winter conditions. This is a proactive marketing and education campaigns to increase awareness and provide tools to improve safety in winter driving, and how to fit tyre chains to all vehicles. Figure 51: QLDC Ice Scraper 
	The Right Track Programme	Addressing recidivous drivers in our district, and neighbouring Central Otago District Council.
Roadside Education	Fatigue stops	Risk of fatigue to drivers our network is increased on public holidays due to long distances travelled and increased traffic numbers. Figure 52: Roadside Education 

Figure 53: Case Study – Benefits of translating information for culturally and linguistically diverse communities

Case Study

The benefits of translating information for culturally and linguistically diverse communities

To keep the community updated on winter road conditions across the cooler months, the QLDC Communications and Engagement team provides daily road and weather reports between 6.30am-7.00am. These are very well received by the wider community as they are engaging, fun and provide useful information to help drivers stay safe on the roads. However, all messaging is in English.

To better serve the district's diverse communities, QLDC decided to review, tailor, and translate the winter road safety tips available on the winter roading webpage into languages that represent our culturally and linguistically diverse communities.

To achieve this, QLDC worked internally to first gain an appreciation of the target audience and languages to translate information into. It wasn't a matter of simply taking the current content and translating it. It required a focus on the needs of the target audience – what do they know already – what do they need to know.

Once this was well understood, the original content was refined and reprioritised based on the importance of the safety messages rules and shortened for clarity. It was then ready to be sent for translation into seven of our most used languages across our district, including Tagalog, Brazilian Portuguese, Mandarin, Korean, Latin American Spanish, Japanese and te reo Māori.

Council also signed up to the MBIE Language Assistance Services in 2022, allowing customer service staff to offer telephone and video interpreting services to anyone who speaks English as a second language. The provides a further opportunity connect with our culturally and linguistically diverse communities.

During a cryptosporidium outbreak affecting the Queenstown water supply network in September 2023, Council translated a boil water notice information flyer into seven different languages to support our Māori and ethnic communities and continues to look for opportunities to translate other key information.

6.2.2.5 INFRASTRUCTURE SAFETY IMPROVEMENTS

QLDC have a safety deficiency database where all issues and requests are captured, assessed, and prioritised. It includes management of activities on the road which are detrimental to road safety such as dangerous trees (overhanging and falling onto carriageway), traffic management for roadworks and events, or emergency response.

The 21-24 programme completed numerous integral safety works in the busiest rural corridors. This included new safety barriers, road signs, markings, and other infrastructure improvements on the Crown Range Road, Cardrona Valley Road, and Wānaka-Mount Aspiring Road. Intersection upgrades at Hawthorne Drive/Red Oaks Dr/Cherry Blossom Ave, Capell Ave/Domain Rd, Aubury Rd/Anderson Rd, Aubrey Rd/Rata St and several pedestrian crossing points along the Schools to Pool path.

Figure 54: LCLR upgrade at Anderson Road Wānaka

QLDC's requested Low-Cost Low Risk programme to NZTA Waka Kotahi for the 24-27 period amounted to c.$16m, of which only $1.2m received funding through the NLTF24. This funding was specifically ringfenced to support contractual obligations for the delivery of Riverbank/Ballantyne Road roundabout.

In the QLDC December 2024 Full Council meeting, $6.2m of unsubsidised budget was approved for the 24-27 period for delivery of safety infrastructure improvements. QLDC are currently reviewing the original LCLR submission and prioritising items that can be delivered with the remaining local share. These infrastructure works will address road safety issues or support safe routes for all road users in the district, such as:

- Completion of the final stage of the Ballantyne Road and Riverbank Road compact roundabout upgrade.
- Delivery of significant improvements continuing on key urban and rural routes and their intersections across Wānaka and Whakatipu.

QLDC are looking to have a more strategic approach to addressing safety. This will take a programme approach to ensure that all identified projects are assessed and considered in alignment to our strategic outcomes. QLDC continue to deliver minor safety projects through our operational team.

6.2.2.6 SAFETY AROUND SCHOOLS

Figure 55: Queenstown Primary School

The Speed Limit Bylaw 2019 commenced the rollout of the variable speed limit reductions around schools district wide. This change aligned with the Ministry of Transport's Tackling Unsafe Speeds Programme and aims to improve safety for vulnerable road users, especially around schools.

QLDC undertook consultation with schools to understand their road safety concerns and identify specific issues. In the 2021-2024 programme all schools in the district had either, updated static speed signs, or variable speed signs installed. Going forward, we aim for a consistent approach to speed management and safety through physical infrastructure including by not limited to speed thresholds, delination and school road markings to complement the sign install works.

Our goal is to make school travel safer by promoting active, fun, affordable, and low-emission transportation options. We aim to achieve this by enhancing safety for all travel modes—walking, biking,

scooting, bus, car, etc. — through road safety education and improved infrastructure to protect and support all road users.

6.2.2.7 SPEED MANGEMENT PLANNING

Figure 56: Let's talk about safer speeds Source: Speed Management Plan Consultation Document October 2024.

Speed management is a key tool in making our transport systems safer, speed increases both the likelihood of crashes and the severity of crash outcomes, regardless of what causes a crash. A small change in speed makes a big difference, especially when cyclists or pedestrians are involved. Most crashes are caused by a number of contributing factors, but even when speed doesn't cause the crash, it is most likely to determine whether anyone is killed, injured, or walks away unharmed. QLDC consultation occurred in October 2023.

The Speed Management Framework and the Setting of Speed Limits Rule underwent a significant change in 2022. There is now an even greater change with the Setting of Speed Rule 2024.

Figure 57: People's safety is our number one priority. Source: Speed Management Plan Consultation Document October 2024.

Speed limits need to reflect both the likely risk of serious crashes on each road and the community's acceptance of these limits and the desire for change. Some locations such as on our highest-risk roads, roads with the highest numbers of active road users, and around our schools have been prioritised in the draft Plan for 2024-2027.

Setting of Speed Limits Rule 2024

In September 2024, the Government revoked and replaced the Land Transport Rule: Setting of Speed Limited 2022. This rule came into effect on 30 October 2024.

As per the NZTA Waka Kotahi website, the rule aims "to ensure speed limits on NZ roads are consistent, evidence based, and appropropriate for the type of road. It's designed for improved road safety, reduce harm and support efficient traffic movement, taking into account the needs of different road users by:

- Providing for an approach to speed management that considers speed limits alongside safety infrastructure and safety camera enforecement; and
- empowering or requiring road controlling authorities to set speed limits for roads under their control, generally after considering safety, economic impacts and the views of road users and the community; and
- setting out requirements road controlling authorities must comply with when setting speed limit."

For more information: https://www.transport.govt.nz/area-of-interest/safety/setting-of-speed-limits

Due to the expected changes from the Government with regards to the Land Transport Rule: Setting of Speed Limited 2024, work with regards to the Speed Management Plan for Queenstown Lakes was put on hold.

In December 2024, NZTA Waka Kotahi announced funding for the the Reversal of Speed Limits and School Speed Limits within the LCLR activity Class. QLDC applied for a total of $400k to assist with this work and will begin work on this in early 2025.

The remaining QLDC unsubsidised budget is currently still under review.

6.2.2.8 SAFETY ISSUES AND CRASH TRENDS

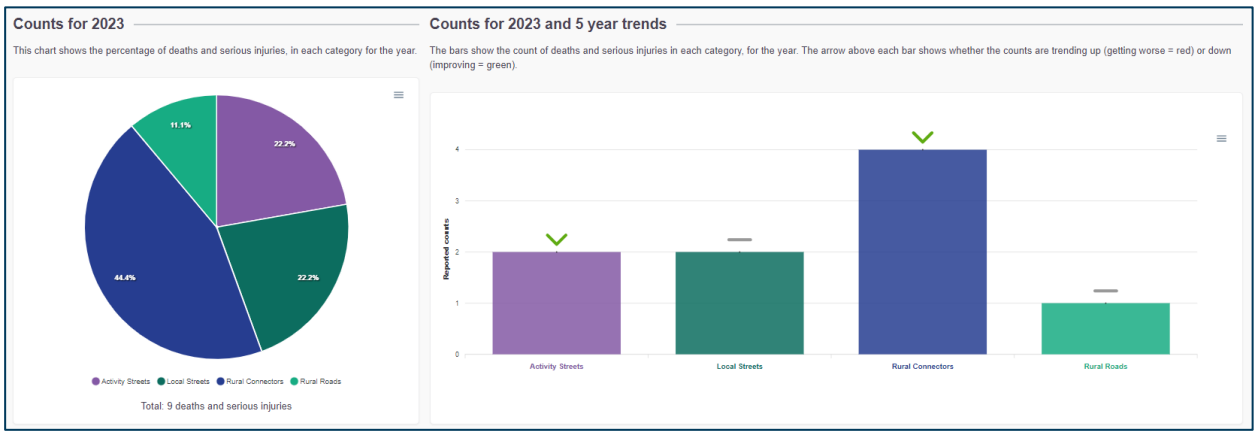
Road crashes resulting in deaths or serious injuries (DSI crashes) have a significant impact on families and communities. The goal is to reduce these crashes in line with the Road to Zero strategy, which will benefit transportation activities and the entire Council. The NZTA Waka Kotahi NZTA Waka Kotahi. Crash Analysis System (CAS) serves as the primary source for vehicle crash data in New Zealand and provides updates into Council's RAMM database, supporting accurate reporting through Transport Insights.

Figure 58: REG Road Safety Statistics Performance Report

The records in both CAS and RAMM list a total of 46 fatal and serious injury crashes on local roads within the Queenstown-Lakes District for the last five years (2020/21 – 2024/25 (to date 07.01.2025)).

One serious crash in 2020/21 (*) was located a significant distance away from the local road network, which means that it is not shown in some reporting systems.

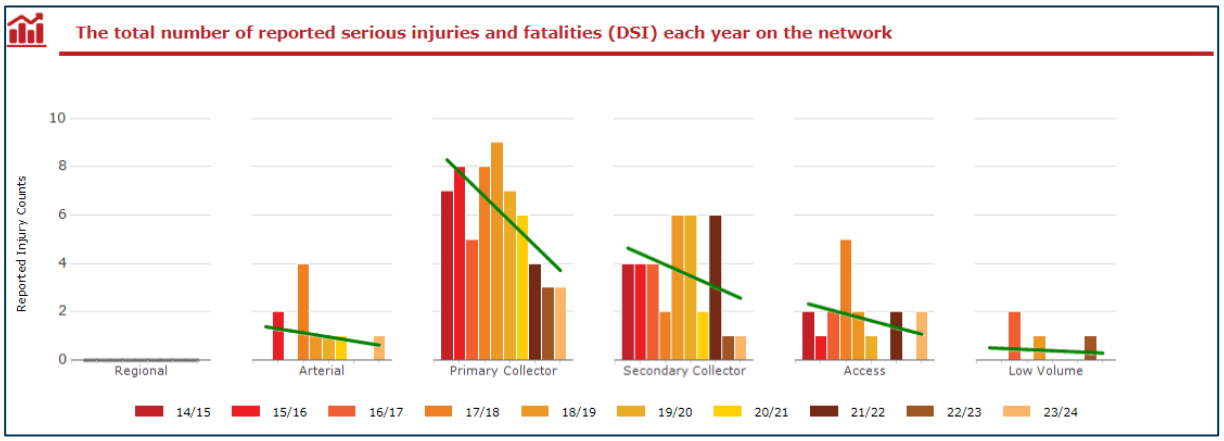
Figure 59: REG Transport Insights - ONF Safe Travel - Deaths and Serious Injuries 2023



QLDC has demonstrated a very significant improvement in DSi crash trends over the last 10 years. Comparatively high crash numbers prior to 2014 stabilised between 2014/15 and 2018/19 and have then reduced from 2019/20.

- The last five years represent a 25% reduction in fatal and serious injury crashes from the previous five year period, putting QLDC on-target to reach the previous Road to Zero outcome of a 40% reduction.
- The total of 5 DSi crashes in 2022/23 is a 67% reduction from the 15 DSi crashes recorded in 2019/20 – following the implementation of previous Road to Zero outcome and Council's original implementation of lower speed limits following the 2019 Speed Limit Review.

Figure 60: Transport Insights - ONRC Safety Outcome Measure 1 (2014-2024)



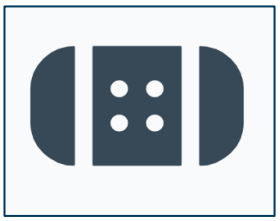
6.2.2.9 NUMBER OF FATAL AND SERIOUS INJURIES

The figure below shows 61 people have been directly involved from the number of fatal and serious crashes sustained on the Queenstown-Lakes District roads over the past five years. Although the majority of serious crashes in QLDC are single vehicles and single occupants, total numbers of injuries reflect the overall harm of DSi crashes are even greater than the "headline" number of crashes, or the road fatalities given in the "road toll".

Figure 61: Crash type and cause – Injury Severity DSi crashes (2020/21– 2024/25) on local roads. Source: NZTA Waka Kotahi Crash Analysis System

6 Fatal

40 Serious



209 Minor

6.2.2.10 CAUSES OF FATAL AND SERIOUS INJURY CRASHES

Reviwing the 2019/2020 to 2023/2024 CAS records show that 101 fatal and serous injuries occured within the district during this period.

Impairment through alcohol and drugs on Queenstown-Lakes's roads are identified as a key factor in injury crashes on our network at 39% .Speeds on Queenstown-Lakes roads are not considered the main factor in deaths and serious injury crashes on Council's roading network but contribute to the severity of crashes within priority areas. The need to reduce travel speeds on our highest risk roads – including some gravel roads – and where roads have high levels of active travel is a focus . Messaging applying to all roads across the network during poor/winter weather ("Drive to the Conditions") remains a focus within the District.

The 2019/20-2023/24 CAS records identify 101 fatal and serious injury crashes. Poor handling (33%), Poor observation (27%) and Travel Speed(20%) where the main contributing factors to DSI.

6.2.2.11 COLLECTIVE RISK

With the introduction of a number of road safety initiatives in New Zealand over the last 8 to 10 years assessment of road safety has introduced a risk-based approach to assessing the crash analysis, comparisons of types of roads on the whole network. This moves away from prioritising the treatment of serious crash sites or fatal crash "black spots" and aims to identify where different roads and crash types are over-represented in overall DSi crashes.

Collective Risk is used to calculate the total number of reported crashes per one thousand kilometres each year on the network. The introduction of the One Network Framework (ONF) enables the measure to be applied to either the whole network, or specific sections of the road network, at a national, regional, or local level.

Specific groupings (such as ONRC road hierarchy classifications or ONF "Categories") can be used to divide the network up into urban and rural roads, traffic volumes, and roads servicing different land use and road user groups. This allows – as an example – similar roads servicing CBD areas to be compared and allow comparisons between "shared spaces" and more traditional urban roads over time.

Whilst management of road networks in New Zealand transitions to One Network Framework categories, collective risk trends and 2022/23 performance has been used alongside both ONRC and ONF.

Figure 62: Transport Insights – Network Collective Risk (ONRC) Safety Outcome Measure 2 (2014-2024)

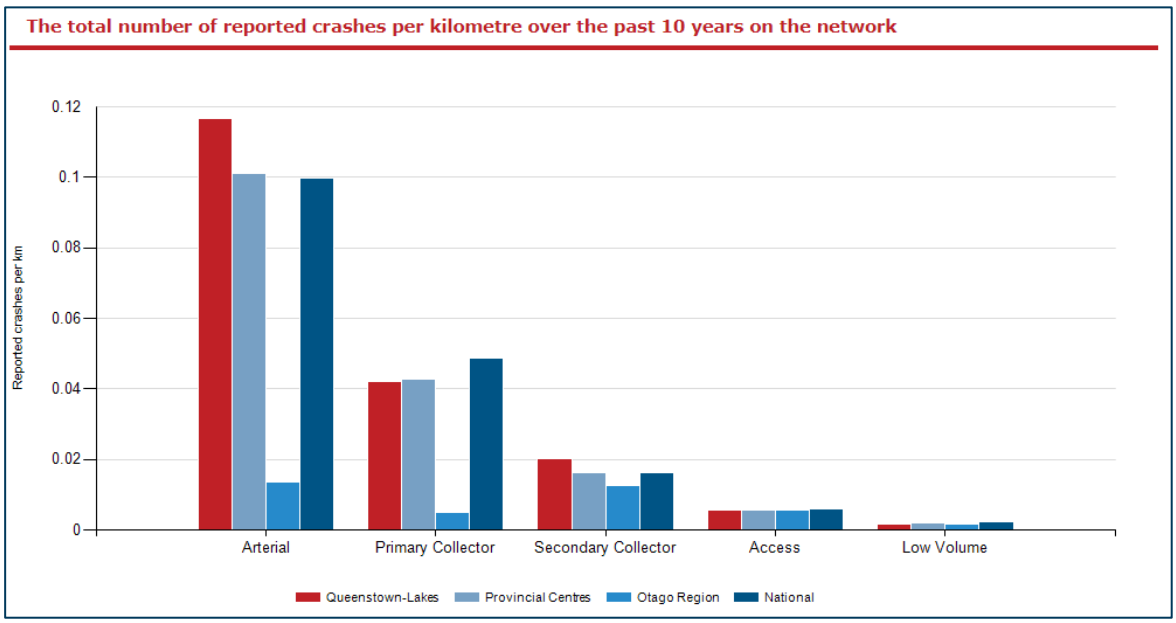


Figure 63: Transport Insights – Urban Roads Collective Risk (ONF Categories) Safety Outcome Measure 2 (2023/24)

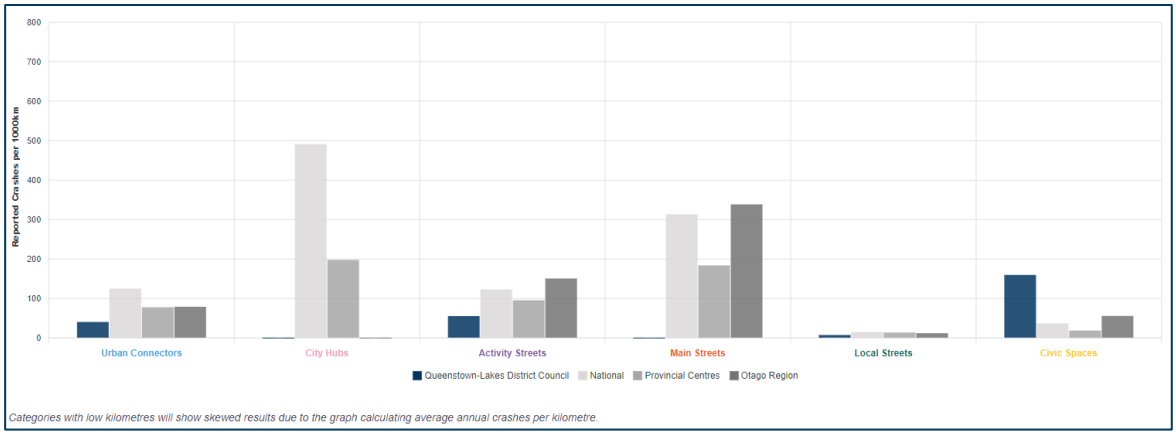
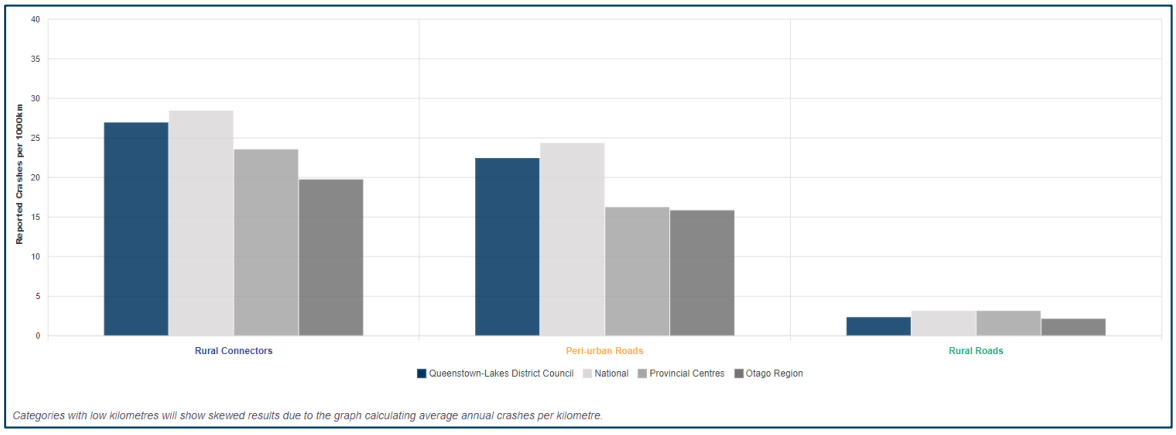


Figure 64: Transport Insights – Rural Roads Collective Risk (ONF Categories) Safety Outcome Measure 2 (2023/24)



- 2023/24 collective risk rating again shows the significant improvement in road safety made on Queenstown-Lakes District roads.
- Rural roads have benefited from the safety programmes introduced over the last five years, including the reduction in speed limits from 2019/20. Safety measures for QLDC's rural road

network now suggest that safety performance is in-line with similar roads across the Otago region, and comparable national peer group networks.

- The higher collective risk indicated against some of our 'Civic Centres' (our CBDs) road categories in 2023/2 will not yet have accounted for the effect of the changes in the Queenstown CBD to "shared space" and lower speed environments.. QLDC will be monitoring this to ascertain if the benefits will be realised.

As this is still a relatively new method of analysing and comparing network-wide safety performance, further work to understand higher - or above-average - risk ratings is included within the Improvement Plan for the 2024-27 AMP period.

6.2.2.12 COMMUNITIES AT RISK REGISTER

The Communities at Risk Register provides insight into communities of road users that are over-represented in terms of road safety risk. The register highlights personal risk to road users by ranking communities by local Road Controlling Authority (RCA) area, based on 14 'areas of concern'. The register provides an assessment of High and Medium concern as part of the national picture, but also allows for trends to be investigated against the 73 RCA's included in the Register.

The tables and commentary below provide analysis of the continued improvements QLDC are making in Road Safety and identify the highest concern categories from the Communities at Risk Register 2023. These are based on specific crash type descriptions, which are over-represented in the fatal and serious injury crashes on the network. Five years ago, Queenstown-Lakes District was ranked in the top half of all RCAs for 10 out of the 14 crash types. This has reduced significantly since 2019, with the overall risk of being involved in a fatal or serious crash now ranked amongst the lowest-risk RCAs.

6.2.2.13 VULNERABLE USERS (CYCLISTS AND PEDESTRIANS)

Cyclists are identified as a "High Concern" priority measure for Queenstown-Lakes District within the Communities at Risk Register. The methodology used for collecting data is based on ACC/hospital admissions rather than CAS crash data. As the District experiences a high level of recreational off-road cycle use and trails cycling in the district, this results in overall risk being considered in relation to all cycling activity, not just the risk of cycling on our roads.

Risks to pedestrians being involved in serious crashes in Queenstown-Lakes has also remained at around a median level when benchmarked across the whole of New Zealand Cyclists and Pedestrians have been involved in 30% of the fatal and serious injury (DSi) crashes on Queenstown-Lakes district roads. These are typically occurring on urban roads and designated areas (car parks, accessways to facilities, and managed recreation areas) from CAS data. More detailed information is provided below.

Figure 65: Educational campaign for Road Safety

With our move towards a more active travel approach and increase in active travel. It is important to QLDC that users feel safe. Programmes are being developed to segregate users where possible and will address key points of interactions between general traffic and those more vulnerable.

In terms of risks to both Cyclists and Pedestrians, QLDC (alongside NZTA Waka Kotahi) have developed a Mode Shift Plan, Better Ways to Go (2022). The active travel network is being developed as a priority for both travel demand management and addressing congestion issues on the network. The key aim of these investments is to make walking and cycling safer and more enjoyable and improve the perception of

safety for road users on bikes, scooters, or on foot. The changes already made are clearly demonstrated by the increase in volume of cyclists of all ages on our roads and trails – both for commuter and recreational journeys. QLDC is committed to deliver cyclist training in schools as well as education programmes to raise awareness to all road users.

Table 14: Vulnerable Road user DSi crashes (2018/19 – 2022/23)

Crash types	Number	Percentage (%)
Cyclist crashes	8 *	13.11
Pedestrian crashes	12 *	19.67
Motorcycle crashes	12	19.67
All other crashes	32	52.46

** Note: One serious crash between cyclists and pedestrians are counted in both crash types*

Cyclist and pedestrian crashes on all sections of our District network are identified as a "High" priority for the council. There have been 18 fatal and serious injury crashes of this type on Queenstown-Lakes District Council local roads, resulting in 18 seriously injured casualties, between July 2018 and June 2023. In each of these crashes, the serious injury sustained by the crash victim could have had a far worse outcome. Reviewing these crashes alongside other crash factors shows:

- 12 of the 18 crashes occurred between October and March
- 12 of the 18 crashes occurred in urban and/or built-up areas. Six occurred on rural roads, including four within off-road car parks, facilities access areas, or access roads
- 12 of the 18 crashes records that the crashes occurred outside of road intersections, either on a "mid-block" road section or the approach to an intersection
- 10 of the 18 crashes occurred on Friday, Saturday, or Sunday
- 10 of the 18 crashes were recorded as at least one vehicle, cyclist or pedestrian involved in the crash failing to notice another person involved
- 10 of the 18 crashes record either inappropriate speed, overtaking, or illegal movements as a factor – or where driver misjudgement or loss of control contributed to the serious injury crash
- Six of the 18 crashes occurred during the hours of darkness
- Five of the serious injuries for this crash type involved people aged between 15 and 29. Two crashes involved children under 16
- Two of the 18 crashes were recorded as being on an unsealed road sectionNone of these crashes recorded extreme weather or winter conditions as an environmental factor.

The number of serious injuries or fatalities for vulnerable road users are too small when split by classification to develop a meaningful trend. Over the past five years vulnerable road user crashes have been a significant proportion of the total fatal and serious injuries (around 30% of all DSi crashes). Although numbers can change significantly from year to year, there is some evidence to suggest that the serious crash rates are reducing, noting specific focus on road safety outcomes for this group of road users at a local and national level.

6.2.2.14 YOUNG DRIVERS AND OLDER ROAD USERS

Young Drivers (aged 16-24) have also historically featured as an area of concern in terms of local road safety. QLDC has been working with NZ Police and other agencies to bring together various public campaigns, including Driver Expo events. The Communities at Risk Register 2023 reports a sustained improvement in safety outcomes for young drivers in Queenstown-Lakes.

Crash data for the last five years records 16 fatalities or serious injuries sustained by Queenstown-Lakes Road users in the 16-24 age group.

The risk register has highlighted that we may have a potential negative trend developing for the risks to Older Road Users (aged 75 and above). QLDC ran a pilot "Elderly Driving" workshop in Wānaka in early 2019, another in the Whakatipu with a refresh being completed in November 2020 in both Wānaka and Whakatipu. With the objective being to build the confidence of senior road users and increase their knowledge of road code changes, safe driving practices and other transport options available.

6.2.2.15 MOTORCYCLES

Whilst the safety of motorcyclists (including moped users) in Queenstown-Lakes is showing a significant improvement in terms of overall risk, motorcyclists are still significantly over-represented in the numbers of road users killed and seriously injured on our roads. In 2022 motorcycles represented around 0.9% of the total Vehicle Kilometres Travelled in New Zealand (400 million VKT).

Figure 66: Motorcycling Safety Giveaway

60% of the fatal crashes in QLDC over the last five years involved a motorcyclist, and Council's safety improvement programmes on roads with high motorcycle use, such as the Crown Range Road or Glenorchy Queenstown aim to improve this outcome. A significant recent investment in guardrail with motorcyclist attachments aims to improve survivability rates for certain crash types and this will be monitored. This is in conjunction with targeted road safety promotion and education programmes.

Figure 67: Road Safety

6.2.2.16 CRASHES AT INTERSECTIONS

Intersections on our busiest rural roads and in our urban centres have benefited from the previous safety programmes and infrastructure upgrades introduced over the last five years, including the reduction in speed limits in 2019. Safety measures for QLDC's rural road network now suggest that safety performance is in-line with similar roads across the Otago region, and comparable national peer group networks.

Crashes resulting in death or serious injury at intersections have reduced significantly over the past 5 years, despite increases in traffic volumes across our network.

6.2.3. NETWORK AND ASSET MANAGEMENT (NAM)

6.2.3.1 INTRODUCTION – NAMS STRATEGY

QLDC is committed to following best practice and undertaking evidence-based decision making. This translates into investment in Network and Asset Management (NAMS). Our constrained and increasingly urbanised network faces many problems seen in bigger and more metro networks. Benchmarking the costs of network and asset management shows QLDC to higher than the peer group and is more comparable to networks which that are fully urban. This is explored further in section 7.

In order to effectively manage and operate our network, QLDC have focused investment in data collection, condition and demand monitoring, modelling and analysis.

The pace of growth has been substantial, pre-COVID-19 QLDC was about 7 years ahead of where we thought we would be, and this is particularly reflected in our traffic numbers. We have had to invest in evidence and data to understand the impact this demand and usage has and will have and to ensure our programmes meet appropriate levels of service.

Our investment in NAMS is clearly aligned to our strategic assessments and our Continuous Programme problem statements. Changes in demand, our growing asset base, urbanisation, our challenging and constrained environment within escalating costs means we need to ensure our network knowledge is continuously maintain and improved.

The rapid growth has changed our network; the number of developments is consistently increasing our network (12km in 2019/2020). This along with urbanisation and intensification has increased asset numbers and density, and the network is becoming more complex.

QLDC have focused on a corporate approach to growth projections, spatial planning, master planning, modelling, network operating frameworks, customer engagement, more frequent data collection, traffic and multi modal counts, condition assessments. The move towards the One Network Framework will also make additional demands on data inputs. As our renewal programming and modelling improves, and expands into our asset classes, our data inputs must improve as well.

The move to the business cases process and the increasing number of capital projects has meant that asset management data and processes have been under pressure to support data collection and evidence capture. Building baselines on key aspects such as parking occupancy, modal splits, multi modal movement monitoring, congestion, and travel time have all been built into our data collection process – alongside traditional asset and condition data. There has not been a lot of provision from the capital projects, , so our operational budgets have taken the burden. QLDC have also been supporting the State Highways data monitoring through Way to Go collaboration. The State Highways have been unable to contribute the existing travel time monitoring, so QLDC have been providing the operational inputs. QLDC Road maintenance contract overheads are held against the NZTA Waka Kotahi NAMS work category and have faced rising cost escalations.

6.2.3.2 DEVELOPING OUR EVIDENCE BASE

Part of QLDC's approach is to develop knowledge of our network and how it is being used. Over the last 2-3 years QLDC have made some major improvements in data collection and updating of its asset register (RAMM). This is evidenced by the significant increase in the REG Data Quality score. Further actions are noted in the improvement plan:

- Large effort to improve data inputs and processes and document these processes.
- Move from visual surveys to repeatable machine surveys i.e. High Speed Data (HSD), SCRIM, Network FWDs, MSDs and better oversight of Inspection data (All Faults).

- The HSD is now being used for multiple activities showing good value for money. Multiple years of surveys is creating deterioration curves to be used in dTIMs and drainage renewals. Geometry is being used to review no passing lane marking and curve warning signs and to undertake slope corrections on our steep roads. Also utilising videos for asset data updates for signs and lines.
- Commenced audit of historic records i.e. rehabs, reseals, new developments, historic FWD and test pits
- Drawing on NZTA Waka Kotahi NZTA Waka Kotahi RAPT process for better field validation of programmes.
- Utilising Downer IMMS to identify gaps in process and how to fill those gaps.
- Developing use/skills in Juno viewer for analysis and field validation.

6.2.3.3 ASSET MANAGEMENT DATA STANDARD

In late 2023, QLDC migrated our RAMM data to the new National Asset Managment Data Standard. This will support consistent data across New Zealand. QLDC were an early adopter and have made significant contribution to improving the standard, developing an improved process and sharing our learnings and supporting our peers.

6.2.3.4 REG - TE RINGA MAIMOA DATA QUALITY

The REG Te Ringa Maimoa data quality report indicative scores shown QLDC's continued data quality improvement continues. Since the data quality reports were introduced, QLDC has seen a huge increase in Data Quality Scores, even with the growing number of data tests. QLDC have prioritised data quality and have staff dedicated to driving data quality.

Figure 68: Data Quality Progression (Source: REG Transport Insights, Dec 2023)

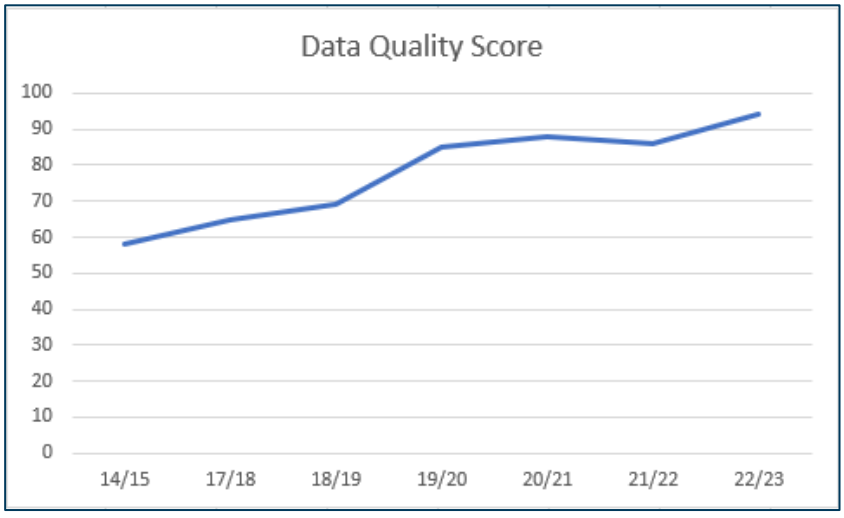
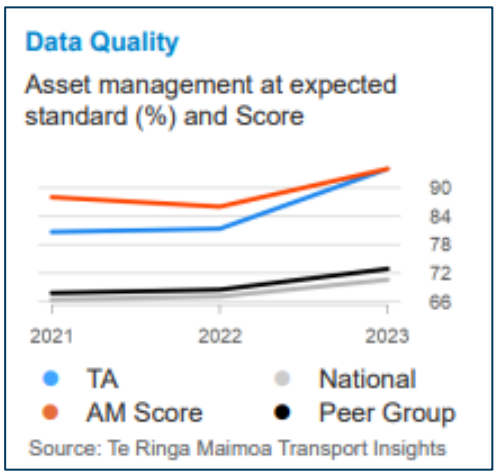
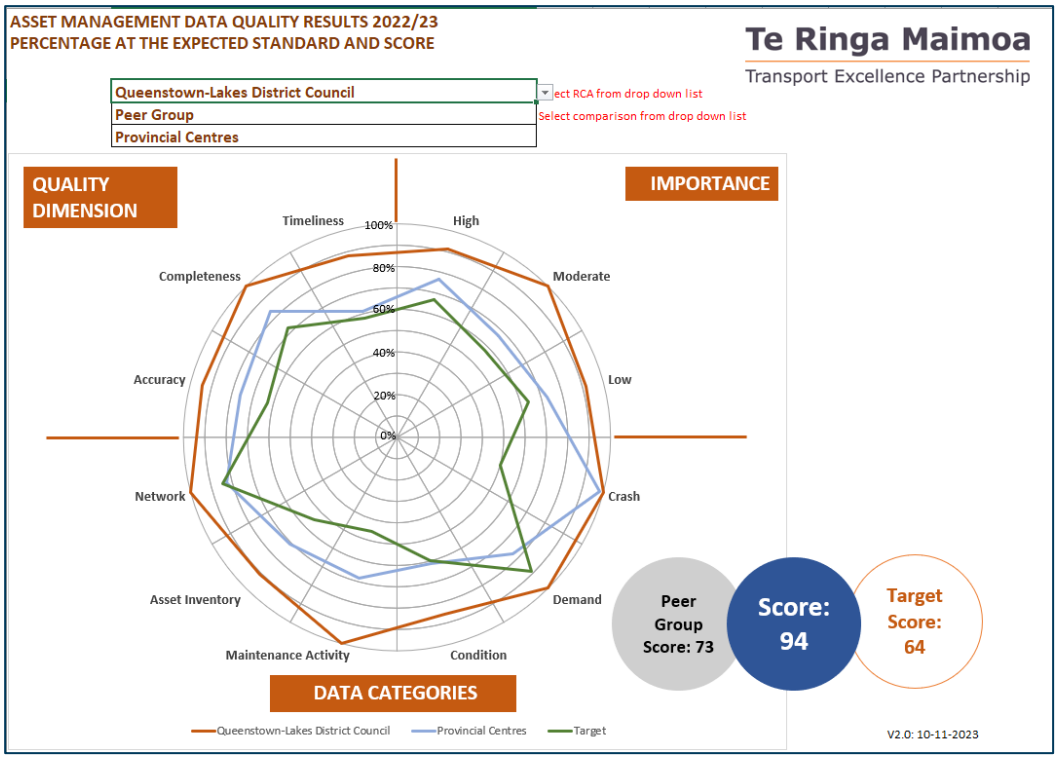


Figure 69: Data Quality Score Comparison (Source: REG Transport Insights, 2022/23)



The figure below demonstrates that QLDC are well above data quality expectations for our peer group and target expectations.

Figure 70: 2022-23 REG DQ Score. (Source: REG Transport Insights, Dec 2023)



6.2.3.5 MOVEMENT / TRAFFIC MONITORING

QLDC have developed a traffic counting strategy and an updated traffic counting programme to ensure that we are undertaking the appropriate level of traffic data collection needed to support business processes and providing value for money. The strategy has a mix of core monitoring (including three permanent and seasonal) and a number of rotational sites. In response to our changes in growth and demand, QLDC update our traffic estimates annually.

We are exploring a number of different technologies and multi modal demand and usage data collection.

- Radar trial on Hawthorne Drive

- Trialling video analytical surveys with our CCTV Contractor.
- QLDC are exploring the use of video cameras along with artificial intelligence software for capturing and analysing traffic and pedestrian movements. An initial exercise is being carried out to provide evidence for a local business case and the methodology is being developed to explore potential for wider counting. QLDC have had discussion with NZTA Waka Kotahi to try and maximize the video technology being used by NZTA Waka Kotahi and adapt it to the Queenstown Town Centre.
- With QLDC's increased focus on mode shift and development of active travel routes, it is becoming standard to ensure that monitoring is considered part of those projects, we now have eight fixed count sites on our active travel routes counting pedestrian and cycles. Council have three temporary counters that are moved around the district to pick up pattens before fixed counters are installed.

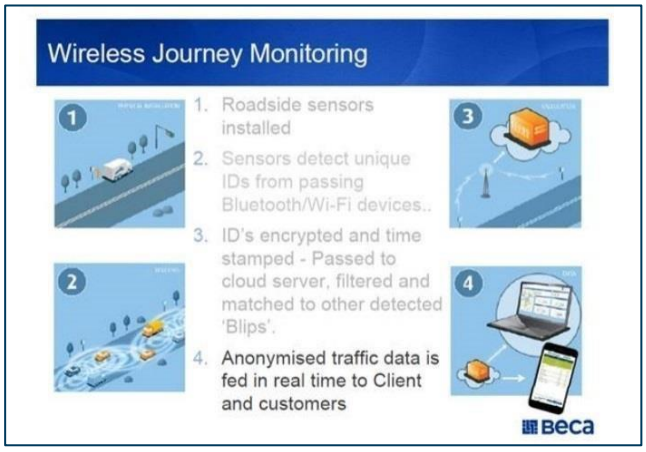
  QLDC are in the process of developing a cycling monitoring programme for the network, monitoring the routes with a NZTA Waka Kotahi approved technology to gather the before data. We are doing this by having strategically placed permanent automatic count stations which are supplemented by other temporary count stations that feed into a central dashboard.

Figure 71: Interactive demand monitoring totem on Frankton track

6.2.3.6 TRAVEL TIME MONITORING

QLDC along with NZTA Waka Kotahi have invested in a system called Blip Track which picks up blue tooth sensors from cars. These sensors are at various locations along some parts of our network, both Local Roads and the State Highway. They use an anonymised algorithm to calculated journey times as well as look at origin and destinations - we can use this to understand journey choice.

Figure 72: Wireless Journey Monitoring



The difference in journey time has been calculated from actual journeys made before and after the changes.

Potentially this information can be linked up to a Variable Message Sign (VMS) and provide customer with real travel time information such as time to the airport, or warning of traffic incidents which may cause delay.

6.2.3.7 INTELLIGENT TRANSPORT SYSTEMS (ITS)

The Ministry of Transport's Statement of intent envisages that Intelligent Transport Systems (ITS) are revolutionising transport globally, and these technologies offer some of the best prospects for improvements in safety, efficiency and environmental outcomes. Options are explored in the Intelligent Transport Systems Technology Action Plan.

The Transport Agency Position Statement on Intelligent Transport Systems identifies specific investment areas for ITS and QLDC are striving to explore these methodologies. High priority ITS investment areas include:

- Mechanisms for collecting quality data about the use of the network
- Better-quality data to drive better operations, planning and investment
- More active network management
- Mechanisms that enable the delivery of accurate information to travellers to promote smarter transport choices.

QLDC are exploring options for broader ITS management through the Whakatipu Way to Go Programme and the Queenstown Master Planning. This is looking at options including an operations centre which monitors CCTV, webcam, traffic, parking and will be used for optimisation of the network. This will include feeds into and from the Wellington Traffic Operation Centre (WToC) which currently monitors Traffic Lights on the state highway and shortly the local road traffic lights.

As part of the Alliance a version of the Queenstown Traffic Operations Centre will be initiated, in the first instance to management the temporary traffic management required during the Queenstown Centre Street upgrade, arterials and NZ Upgrade programme of works.

6.2.3.8 DEVELOPING AND TRIALING NEW TREATMENTS/ MATERIAL SELECTIONS

QLDC is exploring the opprtunity to use different treatments and technologys. A range of options are being explored:

- Unsealed road clay blending trials
- Dust suppression options
- Snow and ice treatment such as CMA / NAC instead of the traditional grit. – Successful trials in Arrowtown in winter 2020-22 led to reduction of the use of grit being expanded to a wider Whakatipu basin.
- SCRIM solutions
- Bitumen rejuvenators
- Epoxy chipseal trial with NZTA Waka Kotahi NZTA Waka Kotahi State Highways (Summer 2023)

6.2.3.9 CROWN RANGE WEATHER STATION AND WEBCAM

QLDC installed a meteorological weather station and webcam at the summit of the Crown Range Road. This filled a significant gap in timely and accurate weather information for the Crown Range and follows the One Network philosophy by adopting the approach used by State Highways. Increased user numbers and the need to ensure safe winter access across the Crown Range to Cardrona, Wānaka, and local commercial operators requires improved information for making safe and timely calls for travel planning and ensuring the road stays accessible.

Accurate data recording and graphing of precipitation, temperature, humidity, wind speed and direction is now common practice in alpine zones for public safety. This information enables administrators and technicians to make road and public safety decisions with accuracy beyond “seat of pants” methods by watching trends and responding to rapid changes.

The combination of local expertise, regional Met Service forecast and accurate local mountain information will provide public, road management and crews with the assurance they have the highest level of decision-making possible. The addition of the camera will allow road users to access visual data in making travel decisions. This has already been proven to be of significant benefit on the Milford Road. This has proved very popular with social media.

Figure 73: Image from the Crown Range Web Camera

Weather Station Benefits: Multiple user access to the weather station and camera would enable each user group to make pro-active decisions and avoid bottle-necks through an early warning capacity.

Technical Benefits: Weather data trends are one of the most beneficial tools especially with temperature change for road icing and wind for inclement driving in snow-storm conditions.

Emergency use: The value of having a network of weather station information through the region is vital for emergency services such as helicopter responses to mountain incidents both from Queenstown, Wānaka and Dunedin for urgent patient response.

6.2.3.10 IMPROVING OPERATIONAL ASSET MANAGEMENT

Following a Road Maintenance Contract Review in 2020, QLDC are working closely with the road maintenance contractor to improve operational asset management and thus service delivery. This has focused on reviewing the Maintenance Interventions Strategy and Maintenance Management Plan.

Utilising technology to assist in network management, developing IT solutions to assist with network management:

- Integrating RAMM with our Enterprise RFS system TechOne enables 'Requests for Service' to be entered by QLDC Customer Service team, entered in the corporate system and the data is automatically transferred to RAMM where it can be almost instantly received by the maintenance contractor. This also works in reverse, so once RFS have been addressed, any actions can be sent back to TechOne.
- Integrating RAMM with our Enterprise Finance system. Monthly maintenance contract claims are entered into RAMM and can now be easily transferred to the QLDC finance system.
- Exploring options to more easily access RAMM data by having a seamless link into our Corporate GIS system.
- Working with Downer our Road Maintenance Contractor to continuously develop and embed the Maintenance Management Plan

6.2.3.11 TECHNOLOGY

Technology is making rapid changes to the way people connect and travel, and the range of transport choices is increasing. QLDC strive towards providing an integrated and multi modal transport system, and technology is a key player. Technology provides opportunities to address our transport issues in new ways. Understanding the impact and opportunities that disruptive technology bring, such as micro mobility and Mobility as a Service (MAAS) will help us achieve our outcomes. Pre-COVID-19 QLDC were working with Lime Scooter to run a trial and QLDC was an early MAAS trial in the app Choice.

NZTA Waka Kotahi's Technology Action Plan states that "it is the use of fully autonomous or driverless vehicles that may have the greatest potential, in the long term, to revolutionise the concept of transport. Such vehicles could have profound implications for road safety and provide new opportunities for people to travel who currently are not able to (for example because of age or disability). Demographic changes in the future, with an increasing number of elderly people, will make this particularly important. They could also further increase the efficiency of the road network and reduce emissions by being programmed to drive in a highly efficient way."

Figure 74: Technology - Driverless Vehicles

In the context of the Queenstown, Autonomous Vehicles (AVs) are likely to have a role in first mile/last mile public transport trips especially for parts of the network which may be difficult to service such as the hill suburbs. The integration of AV and public transport is already emerging through trials elsewhere in New Zealand and internationally.

Potential applications for AV trials with relation to the activities in the Queenstown Integrated Business Case Recommended Programme include servicing hotels or other key destinations from the:

- Mass Rapid Transit hub
- Frankton ferry terminal

6.2.3.12 ELECTRIC VEHICLES

QLDC has been working with the New Zealand Electric Vehicle Club "Leading the Charge". We have installed one fast charger in Ardmore Street (Wānaka) with two dedicated Electric Vehicle (EV) charging parking stalls, and two fast chargers in Athol Street (Queenstown) car park with two dedicated EV charging parking stalls. Council is looking to increase this with another four charging stalls that could be serviced by the two charges. Glenorchy has installed a fast charger on Ngai Tahu property, which QLDC helped facilitate. A number of privately installed charging facilities that are available for the public to use services the district and this in itself demonstrates once of the challenges of technology, as a variety of people are installing and providing this technology with varying approaches.

As an organisation, QLDC is delivering on the Zero Carbon Communities principle of Vision Beyond 2050, and will replace most of its existing vehicle fleet with 100% EV's. Currently half of Councils fleet are Electric Vehicles (30 vehicles), once current leases expire, all vehicles aside from trucks and utes will be swapped out in QLDC's fleet.

QLDC support the electrification of vehicles, but are keen to ensure that a number of aspects are addressed, and acknowledge that some are in scope of Council control, whilst many are not.

Figure 75: Technology - Electric Vehicle Club

- Its essential to ensure that electricity distribution networks are sufficiently resilient and have the capacity to meet the demand from the transition to EVs.
- There needs to be a broader need to transition away from private vehicle use, towards low emission public transport

- EV charging requirements of non-resident drivers, including visitors and transient individuals, needs to be considered.
- R.5 - It is important that there is connection between territorial authority documents, such as land development policies/strategies, and the national direction contained within the NPS UD.
- EV charging infrastructure be considered as part of the new National Policy Framework that will sit under the proposed Natural and Built Environment Act.
- access to EV and solar charging infrastructure across socio-economic groups and for more remote communities should be considered.
- QLDC would like to establish early partnerships with the Ministry of Transport and industry partners to investigate opportunities for pilot trials and testing of new technology to help support flagship projects.
- Ensure that the specific impacts of variable geography and topography and the consequent effects on EV charging demand and associated infrastructure are taken into account

6.2.4. CORRIDOR ACCESS MANAGEMENT

All excavations and activities (e.g. events) carried out within the road corridor must be carried out in accordance with the National Code of Practice for Utilities Operators Access to the Transport Corridors , the Code of Practice for Temporary Traffic Management (CoPTTM)) and the Health & Safety Act.

We have a requirement under the Local Government Act to manage people working on the road, particularly utility network operators working within the road reserve. The objectives of managing corridor access are to ensure that people working in the road do so safely and don't present a hazard to the public, to ensure that any proposed works will not conflict with Council assets and are reinstated properly on completion.

Planned activities and events are coordinated by the nominated QLDC Traffic Management Coordinator (TMC), the Corridor Access Engineer, ensuring that access to the roading corridor, is managed and monitored to minimize impact on the community. activity's impact on CLOS outcomes (such as Safety and TTR) is minimized

6.2.5. SEALED ROADS

The majority of QLDC's customers make their journeys on the sealed road network. Entry to the district is via three key entry points: state highway 6 and 8, and the airport. Our local roads connect the community to residential, commercial or visitor destinations enabling customers to make their journeys. Management of the sealed roads makes up about 36% of the Continuous programme investment.

6.2.5.1 SEALED ROAD PERFORMANCE MODELLING

In 2023 QLDC engaged Elke Beca from WSP to run our dTims model. 596km of the network was modelled (approximately 65% of the full QLDC road network), of this, urban roads account for over 50%. Nearly 47km of unsealed OTTA surfaced pavements were included in the analysis. High class routes (Regional, Arterial and Primary Collector) make up around one quarter (25%), medium classes (Secondary Collector) one third (27%) and the remainder of the network is low ONRC class (Access & Low Volume).

The QLDC network contains a significant portion of higher cost surfacing with over 30% currently surfaced in asphalt or slurry. While much of this higher cost surfacing is relatively new, introduced through new residential developments, these surfaces will require renewal in the future and investment must be provisioned.

Figure 76: Sealed Road Performance Modelling

PERFORMANCE OVERVIEW

Availability of condition data on the network is very good including; historical roughness, two years of high speed rutting and texture data covering nearly 100% of the network, historical maintenance cost, laser scanner crack data (new in 2023) and extensive pavement strength data.

Overall, the QLDC network appears to be in good condition and with relatively stable trends.

From a ride comfort perspective, the network is smooth when compared regionally and nationally and all classes are stable or marginally deteriorating.

Laser scanner crack data. A single year of data is available thus trend assessment is not yet possible. This data is expected to improve planning and investment decisions going forward, particularly for road surfacing decisions.

While the network is 'young' and data indicates the network is performing well, the accelerating traffic growth (now exceeding pre-COVID levels) and extreme climatic conditions reduce the risk threshold of the network to condition deterioration. This is evidenced by the seal life analysis (carried out in 2019 and updated in 2023), which has indicated a short seal cycle on the network, particularly on the predominate 2CHIP surfaces.

Two key factors have the most significant impact on the sensitivity of this investment justification going forward.

- **Treatment selection:** Three surface options are used on this network being: Chipseal (CS), Slurry (SLRY) and Asphalt (AC) with the latter two options being predominate treatments on the Urban roads. The cost to deliver these treatments ranges from $8.4/m2 to $37/m2 (5 CS = 1 AC). The development of the Surface Treatment Selection Guideline is viewed as a significant improvement. As a result of the guideline, this analysis considers 20% of the future network will be surface in AC or Slurry compared (over 30% of the current top surface is AC or Slurry). Continued refinement of this guideline is recommended.
- **Treatment rates:** The cost of delivering future renewals, based on a combination of treatment selection guidelines and planning treatment rates provided, has increased by almost 10% for surfacing and 30% for pavement renewals since 2019.

The Recommended investment scenario ($5.5M pa) represents nearly a $1.5M per annum increase from the current budget ($4.1M). Two additional scenarios have been run demonstrating the minimum investment to meet surfacing need with almost negligible pavement renewal.

6.2.5.2 SEAL TREATMENT POLICY AND FRAMEWORK

QLDC have developed a Seal Treatment Policy to provide transparency and clarity on the treatment section for the QLDC reseal program. It provides an evidence-based and communicable framework for identifying candidates for higher cost surface treatments of Slurry and Asphalt. There has been a large drive from NZTA Waka Kotahi to provide an appropriate and cost-efficient level of service.

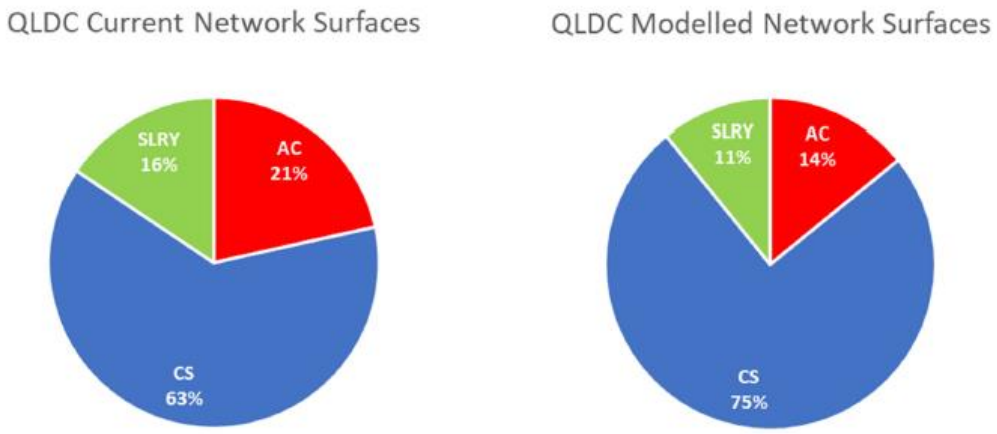
The seal treatment policy aims to:

- Align QLDC road sealing treatments with technical best practice
- Provide an evidence-based framework for decision making to provide clarity to stakeholders on road seal treatment selection.
- Indicate how QLDC will progressively implement a change in level of service from asphalt to chipseal on the network

The seal treatment policy is utilised in our deterioration modelling and as such QLDC will see a clear transition in the network surfaces, with the percentage of chip seal increasing by 12% over the modelled period of 20 years.

In 2023 there continues to be a good conversion of the proposed seal treatments from chipseal to AC and this forms part of our FWP network Strategy. QLDC are also looking to explore the opportunities of treatments such as rejuvenation treatments to extend the life of the ACs. There is also a collaborative trial with NZTA Waka Kotahi for an epoxy chipseal in Summer 2023.

Figure 77: Projected impact of Seal Treatment Policy on 10Yr Seal Type



6.2.5.3 NETWORK FORWARD WORKS STRATEGY

We have been working closely with our suppliers and partners to ensure our forward works programme is robust and validated.

Figure 78: Sealed Network Strategy

6.2.5.4 SEALED PAVEMENT MAINTENANCE

QLDC work closely with the road maintenance contractor to improve programming and develop a robust Maintenance Management Plan (MMP) and Maintenance Intervention Strategy which is closely linked to the FWP. Utilising Downer's Information Management Maintenance System (IMMS) and collaboratively developing MMP specific to our contract and network. Following NZTA Waka Kotahi's RAPT process has supported this move.

Figure 79: Sealed Pavement - Edge Break

There has been a conscious increase in preventative and proactive maintenance; the programme of crack sealing, seal patching has substantially increased over last couple of years. Better focus has also been placed ensuring patch repairs have second coats.

QLDC have been applying a strategy of increased heavy maintenance regime to prolonging asset life. There are concerns that this is not working in extreme parts of the network, and this is not seen to be sustainable. However, this strategy does not work well in the higher risk parts of our network, particularly in alpine and frost prone areas. There is increased focus on drainage maintenance and renewals 113 because QLDC believe that addressing drainage deficiencies in our network will lead to longer achieved pavement and surface lives.

Figure 80: Sealed Pavement - Roadworks

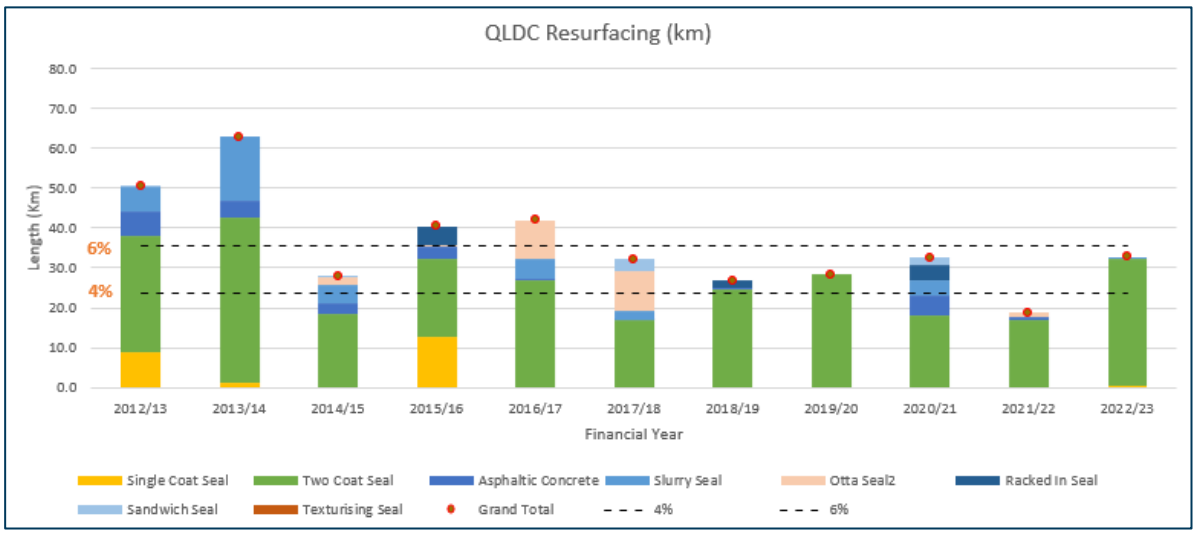
6.2.5.5 SEALED ROAD RESURFACING

For the last three NLTP cycles, QLDC has concentrated on improving data inputs and processes around the forward works programme for sealed roads. Developing data collection, (High Speed data, SCRIM, FWD, surface defects (Downer All faults)), improving the dTIMS (developing policy documents, future predictions, understanding deterioration and treatment selection better) and working closely with NZTA Waka Kotahi RAPT tours, building internal capability. QLDC have been working with Downer, our Road Maintenance Contractor and utilising their IMMS to identify gaps in process and how to fill those gaps. Developing use/skills in Juno viewer for analysis and field validation.

A big achievement in the last NLTP cycle was the change in our Code of Practice to ensure that developers are covering the cost of their second coat seals.

Developing in-house ownership of the FWP process has led to less reliance on professional services. The culmination of the above improvement meant that QLDC were able to reduce the quantum down to about baseline of 6% and lower. QLDC need to understand if this is sustainable, potentially not reflective of long-term expectation – all being monitored.

Figure 81: Resurfacing profile over time



6.2.5.6 SEALED ROAD PAVEMENT REHABILIATION

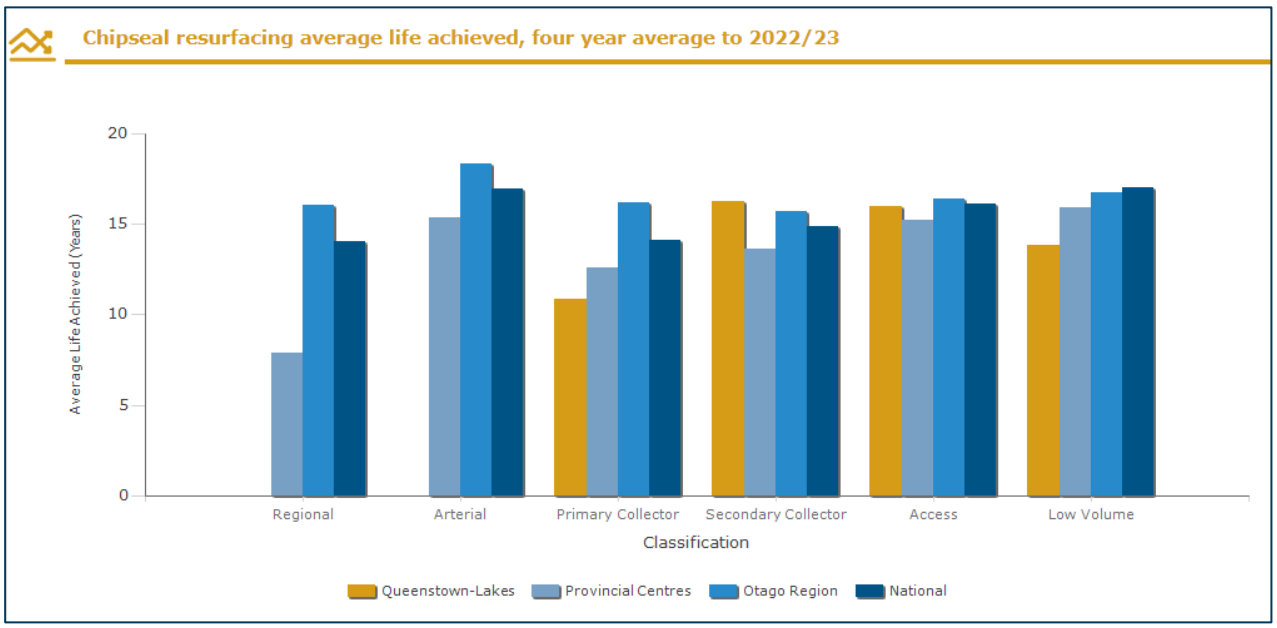
Rehabilitation needs to be based on pavement condition and economic analysis. It is not appropriate to judge rehabilitation through benchmarking. The budget for rehabilitation work has declined substantially in recent years and is being held at the reduced level QLDC have made a concerted effort to pull back on rehabilitation spending over last few years, QLDC need to ensure is sustainable, currently on a 50-year return basis which base preservation of under 2%. QLDC are working to develop a better rehab programme through an improved dTIMs (collecting a better understanding of pavement strength by collecting network FWDs, exploring MSD).

There are a number of emerging rehabs due in the forward works programme, the most significant risk is with Cardrona Valley Road, over the next eight years QLDC will be progressing targeting these renewals to deliver an efficient programme. Working with the maintenance contractor to focus on the drainage FWP, with a view to extending the life.

6.2.5.7 SEAL LIFE ANALYSIS

The following figure shows the Transport Insights benchmarking for 'chipseal achieved life' is sitting below our peers, regional and national comparisons in all road classes apart from Secondary Collectors. QLDC are aware of our seal ages achievements are trying to address the root cause and required actions. In 2019 WSP undertook a detailed study of achieved lives and this highlighted some data inconsistency which are being addressed, but further investigation and future mitigations are required. This was repeated in 2023 as a precursor to the dTIMS modelling. The residual lives show that surfaces were generally lasting longer than the RAMM default life for single coat chipseals and slurries, and less than the default life for two-coat chipseals and asphalt. Given that data is telling us that single coat chipseal have historically performed well on our network, QLDC are looking to undertake further single coat chipseals in our forward works programme, however there are some inherent issues with treatment choice, which may be influencing these. Two coat chips seals and asphalts are predominantly used in a more challenging environments such as the Crown Range which is steep and undergoes extreme winter weather events and freeze / thaw. QLDC recognise these lives are not ideal and will be exploring the data in more detail to understand any underlying issues and to ensure appropriate treatments are undertaken. There are other comparable networks such as the Lewis Pass and Lindis Pass which have high frequency sealing.

Figure 82: Chipseal resurfacing average life achieved, four-year average to 2022/23 Source: REG Transport Insights



When comparing the cost per financial year QLDC is demonstrating a very high comparative cost. This is put down to a number of factors; high contract costs due to high establishment and materials. QLDC awarded a new resela contract in 2023 which saw reseal costs icrease by 100%, which is idicative of the current markt. Our strategic assessments have covered the issues surrounding the contraints in our marketplace.

QLDC acknowledge that our costs are high and our achevied lives are low and this is somethig we are working towards understanding and improving.

Figure 83: The total cost of chipseal resurfacing undertaken over the selected Financial Year (2023/24) Source: REG Transport Insights

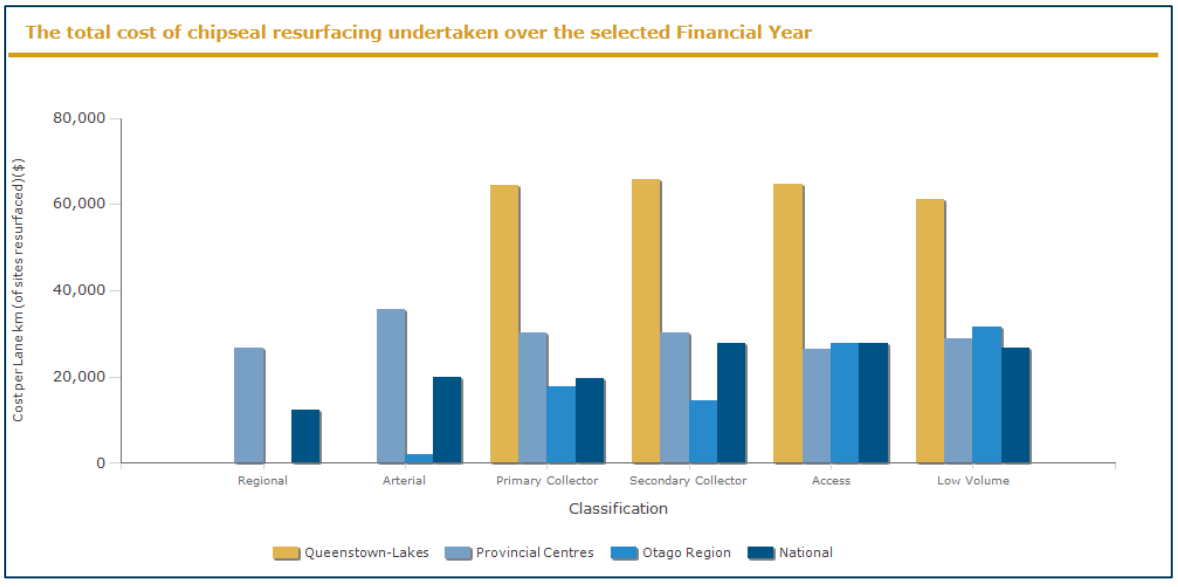
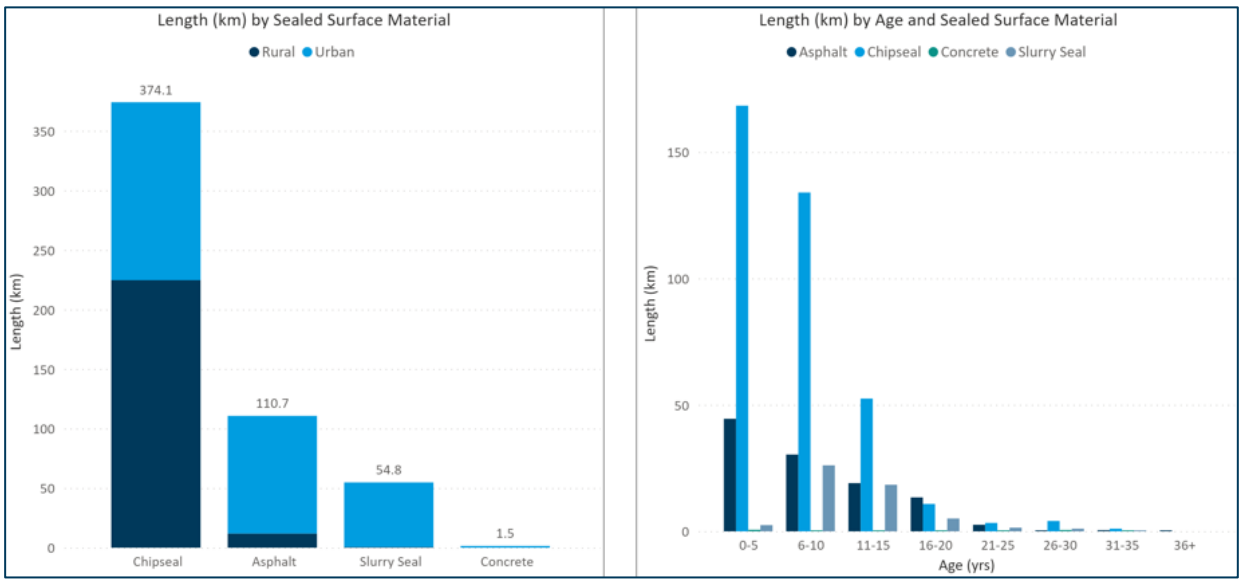


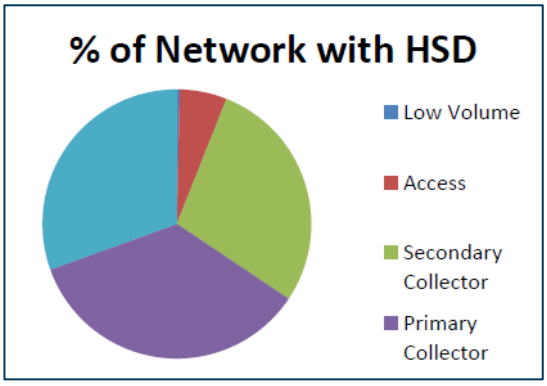
Figure 84: Length by Sealed Surface Material | Length by Age and Sealed Surface Material



6.2.5.8 CONDITION DATA COLLECTION

QLDC have a proactive condition data collection process and have been collecting High Speed Data (HSD) since 2016 by utilising NZTA Waka Kotahi's state highway data survey contract with WDM, which includes SCRIM. The survey was targeted by ONRC classification, covering the district's arterial, primary and the majority of its secondary collector roads. Additionally, QLDC took a risk-based approach and included areas with potential skid resistance issues on steep or known crash sites.

Figure 85: Percentage of Network with HSD



In 2023, QLDC decided to get data surveys including cracking surveys using the LCMS 2 whichprovided an interesting opportunity to explore some new data insights.

With the rollout of the new national consistent condition data collection (CCDC) project, the HSD surveys going forward will include an anual full inspection of all high class roads (major collectors and above) and half of the districts's low class roads (secondary collectors and below), i.e. 50% in year 1 and the remaining 50% in year 2. Generally, the CCDC project aims to survey local and central government roads to a nationwide standard in order to achieve more consistent and nationally comparable datasets which aid to improve the entire sector's asset management planning and decision making. QLDC's first CCDC survey is scheduled to be undertaken in February/March 2025.

SKID RESISTANCE

Skid resistance is an important part of understanding safety levels of service. Aligning with NZTA Waka Kotahi's T10, we undertake a desktop survey and a field validation, ensuring the high-risk sites were included in our FWP. There were sites where the SCRIM result influenced our decision to bring or push roads in the FWP.

This graph below indicates a slight upward trend on the previous assessment in 2020. This will be monitored.

Figure 86: SCRIM exemption report trend

Figure 87: Examples of flushing on Cardrona Valley Road

6.2.6. UNSEALED ROADS

QLDC has a large proportion of unsealed roads 327 km (39%) and they are predominantly used to access areas of Crown Estate, tourist areas or for agricultural purposes. Many of our unsealed roads access areas of outstanding natural landscapes and are very popular tourism attractions, this has led to a high traffic demand – with many of these roads achieving a high ADT of 497 (12% Heavy) Accessing Great Walks such as the Mt Aspiring National Park Routeburn Track or to key tourist attractions such as Skippers Canyon.

QLDC's unsealed network has the following characteristics:

Figure 88: Road in landscape

- Mixture of roads across open flat terrain through to alpine pass style routes;
- Generally high-quality subgrades comprising of minor silts, sands and gravels. Minimal clay soils present;
- High tourist volumes on key unsealed subnetworks (Mount Aspiring, Gibbston Valley, Glenorchy – various), providing access to Crown estates/DoC land;
- Minor heavy vehicles volumes when compared with other territorial authorities such as Gisborne who deal with logging as a major generator of heavy vehicle movements;
- Clean sandy gravel aggregate sources not conducive to binding in an unsealed road situation;
- Increasing numbers of residential properties alongside unsealed roads leading to dust nuisance complaints;
- Extreme climatic conditions - Unsealed pavements are exposed to freeze thaw cycles in winter and arid conditions in summer.

6.2.6.1 SEAL EXTENSIONS

Following a period of seal extensions between 2000-2010, the unsealed network is now relatively stable in length. The policy to invest in seal extensions changes over time depending on the community and the elected Council. Sealing of the roads has significant consequences in the long term because of maintenance and asset deterioration issues. The decision to extend the seal is therefore not one that can be confidently forecast. In 2009/10 the NZTA Waka Kotahi changed the funding policy for seal extensions so they will only gain funding where there are specific safety benefits that account for over 50% of the projects benefits. Hence, QLDC has largely discontinued its seal extension programme. The most recent seal extension was Ballantyne Road in 2021 and was driven by a clear safety need.

In the 2023 Technical Audit by NZTA Waka Kotahi it was identified that Council has a growing number of unsealed roads that should be considered for sealing. QLDC will be reviewing this approach and determining a stratgey going forward.

6.2.6.2 UNSEALED ROAD AM STRATEGY

QLDC have developed an unsealed road asset management strategy and reflects QLDC's maturing approach to evidence-based planning and operations on the unsealed network.

The document aims to deliver:

- Overarching strategic approach to managing the unsealed network;
- Key strategic outcomes;
- An approach to Level of service (LoS) that reflects customer outcomes and function/demand;
- Key activities to be undertaken;
- Prioritisation tools and systems to implement the strategy at an operational level.

Figure 89: Arrowtown - Macetown

Figure 90: Unsealed Road AM Strategy

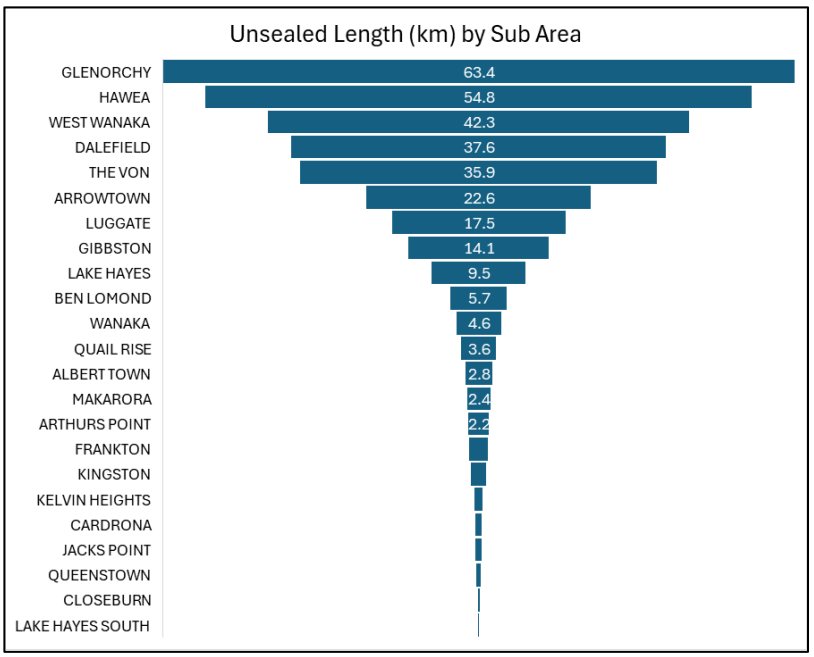
Table 15: Unsealed Roads - What we do and why we do it?

Unsealed Roads - What we do and why we do it?	
Grading	Restoring the driving surface of a gravel or natural surface road to a desired smoothness and shape by removing irregularities such as corrugations and pot holes and redistributing gravel.
Metalling	Adding aggregate to the unsealed roads
Dust Suppression	Work is also undertaken for environmental reasons to mitigate the impacts of dust on residences. The extent of this is managed by Council's Roading Policy which provides for 100m of dust suppression where a house is within 100m of the road.

Figure 91: Grader

The figure below shows the Communities with unsealed roads.

Figure 92: Unsealed Length (km) by Sub Area (Jan 2025)



UNSEALED IMPROVEMENTS

QLDC have been assessing our aggregate sources and quality. Samples have been tested against Paige Green which indicates the poor quality. QLDC are discussing some clay blending trials with Auckland University.

Table 16: Aggregate Performance

Evidence – Local Aggregate - Unsealed Roads		
The aggregate sources in our district are of variable quality.		
WARD	**Aggregate Source**	**Performance**
Wakatipu	• Scope Resources • Rees Pit, • Von Fan • Fairlite	Wakatipu has a lack of clay bound aggregate. Aggregate source from the Shotover River will not be acceptable as M4/AP40 basecourse material without specific prior approval. Shotover River aggregate from COUNCIL consented site only may be used on Skippers Road
Wanaka	• Sawyer Burn (Meads road) • CMH McKay Road Pit • Powers Pit • Matukituki River, Wishbone • Wanaka Airport • Scurrs Pit (CV rd)	Wanaka has more options for aggregate and better clay content

6.2.7. BRIDGES AND STRUCTURES

Bridges & Structures are a key link in QLDC land transport system, and they play a pivotal role in resilience and accessibility. Resilience is a key national, regional and local priority, QLDC structures

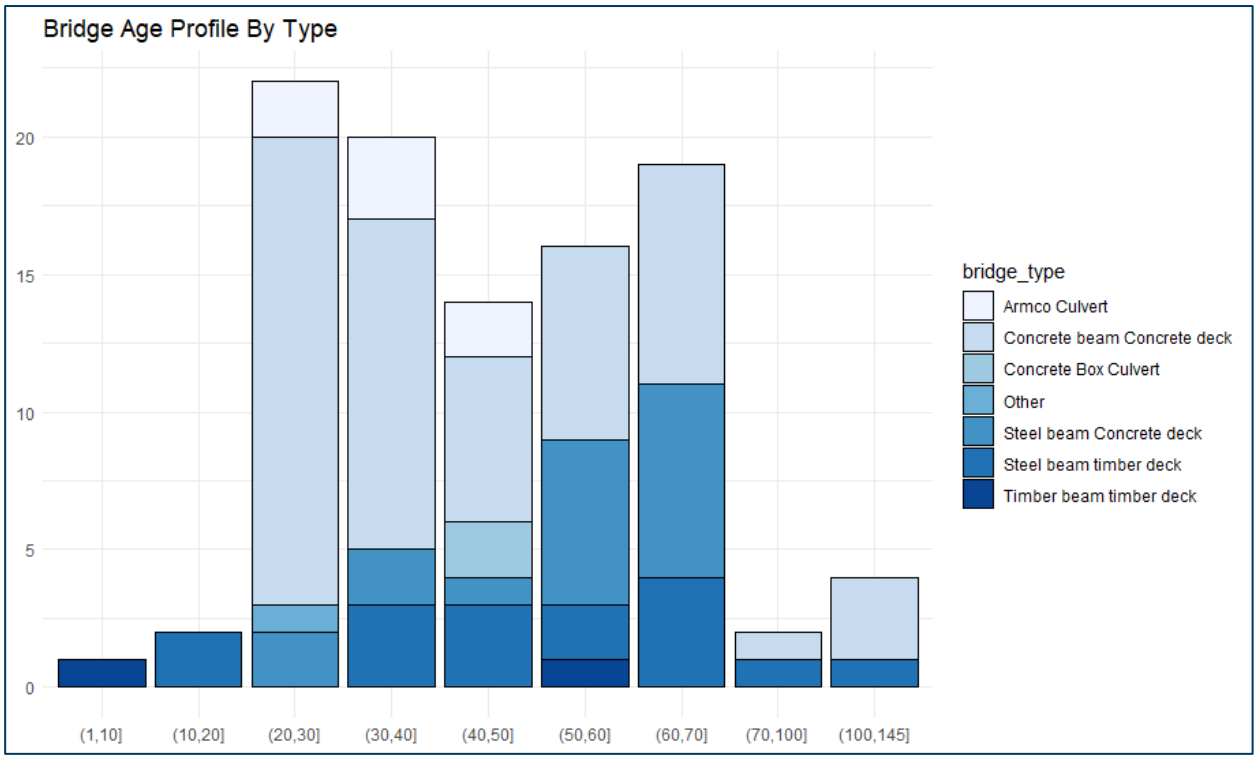
include not only the more obvious bridges that convey vehicular traffic, but also tunnels, subways and culverts, stock underpasses, and a growing number of cycle and pedestrian footbridges.

The nature of these assets means they are high risk, high value assets which require proactive inspection and replacement. When properly designed and managed however, they have a useful life that generally exceeds that of other road assets. Bridges and structures provide access at key points in the transport system to ensure a safe and resilient network. Mobility and accessibility with the QLDC transport system is integral to supporting the local economy, particularly through tourism.

Access for heavy vehicles is important to enable access to remote communities and to support primary industry. Key communities are vulnerable to lack of resilience; Glenorchy, Von, Kinloch – Makarora and Kingston (dependant on the state highway). Steep relief high aggregate flows mean bridges are prone to high rock fall/debris flow from their own catchments. Although a large number of bridges are on high deltas, the bridge is higher than the flood plain, which protects our structures.

QLDC's investment in active travel has an impact on key structures such as Edith Cavell where the current level of service is not appropriate. Ensuring that people can safely use our structure in their transport choice – walking or cycling is a key part in QLDC's strategy.

Figure 93: Age Profile by Bridge Type, Jan 2025



6.2.7.1 RETAINING WALLS

The typography of the landscape in our district, particularly around the Queenstown Hill, Fernhill and the Crown Range means that retaining walls play a key role in enabling access in parts of our district. There are even historic retaining walls along the Macetown Road and in Skippers which are registered with the Historic Places. As Queenstown becomes more urbanised and intensified, retaining walls play an increasing role. There are a number of retaining walls as part of the Queenstown Town Alliance works.

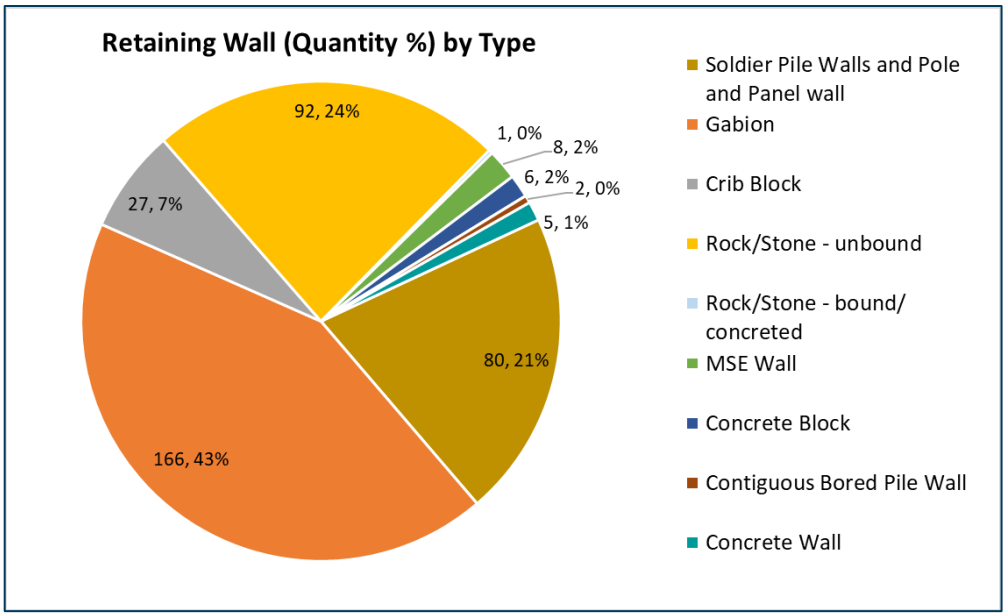
Retaining walls prevent down slope movement or erosion and provide support for vertical or near-vertical grade changes and are key to our resilience. Improving the accuracy of asset data for retaining structures has been a recent focus Through the Structures assessments and QLDC now have a much more robust dataset and monitoring of the condition of retaining walls.

Current retaining wall issues:

- Result of historic development decisions, issues with LTO's Licence to Occupy – data lost
- Historic retaining walls in Arrowtown: Butlers Green, Macetown Road
- Cuttings, netting on Crown Range.
- Skippers –Devil's elbow

Part of Macetown Road contains historic retaining walls, but not all are public roads. Mace town Road is not actively maintained but remain reactive to certain events.

Figure 94: Number of retaining walls by type



6.2.7.2 BRIDGES AND STRUCTURES AND STRUCTURES PROGRAMME

QLDC have a robust process to monitor structures in accordance with NZTA Waka Kotahi S6 Bridges and other significant structures inspection policy. This is delivered under the Bridges and Structures Inspection and Asset Management Support Contract whichembeds a consistent approach to how we manage, inspect and invest in our high-risk high value structural assets. The Contract brings together Council assets that sit under Roading, Parks, Property and 3 Waters structures. It ensures they are regularly inspected and resulting potential works are prioritised and tracked. It covers the full life cycle management of the assets, from inspection, asset condition, data management, reporting, work element, maintenance.

- **Maintenance -** is undertaken under the Road Maintenance Contract (who also undertake visual inspections). Some historic issues in procuring hardwood members and decking planks. The emerging issue is to look at proactive / preventative maintenance – steel members (painting over waterways (ORC consent issues) i.e. water blast/sand blast are not within current budget scope.
- **Structural componement replacement**– provides for the like-for-like replacement renewal of components of structures – a big focus on the structure proramme.
- **Renewals planning** -Looking at the options for addressing demands on Edith Cavell Bridge duplication (business caseunderway), Shepherds Creek Hut culvert (SSBC to be completed under Resilience), Glenorchy Narrows Half Bridges, Ramshaw Lane Retaining wall are in the next 10-year plan and the active travel network will need a number of structures to be delivered.

- QLDC reviewed the network for Bridge Access for 50 Max and High-Productivity Motor Vehicles (HPMVs). New approved 2024 routes are available on the NZTA Waka Kotahi website.

6.2.7.3 BRIDGE POSTINGS

QLDC has 13 posted structures. For some of the bridges heavy vehicles are able to use a ford during low flows, or there is an alternative route available. In some cases there is no ford available, and there is no detour which increases the risk of overloading on the bridge. The postings have been implemented due to the condition and calculated capacity of the structure.

Table 17: Bridge Postings as of April 2024

QUEENSTOWN LAKES DISTRICT COUNCIL

Stantec

Queenstown Lakes District Council Bridge Weight and Speed Limits Engineer's Certificate

I, Derek Chinn , CPEng 177243, certify that the following bridges have undergone a posting inspection and that as a result I am of the opinion that the use of the bridge by vehicles exceeding in weight the weight limit, or travelling at a speed exceeding the speed limit proposed below would so overstrain the bridge to be likely to cause its ultimate failure.

Bridge No.	Bridge Name	Road Name	Gross Vehicle Weight (%Class 1)	Axle Limit (kg)	Speed Limit (km/hr)
2	Sawyer Burn	Meads Road	100%	-	
3	Bee Burn	Meads Road	80%	-	10
4	Peter Muir	Timaru Creek Road	80%	-	10
5	Johns Creek	Timaru Creek Road	40%	-	10
6	Grandview Creek	Gladstone Road	70%	-	10
25	Invincible	Rees Valley Road	65%	-	10
35	Deep Creek	Skippers Road	40%	-	10
36	Skippers	Skippers Road	3,000KG	1,500KG	15
			ONE VEHICLE AT A TIME		
54	Matukituki	West Wanaka Road	13,600KG	8200KG	-
			ONE VEHICLE AT A TIME		
55	Motatapu River	Motatapu Road	30%	3,500KG	10
56	South Von	Von Road	3,100KG	2,460KG	10
			LIGHT VEHICLES ONLY		
84	Muddy Creek	Greenstone Station Road	100%	- 10	
102	Larch Hill Place	Larch Hill Place	2,500KG	1,500KG	10

Signed: DChinn

Name: Derek Chinn

Date: 29/04/2024

6.2.8. WALKING AND CYCLING – ACTIVE TRAVEL NETWORK – FOOTPATHS & CYCLEWAYS

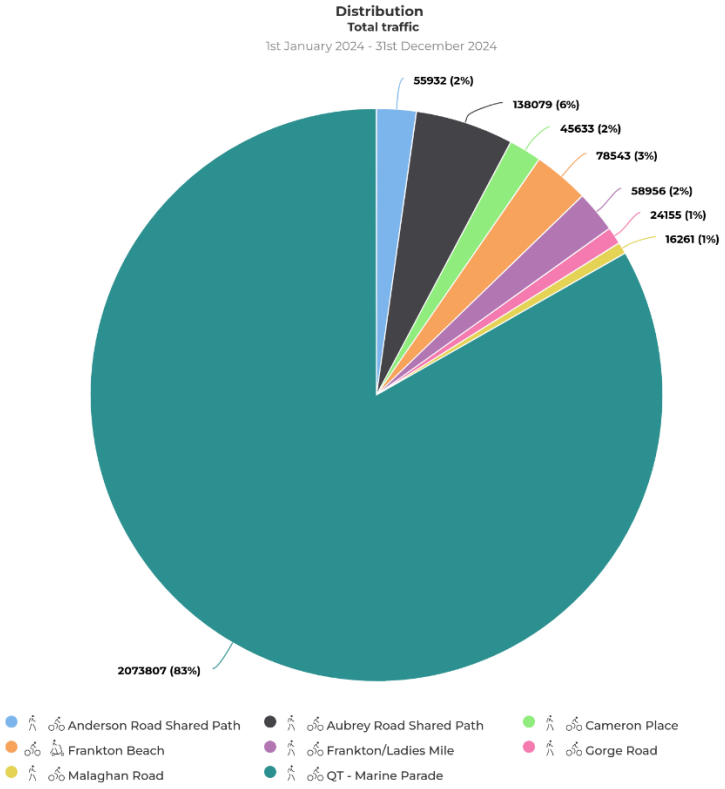
QLDC has over 308kms of footpaths and 50km of shared footpath/cycleway, these form our active travel network; enabling movement for both pedestrians and cyclists. As growth continues in the District and QLDC becomes more congested and travel time more unreliable, the active travel network provides huge opportunities for mode shift and alternative travel demand management. Active travel routes, especially those aimed at commuters will grow the transport network considerably, already seen in the Whakatipu Active Travel programme. QLDC have commenced work to adopt the One Network Framework as it strongly aligns with QLDC's strategic response to understand multi modal movement of people and our Network Operating framework/plan approach.

Investment in active travel network clearly aligns to our Maintenance and Operations problem statements and to our general strategic direction around developing a multi modal network. There is strong community will to see investment in the Wānaka active travel network, in the short-term there is further investigation work needed to understand the future transport requirements in Wānaka. A Network Optimisation and Mode Shift Single Stage Business Case is planned to look into this. The Queenstown Integrated Transport Strategy (QITS) identified a need to achieve 60% mode shift to active travel Frankton to Queenstown.

The QLDC Parks and Transport Team in collaboration with the Queenstown Trails Trust have 37 counters across the district to allow us to track our usage. The high usage across the district highlight the importance of investment in continuing to support active travel as an alternative modal option.

Our key transport commuter routes continue to be utilised year round with a particulary higher usage during the summer months as highlighted by the figure below. In 2024 2,073,807 pedestrians and cyclists passed through the counter located on Marine Parade.

Figure 95: Key transport Active travel route usage 2024 via EcoVision fixed cycle and pedestrian counters



To view QLDC's Active Travel map and counters please head to our website: Parks and Walkways - QLDC

6.2.8.1 WHAKATIPU ACTIVE TRAVEL NETWORK

The Queenstown Town Centre Street Upgrades project was completed in 2024. This project has provided some key active travel connections connections for active travel around and into the Queenstown town centre.

Figure 96: Street Upgrades Project

Another great boost for active travel in Queentown was the Route C5 Arthurs Point to Queenstown (rural section) which received Transport Choices funding in June 2023. This route provided an enhanced level of service with 4.3km of shared path, providing a safe way to walk, cycle or scoot into Queenstown which is key to encourage those living in Arthur's Point to use thse modes. Monitoring was also installed and the uptake will be tracked

Figure 97: C5 Active Travel

Route B2 Fernhill to Queenstown delivered footpath widing, crossing points, new signage and lighting to provide a genuine alternative route to getting around by car between Queenstown and Fernhill.

Figure 98: B2 Active Travel

Figure 99: Preferred Whakatipu Basin Active Travel Network

6.2.8.2 WĀNAKA ACTIVE TRAVEL NETWORK

In the 21-24 period Wānaka has seen a great deal of investment in Active Travel. The Wānaka Schools to Pool Route will provide a safer, multimodal network for pedestrians, cyclists and micro mobility users. The route connects three schools – Holy Family, Wānaka Primary and Mount Aspiring College to the Wānaka Recreation Centre. The project was initially unsubsidised, however received Transport Choices funding ($1.5m) in June 2023 as well as an additional $1m in 2024 to support delivery of some additional works along the route.

More detailed information can be found on the School to Pool route on the QLDC website: https://www.qldc.govt.nz/your-council/major-projects/schools-to-pool-active-travel-route/

Figure 100: Wānaka Schools to Pool Route

Our 21-24 LCLR Active Travel fund also provided some substantial upgrades to the Active Travel route on Anderson Road as well as other quick wins around the township.

Wānaka Lakefront has also undergone extensive (unsubsidised) works, which include a continuous shared promenade around the lakefront. Stages 1,2, 3 and 5 have been completed with Stage 4 remaining to be delivered. Part of this delivery includes improvements to existing active travel connections on the lakefront, with new section of the shared pathway Te Ara Wānaka to run from the completed Stage Three area, past the marina and yacht club, to connect with the start of the Eely Point lakeside trail. Further information on Wānaka Lakefront can be found on the QLDC website https://www.qldc.govt.nz/your-council/major-projects/Wanaka-lakefront-development-plan/

Figure 101: Wānaka Lakefront

6.2.8.3 INVESTMENT IN WALKING AND CYCLING

Footpaths became subsidisable in 2018-21 NLTP period, at the time QLDC did not undertake a detailed approach to assessing which parts of the network would meet these criteria. As a result, there are approximately 30 kilometres of additional footpaths that meet the NZTA Waka Kotahi criteria for funding. However, due to the policy change through the GPS where there is less focus on walking and cycling investment, QLDC are looking to retain the level of service in these areas through unsubsidised funding.

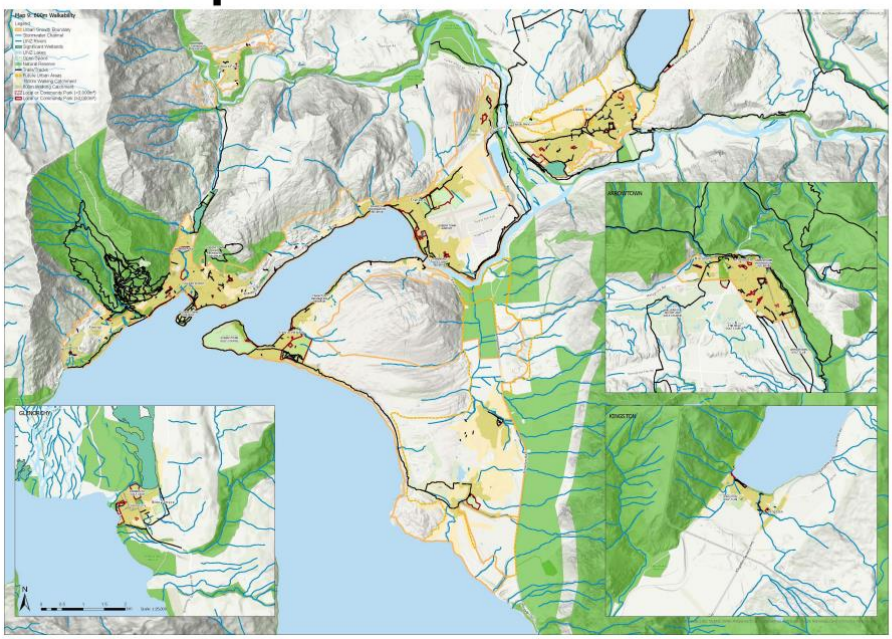
6.2.8.4 BLUE GREEN NETWORK / WHAIORA GROW WELL PARTNERSHIP

The Blue Green Network / Whaiora Grow Well Partnership is an Urban Growth Partnership between Central Government, Kāi Tahu, Queenstown Lakes District Council and Otago Regional Council. The overarching goal of the partnership and the Queenstown Lakes Spatial Plan is to 'Grow Well' or 'Whaiora' in Te Reo Māori, which translates to "in the pursuit of wellness".

The network is the grouping of all the parks, open spaces, trails, streets and waterways in the district which deliver a variety of educational, recreational, ecological, cultural, landscape and health benefits. With limited space available in our developable areas and limited opportunities to connect to our surrounding landscapes, it's important Council plan for the future needs of the growing community and protect and enhance our blue-green network throughout the district.

Whakatipu

Work in progress



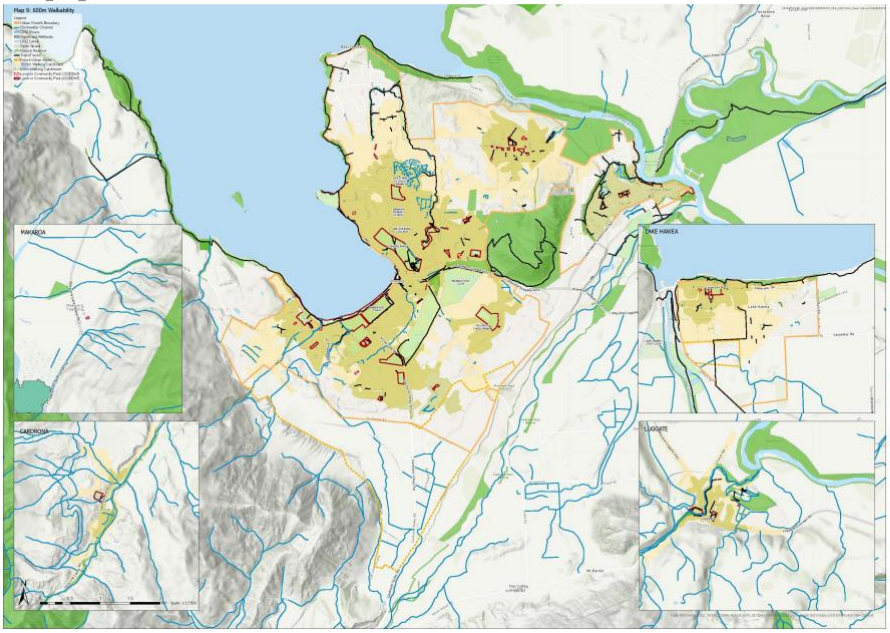
Legend
- Urban Growth Boundary
- Stormwater Channel
- LINZ Rivers
- Significant Wetlands
- LINZ Lakes
- Open Space
- Natural Reserve
- Trails/Tracks
- Future Urban Areas
- 1500m Walking Catchment
- 600m Walking Catchment
- Local or Community Park (<3,000m²)
- Local or Community Park (≥3,000m²)

Priority Areas and Settlement Areas as outlined in the Spatial Plan

- Fernhill / Sunshine Bay
- Queenstown Town Centre
- Queenstown Hill / Frankton Road
- Frankton / Quail Rise
- Eastern Corridor (Shotover Country, Lake Hayes, Ladies Mile)
- Southern Corridor (Parkridge, Hanleys Farm, Jacks Point, Homestead Bay)
- Arrowtown
- Glenorchy
- Kingston

Upper Clutha

Work in progress



Legend
- Urban Growth Boundary
- Stormwater Channel
- LINZ Rivers
- Significant Wetlands
- LINZ Lakes
- Open Space
- Natural Reserve
- Trails/Tracks
- Future Urban Areas
- 1500m Walking Catchment
- 600m Walking Catchment
- Local or Community Park (<3,000m²)
- Local or Community Park (≥3,000m²)

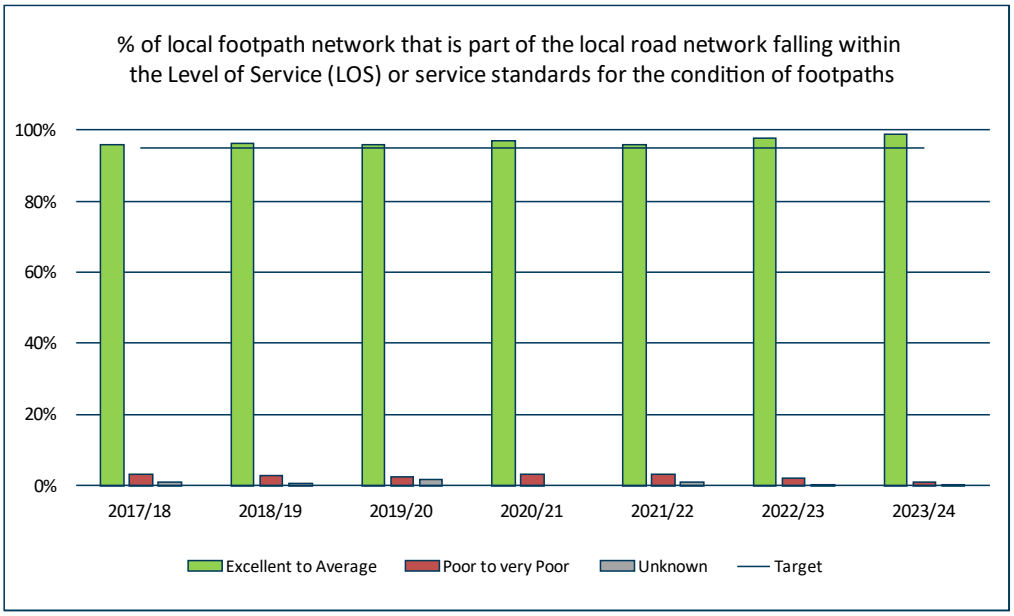
Priority Areas and Settlement Areas as outlined in the Spatial Plan

- Wānaka Central
- Wānaka North
- Wānaka West and South
- Albert Town
- Cardrona Village
- Hawea
- Luggate
- Makarora

6.2.8.5 FOOTPATH CONDITION

QLDC undertake full footpath condition surveys every 3 years which pick up high priority faults, rate the footpath sections and feed into a footpath forward works programme.

Figure 102: DIA Footpath condition measure (2023/24)

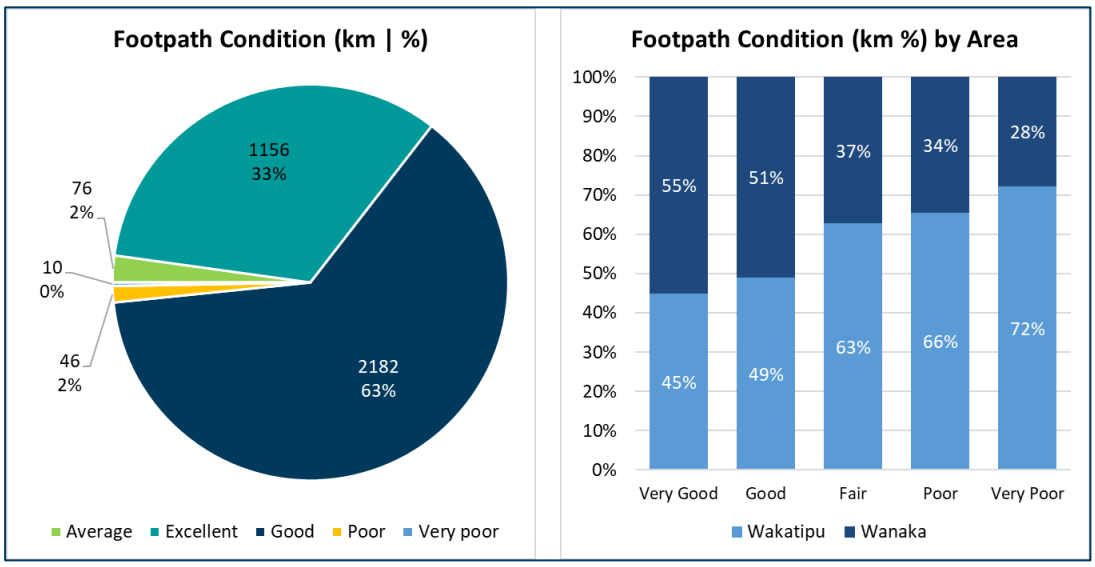


The DIA Footpath Condition Measure shows that the Level of Service for condition is fairly static. It should be noted that a reasonable number of new footpaths being vested each year keeps the overall percentages up.

The Footpath FWP was finalised in early 2024 and will feed into our footpath renewals programme. There are areas of our footpath network that has been historically underinvested in; Arrowtown is an example where the footpaths need renewing before the whole of life costs escalate. Many of the current footpath seals are coming up to an end of life and the bitumen is very brittle. If these are not addressed, the treatments will become much more complex.

QLDC are developing a better understanding of how our active travel network operates and with the arrival of the One Network Framework and QLDC's use of Network Operating Frameworks, we should see some advancement over the next few years. QLDC's Community Services team is creating a Blue Green Network which is grouping all the parks, open spaces, connections, and accessible waterways that deliver a variety of educational, recreational, ecological, cultural, landscape and health benefits. The network will set out the level of provision of open spaces and connections needed in each community to deliver a sustainable quality open space network. It will respond to the anticipated growth and provide the community with access to a range of recreational, social, cultural, and environmental experiences.

Figure 103: Footpath Condition



6.2.9. OPERATIONAL TRAFFIC MANAGEMENT

There has been a step change in the way QLDC operate our network, in 2020 QLDC vested the first set of Local Road Signals in the Five Mile commercial shopping centre in Frankton. Then the 21-24 NLTP saw the following signals come on board.

Table 18: Operational Traffic Management - Signals

Wānaka	Pedestrian Crossing	Aubrey Road
		Ballantyne Road
Whakatipu	Traffic Signals	Hawthorne Drive
	Traffic Signals	Man Street

This change is a clear sign of the rapid growth and urbanisation that QLDC has seen as more active modes are prioritised and safe corridors created.

QLDC has been working closely with the Wellington Traffic Operations Centre (WToC) who will be monitoring and controlling the signals. Maintenance is undertaken via a MOU signed July 2023 with NZTA Waka Kotahi New Zealand Tranpsort Agency, whilst the Alliance will keep control of any they deliver (currently the Man Street Signals). QLDC is reviewing the longer-term approach to managing signals on our network and how this will fit in with winder network monitoring.

Figure 104: Hawthorne Drive Signals

Figure 105: Aubrey Road Pedestrian Signals | Ballantyne Road Pedestrian Signals

During the 24-27 NLTP, QLDC will see a number of signals from the Alliance on the Arterial route; Suburb Street /Melbourne and Henry Street/ Gorge Road.

There has also been a significant increase in electronic variable message signs (VMS).

1. The Crown Range now has VMS at a number of points on the route towards the Crown Range which means that road users now have early warning of road conditions and availability of the network.
2. Variable speed limits in the school zones.

6.2.10. DRAINAGE

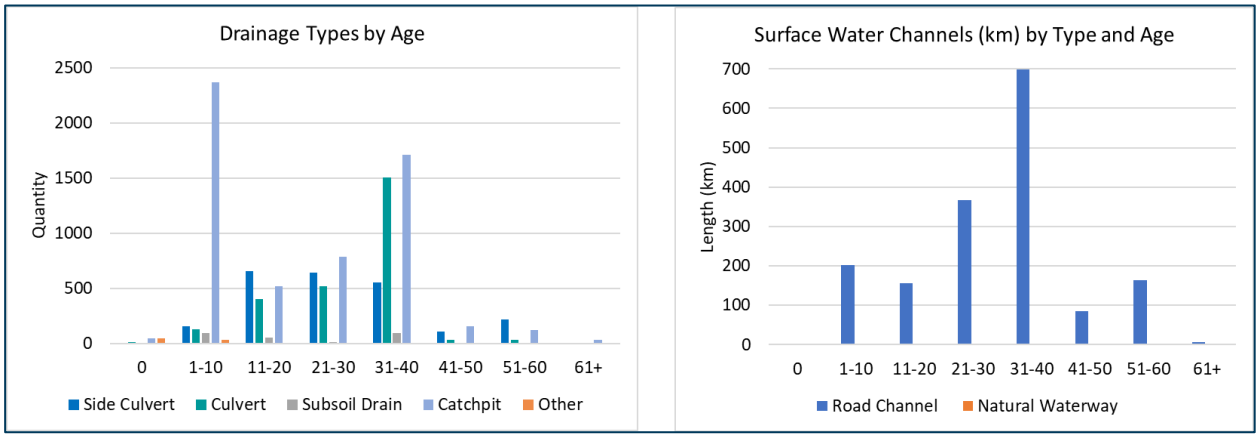
Drainage in QLDC consists of a variety of types and materials. Our urban network utilises kerb and channel, apart from Arrowtown which retains a historic approach to drainage. With growing urbanisation, our drainage is also changing. The number of natural drainage is increasing and we are seeing water gardens and other features appearing on the network. Our rural drainage is mostly surface water channels. Historically some culverts were undersized and is causing some issues with our stormwater systems.

QLDC is taking a holistic approach to drainage and surfacing road renewals. QLDC has traditionally been very reactive in terms of drainage renewals and are now developing a forward works programme approach to drainage. This consists of an asset data review, taking a treatment length (TLs) approach to the drainage asset which allows a more targeted treatment programme. These TLs will be condition rated and will undergo an algorithm which assesses the environment (rainfall, soil type) and various defect data (all faults, MSD and HSD deterioration curves). Prioritisation will look at risk and consequences, using ONRC, pavement classification groups. QLDC are trying to develop annual length of drainage renewals. Local State Highways are around 7% in Southland and 3-4% for Central Otago so QLDC is likely to sit somewhere in the middle.

Drainage condition rating is something that needs to be developed further in order to better inform renewals programme. Work with our Contractor is underway to improvement network monitoring.

Our 3-waters teams are beginning to focus on stormwater, so we will be working with them to get better drainage outcomes for our network.

Figure 106: Drainage Type by Age | Surface Water Channel by Type & Age



6.2.11. FLOOD PROTECTION AND CONTROL

QLDC does not have any 'significant' flood protection or control works infrastructure. There are a small number of minor flood protection assets that QLDC hold responsibility for, such as the Glenorchy flood bank, the Kinloch Rd rock armouring, and the Lake Whakatipu wall in the town centre. These are regularly inspected and maintained by Council.

It is worth noting that as a result of climate change and an increased emphasis on resilience, we will be exploring in more detail the district's exposure to natural hazards over coming years. A focus area for us is the flood risk for the townships of Glenorchy and Kinloch and QLDC are participating in the ORC led 'Head of the Lake' project.

6.2.12. STREET LIGHTING

The Queenstown Lakes District is internationally renowned for its outstanding landscape. Outdoor lighting contributes to the appreciation of this landscape by night and enhances the safe enjoyment of the district. The quality of the environment is an important factor in supporting economic growth within the district.

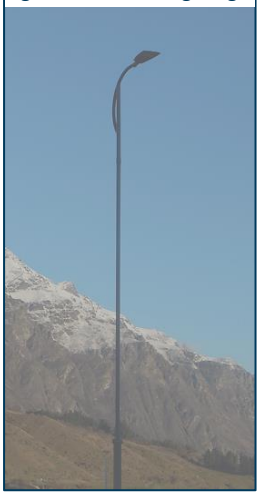
The district is a recognised tourism destination which supports economic growth across the southern part of the South Island. As growth has increased new developments have transformed previously dark rural areas into bright urban areas and it has been recognised a consistent approach is required to support best practice.

The district's growth is moving from a rural district to a number of urban townships and in Queenstown itself, a small city. It is important that lighting and urban design changes are reflected in our lighting network.

6.2.12.1 SOUTHERN LIGHT STRATEGY

QLDC manages our approach to street lighting through the Southern Light Strategy. For further detail, please refer to the Southern Light Strategy here: Strategies and Publications | Queenstown Lakes District Council

Figure 107: Street Lighting



Historically there has been a disparate approach to the implementation of street and amenity lighting infrastructure due to a lack of clear and up to date technical specifications. This has resulted in a large variety of outdated lighting infrastructure which has led to high and complicated on-going maintenance costs. This has partly been addressed through our roll out of LED lighting on our standard P-Cat luminaires, but there still remains a large number of decorative and V-Cat luminaires which need to be updated.

6.2.12.2 LED ROLL OUT

QLDC comenced a step change with a street lighting roll out in 2018 and are continuing to convert exisitng lights as they fail. QLDC is installing warmer light (3000 Kelvin) LED luminaires rather than the slightly more efficient colder (4000 Kelvin) luminaires being installed in most other districts. The warmer lights meet the criteria required for communities to become accredited by the International Dark Sky Association. Developers of new subdivisions are being required to install LED streetlights and they luminaires must be on NZTA Waka Kotahi M30 list. The installation of LED's is expected to reduce costs in the maintenance and energy, however QLDC are facing rising energy and power network costs which will negate some of the assumed savings.

The figures below show the percentage split of luminaire types and the energy load on the network. It is interesting to note that the High-Pressure Sodium luminaires account for 27% of the network, but represent 49% of the annual electricity costs in the unmetered load. This shows the value of the LED replacement programme and QLDC will look to continue LED roll out.

Figure 108: Luminaire Type and est. Annual Load

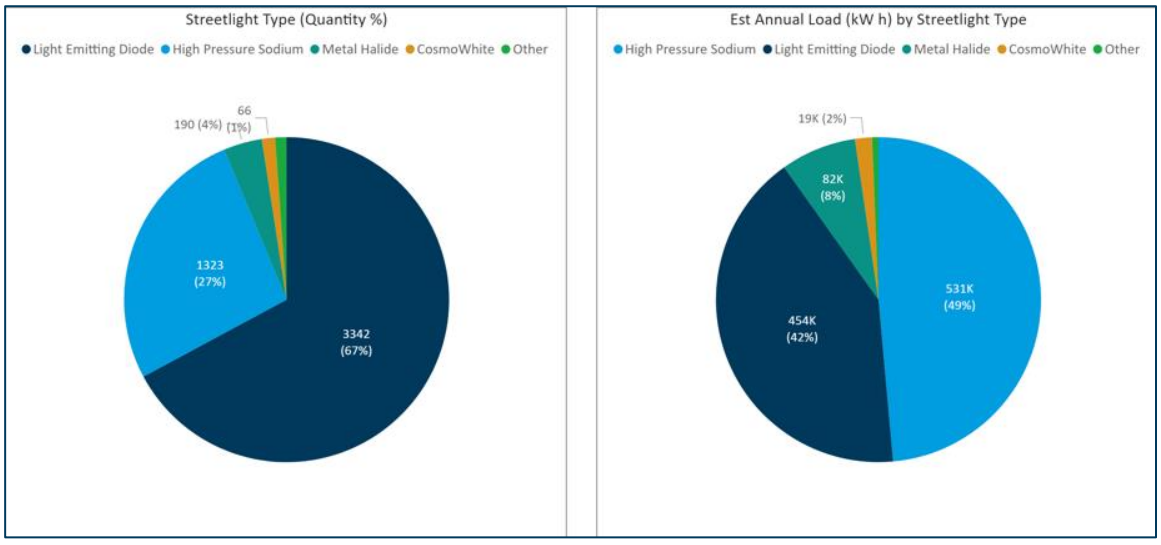
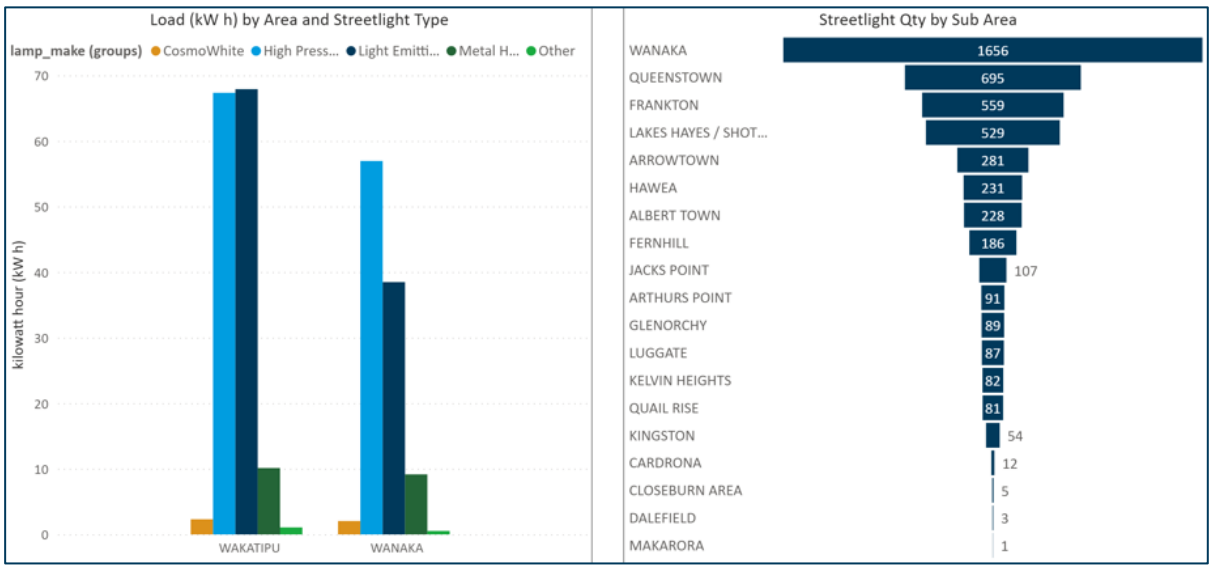


Figure 109: Townships showing number of council-owned streetlights



6.2.13. RESILIENCE

Queenstown Lakes' reputation as a visitor and residential destination relies in part on its transport systems providing safe and reasonable access around the district. There is a continuing importance of tourism to our local economy and the criticality of providing welcoming, uncongested, safe, clean, environmentally attractive, and well signposted and delineated roads for visitors. Facilitating the journeys and retaining access to important services such medical, schools and businesses is important, especially in winter by ensuring the roads are usable during and quickly after snowfall, cold weather and ice events.

Resilience is a key national, regional and local priorities, the ONRC defines resilience as– "The availability and restoration of each road when there is a weather or emergency event, whether there is an alternative route available, and the road user information provided."

QLDC acknowledge the complexity of resilience across all of its infrastructure portfolio and are working on an approach for our long-term investment in infrastructure that incorporates a resilience lens that is understood and is consistent across the organisation, as well as helping to develop the roadmap for building resilience in our infrastructure.

6.2.13.1 DEVELOPING INFRASTRUCTURE RESILIENCE

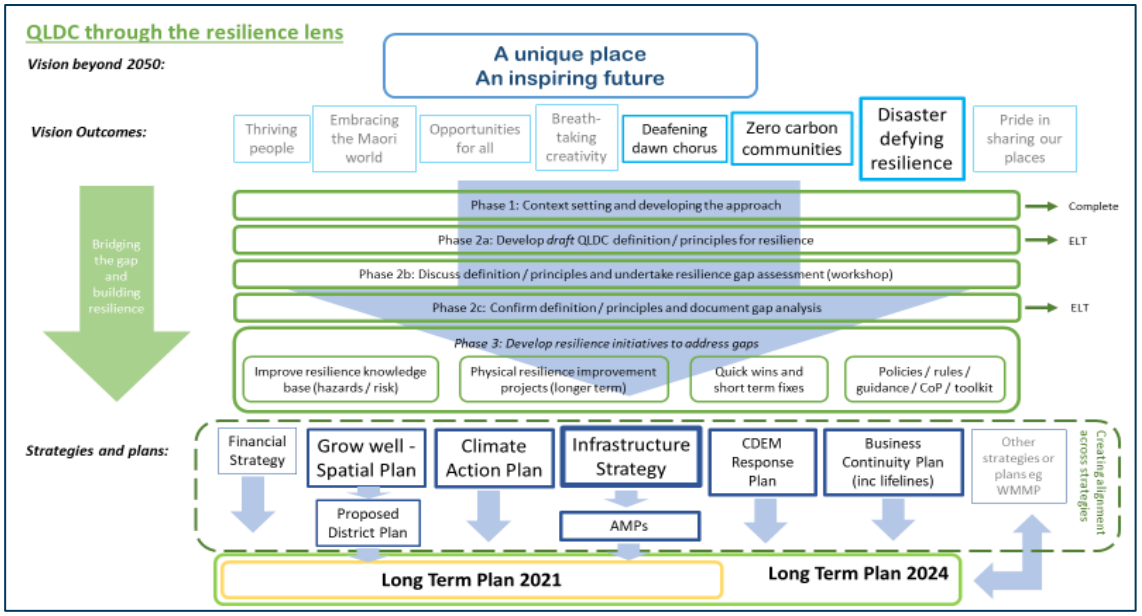
Our infrastructure is an increasingly complex system of systems and is subject to a range of possible foreseeable and unforeseeable hazards and failures. QLDC continues to improve our awareness and understanding of the significant earthquake/ liquefaction risk and the potential impact on the region. Additionally, climate change is predicted to exacerbate flood and drought related hazards, and these will occur with increasing frequency and intensity over time.

Our community largely expects uninterrupted, increasing level of service. Rising standards set by central government for services under our control (including through our infrastructure), will put further pressure on our infrastructure investment. Preparing the district for natural disasters and a changing climate (shocks and stressors) is a priority for Council. The extent to which resilience is built into infrastructure networks and services will be a key determinant of the type and level of investment required over the next 30 years. The physical resilience of infrastructure assets will also influence the level of individual and community preparedness required for shocks and stressors.

Unprecedented growth in our region has further exacerbated the pressure on our existing infrastructure.

Like all districts, the need for investment in infrastructure is greater than our capacity to fund it.

Figure 110: Approach to Resilience



6.2.13.2 TRANSPORT RESILIENCE APPROACH

QLDC's transport network resilience knowledge is growing, there are key parts on the network we consider to be high risk. These are the Crown Range Road, Glenorchy-Queenstown Road as well as Skippers Road and Kinloch. There are a number of work programmes aimed to address resilience risk.

- As part of our Network and Asset Management improvements we are adopting Slope Check to monitor geotechnical slope stability. We have completed two years of this and will look to repeat and understand change. This provides an H&S tool for risk assessment on site for Contractors and well and tracking the slope stability risk.
- Otago Regional Council's approach to the Head of the Lake natural hazard strategy
- Corridor studies specific to high risk corridors such as the Crown Range and Glenorchy-Queenstown Road.
- Edith Cavell bridge duplication Business Case
- Review on how Skippers Road is managed
- Dangerous Tree programme
- Rees Bridge Gravel Extraction

Figure 111: Head of Lake Whakatipu; Natural Hazards Adaption Strategy

6.2.13.3 TRANSPORT RESLIENCE 2024-27

For the 2024-27 NLTP, QLDC submitted on three key 'Resilience' projects. zn 4 October 2024, NZTA Waka Kotahi announced further investment in resilience with a 76% FAR. This funding approval will support QLDC's three key resilience projects as set out below:

SHEPHERDS CREEK HUT

Following a significant rainfall event in April 2022, a debris flow event was triggered in the Shepherds Hut Creek catchment. This event resulted in blockage of the culvert and subsequent over topping of the culvert which passes beneath the Glenorchy-Queenstown Road. The event caused water and debris to flood the road resulting in a total loss of service for 36 hours. The subject site has a history of debris flow occurrence, with significant upstream debris, placing it at high risk of further events.

Figure 112: Shepherds Creek Hut

CROWN RANGE

The Crown Range is a key tourist route that connects the two main town centres in the District (Wānaka and Queenstown). It significantly contributes our districts economic and social well-being and provide an alternative access to the state highway for connecting these communities. It is NZ's highest sealed public road. The risk of slope failure is a significant resilience issue and requires remediation of failing slope. Reduce immediate risks proposed by slope debris to carriageway through scaling. Improve slope stability, reduce the on-going risk of slope debris falling onto the road through unloading/reprofiling/benching of the slope.

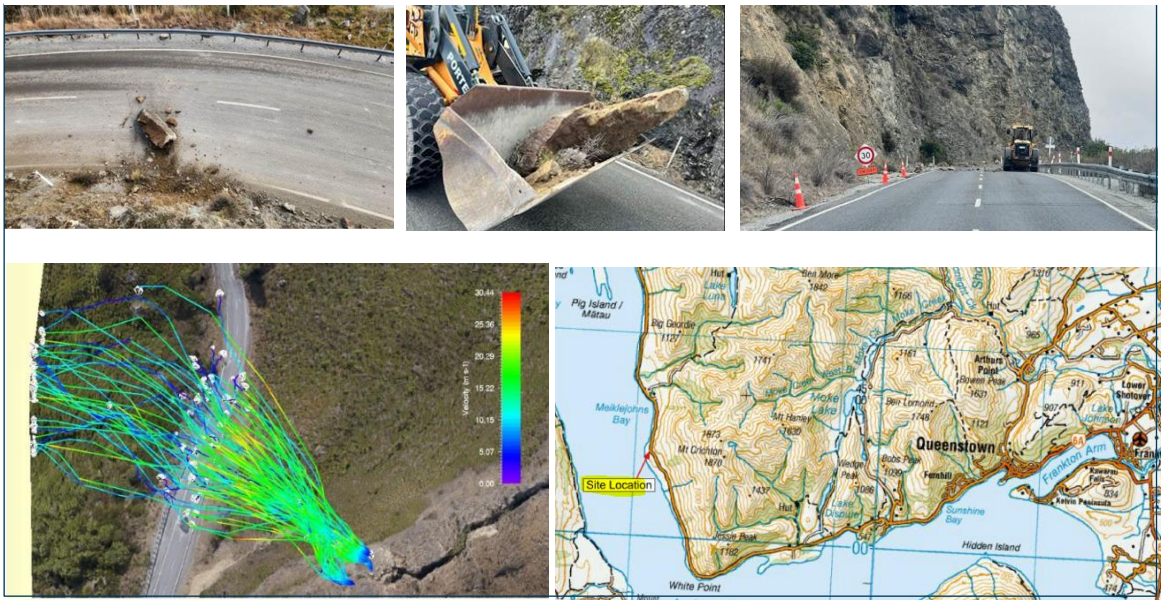
Figure 113: Crown Range

BENNETTS BLUFF

Glenorchy-Queenstown Road is a critical route to access the communities at the Head of Lake Whakatipu, and there is no alternative. The route is at high risk from geohazards, particularly slope and rock instability. there have been a number of events at the Bennett's Bluff site. Medium term is around netting vulnerable face sections to reduce ongoing risk. Consideration needs to be given

to the long-term risk centres on managing the chasm at the top of the face, understanding rates of movement etc.

Figure 114: Bennetts Bluff



6.2.14. ENVIRONMENTAL MAINTENANCE

The management of the environmental aspects of our network is key to providing a safe and resilient network which supports safety and economic growth. This is delivered through winter maintenance, vegetation control, land stability and dangerous trees. Environmental activities are often difficult to predict and reliant on the seasons, therefore QLDC are focusing on building better data and forecasting.

Table 19: Environmental Maintenance: What we do and why we do it

What we do and why we do it?	
Winter Maintenance	Ensures the roads are usable during and quickly after snowfall, cold weather and ice events. The Crown Range is the district's main Alpine Pass and the highest publicly sealed road in New Zealand. It provides the direct link between the two largest towns (Queenstown and Wānaka) as well as access to several large tourist winter activity providers; Department of Conservation (DoC), Cardrona and Snow Park ski areas as well as the Southern Hemisphere Proving Grounds for the automobile industry. Weather and crash events can impact access to these activities. The Crown Range also provides resilience for State Highway 6. The last 5 financial years (2022/2021 – 2024-2025) has seen 6 DSI on the SH, with detours being directed over the Crown Range Road. The Whakatipu Basin can be heavily impacted by ice and certain tourist routes are particularly vulnerable such as Glenorchy-Queenstown Road and Arthurs Point to Arrowtown. QLDC clear ice and snow from priority roads and main transport links, making sure they're gritted before moving onto secondary roads, then footpaths on those particularly snowy days.

	QLDC have been working to develop better understanding and visibility of weather QLDC utilise MetConnect from Metservice weather for weather forecasting and are able to compare the in-ground sensor of our Crown Range Weather station to many of the State Highway weather stations across the country. Winter Road Reports | Queenstown Lakes District Council

Table 20: Metservice road sensor weather station data

Temperature Stats 1-Sep-2023 to 30-Sep-2023			
Location	Hours with Road T Below 0	Hours with Air T Below 0	Hours in Period
Crown Range	72	56	720
Desert Road	33	38	720
Cooptown	23	5	720
Tekapo	21	59	720
South Waiouru	16	28	720
Burkes Pass	8	12	720
SH5 Weighbridge	7	10	720
Lewis Pass AWS	5	6	720
Wedderburn	4	12	720
National Park	4	8	720
Leith Saddle	1	0	720
Lindis Pass	0	47	720

Table 21: Environmental Maintenance (What we do and why?)

Environmental Maintenance: What we do and why we do it?	
Dangerous / High Risk Trees 	The Queenstown Lakes District has a large number of tree species which are vulnerable to rotting of their cores and have a history of failures. These are: Willow (Salix spp.) Poplar (Populus spp.) Southern Beech (Nothofagus spp.) Due to tree types, local weather conditions, a number of near misses and one unfortunate fatal event in 2009 involving a tree falling on a vehicle, it was identified that we needed to address the risk posed by our tree stock. Previously, surveys had been carried out, but only after issues had occurred and not on the entire road network. A more proactive approach was required to understand the risk. QLDC also changed its approach to communications during high wind weather events to informs customers of the risk.
Vegetation Control 	Vegetation management is important for safety by providing visibility sight lines. It includes spraying, mowing and trimming of trees/bushes. Spraying includes (noxious spraying, spraying of vegetation in urban areas, kerb and channel spraying, edge crack spraying). There is a register for recording areas where residents have requested a no-spray zone.

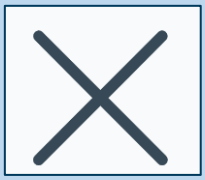
Environmental Maintenance: What we do and why we do it?	
	QLDC has different growth patterns across the seasons and a variety of vegetation species.
Street Cleaning 	Provides a clean environment to support the liveability of the area for locals, visitors and tourist activities. Keeps detritus from entering the reticulated Stormwater system. Street cleaning involves litter removal, sweeping of the kerb and channel and general detritus removal
Emergency Repairs 	QLDC is making financial provision for emergency reinstatement. Unforeseen short, major events that damage assets or close roads can be considered as emergency events and any associated activities will be funded through the emergency reinstatement budget where possible. These events are difficult to predict and are therefore often dealt with by emergency works funding. Minor events: Up to 100k Major events: Over 100k
Land Stability 	Certain parts of the district are very susceptible to land instability issues due to the climate and topography. The last RLTP saw an investment on the Crown Range Land stability above the road. There are still issues below the road on the Crown range which will need to be explored. Glenorchy-Queenstown Road has also been identified as a high risk area and there are repeated slips on Skippers and Mace town Road.
Storm/Flood Damage 	If a storm/flood event occurs, QLDC's share of the road repair costs is covered by deferring other proposed work and the emergency reinstatement budget. Shoulder seasons requirements include road access during heavy rainfalls. Dart river flooding of the Kinloch Road Fords on low volume and access roads are vulnerable to flooding e.g. Wānaka Mt Aspiring Road.

Table 22: Environmental Maintenance and Renewals

Environmental Renewals	
WINTER MAINTENANCE 	Key factor in the district as major factor in supporting local economy through resilience and safety. Crucial to understand environmental assumptions (Strategic Assessment). Largest proportion of 121 is on winter maintenance. Peer group benchmarking shows QLDC as a high cost TLA however when the comparisons look at environmental conditions this is not so extreme. When looking at high-cost winters, this is directly related to number of frost days recorded by NIWA. New contract KPI which is based on type of winter assists with delivery and target cost in a difficult situation. Cost of CMA is increasing as explore reduced grit usage. Various trials have shown this is an effective strategy, but still need to consider where CMA is not appropriate. QLDC are developing knowledge and use of technology such as investing in Crown Range weather station, more vehicle road temperature sensors etc.

VEGETATION MAINTENANCE	Important element in customer safety and visibility of hazards. New contract has new sub- contractor. Increased focus on data collection and management Exploring potential move of urban vegetation management to Parks & Reserves Contract. Community feedback has shown a desire to increase LoS regarding urban and rural roadside litter removal.
ENVIRONMENTAL RENEWALS	Renewal of catch fences provide for protection of the carriageway, that Renewal of any special treatment of run-off from the road to maintain water quality. This is an emerging issue due to NPS Freshwater Management.

Figure 115: Winter maintenance

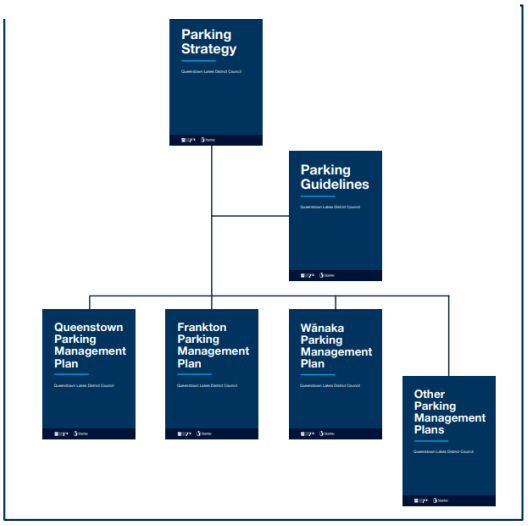
6.2.15. PARKING MANAGEMENT

Comprehensive Parking Management Plans In recent years the population of the district has grown faster than anywhere else in the country, and much of this growth has been accommodated in low-density development on the fringe of our urban centres. This has led to dispersed communities that are highly car-dependent and rely on access to parking at key destinations. During this time, the district has also faced extraordinary growth in the number of people visiting the area from elsewhere in New Zealand and overseas. The unique demands of these visitors - many who are unfamiliar with the area and travel using a wide range of vehicles like campervans, coaches, and electric vehicles, are creating substantial parking issues in our small urban centres. The combined demands from residents and visitors mean finding a suitable car park is becoming more difficult. These problems are impacting on the accessibility and amenity of our towns, the quality of life of our residents, and our reputation as one of Aotearoa New Zealand's premier tourist destinations. In the second half of the 2024 / 2025 financial year, a QLDC Parking Strategy and Guidance Document will be finalised. Community specific Parking Management Plans (PMPs)

will then be developed for Queenstown, Frankton and Wānaka. These PMPs will outline how we will manage parking in each area, recognising the uniqueness of each community. The PMPs will be based on the tools and hierarchies within the Parking Guidelines that align with and deliver the objectives and principles of the QLDC Parking Strategy. These tailored PMPs will address existing problems and identified future issues within defined areas that will contribute to wider transport outcomes and create pleasant and high-quality urban environments.. The actions within the PMPs will be further informed by parking data and conversations with each specific community.

The completed PMPs will feed into the parking management implementation plan, which is expected to be completed during the second quarter of the 2025 / 2026 financial year.

Figure 116: Proposed Parking Management Plans



6.2.16. TRAVEL DEMAND MANAGEMENT

QLDC are incorporating more “soft” measures such as behaviour change and Travel Demand Management (TDM), into our trnapsort programmes, inlcuding the dewlviery delivery of ‘Better ways to Go’, the , the Mode Shift Plan (required as a high growth district). This will see focus on optimising existing infrastructure wherever possible, although investment in ’hard infrastructure’ will still be required. QLDC’s approach is to look at the transport system as a whole and takes a network approach, inclusive of all modes.

The need to compile a Travel Demand Management (TDM) programme is a recommendation from numerous QLDC forward planning projects: QTBC, Frankton, Wānaka and Queenstown Masterplans as well as the Queenstown Lakes Mode Shift Plan. TDM is also a major element of the QLDC Climate and Biodiversity Action Plan 2022-25 (CAP22-25) and has a key input into reducing travel demand and emissions.

TDM seeks to establish and support efficient and effective use of the transport system, thus reducing the negative impacts of travel. A successful programme will create behaviour change; influencing how, when and where people travel. This in turn will ease pressures on the transport network and deliver economic benefits to the community and local businesses.

QLDC completed a TDM Single Stage Business Case (SSBC) Lite (Nov 23). This Business Case (BC) identified a prioritised work programme focussing on ‘soft’ measures rather than new infrastructure investment. this included:

(1) Policy – QLDC Internal Policy Review, new/updated travel plans, accessibility plans, Climate Action Plans etc.

(2) Education – Identification of educational behaviour change programs and effective communication strategies.

(3) Technology – tools and maps such as Mobility as a Service (MAAS) and research and monitoring to better understand audiences,

(4) infrastructure identification – investigate opportunities for incorporating physical wayfinding and

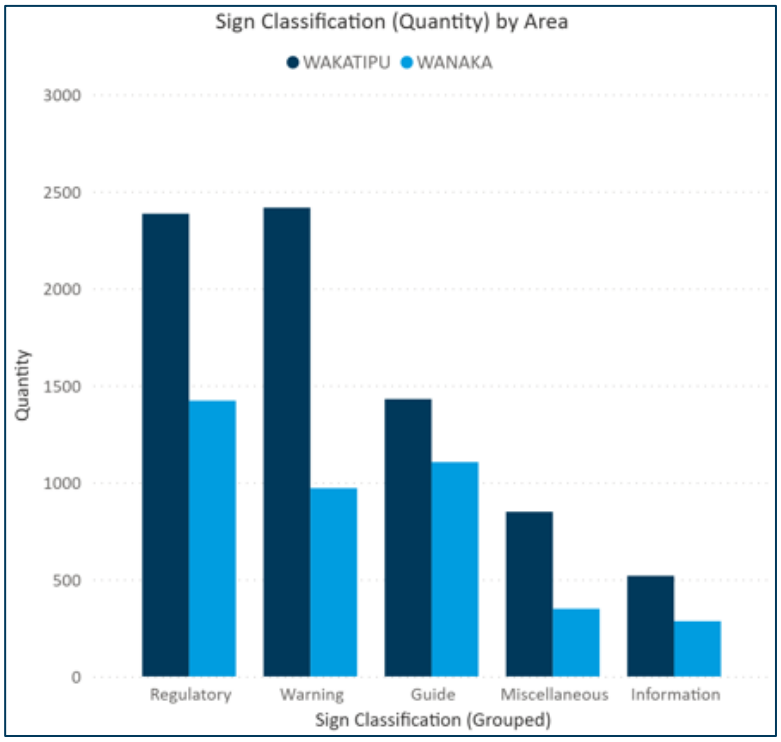
(5) the potential introduction of Travel Management Associations (TMA’s) – To ensure the programme is being effectively delivered in the district.

To ensure the BC gives effect to national, regional and local authority priorities ORC and WK will be engaged throughout the process.

See section 10 for more information on TDM.

6.2.17. TRAFFIC SERVICES - SIGNS, MARKINGS, GUARDRAILS AND RAILINGS

Delivery of Traffic Services is a fundamental part on how we communicate with and guide our customers. This often takes the form of way finding, warning of risks and mitigating risks to provide a safe environment through our network.



The geography and typology of our district has a key impact on our management of traffic services. From the impact of gritting on the life of line markings, the need for guardrails on our mountain and lake edges and directional and way marking signs to support our locals and visitors find their way around the district.

Figure 117: Sign Classification by Area

6.2.17.1 MANAGEMENT OF TRAFFIC SERVICES

Impact of line marking from winter maintenance especially gritting, means having to replace markings more regularly. Currently re-marking urban and all arterials bi-annually and remaining network annually. This is still not achieving the required standards. Contract is exploring roading marking data processes to capture existing data and new. With urbanisation there is a growing trend for increased as well as more complex markings. The growing public transport network means bus stop markings increased, pedestrianisation brings controlled intersections with more complex markings.

Sign replacement manufacturers recommended every 7 years, but with intense ultraviolet light in the district, signs often lose their reflectivity before then.

6.2.18. PUBLIC TRANSPORT

Figure 118: QLDC Bus

The public transport network is a key activity within our transport network, although not directly under the control of QLDC. The Way2Go collaboration enables an approach that directly brings Otago Regional Council (ORC) together with NZTA Waka Kotahi and QLDC to work collaboratively to use the public transport network as an opportunity to address traditional transport issues.

QLDC's approved LTP24 had highlighted investment for PT Infrastructure across the Whakatipu and Wānaka networks of $2.9m. This investment included the design and construction of bus stops and shelters across the network. This investment had assumed a 51% subsidy from NZTA Waka Kotahi.

QLDC did not receive NZTA Waka Kotahi funding support for Public Transport Infrastructure QLDC is committed to ongoing investment in public transport, including the introduction of new routes and modifications to existing services. Due to a shortfall in NLTP funding, we have reduced the planned programme for delivery to align with the revised budget (local share only). Items identified in the ORC PT BC are planned for delivery in the next funding period.

Deliverables for this period include:

- Works to facilitate the trial route between Arrowtown and Queestown (via Malaghans Road/Arthur's Point.
- The retrofit of existing bus shelters to include shelters, lighting etc.
- New stop – Hawthorne Drive to replace exisiting stop within Remarkables Park.

Items identified in the ORC PT BC are planned for delivery in the next funding period.

In December 2024, 10 solar powered electronic signs were installed at different stops across the district giving users real time tracking information about buses. The use of solar panel are also being investigated in Arthur's Point and Arrowtown to provide light in the dark spots on the network, increasing customer sense of safety and security.

Introducing Mass Rapid Transit is seen as a potential longer-term solution to the capacity issues in QLDC and is being explored through our business case process. NZTA Waka Kotahi have signalled they are undertaking some further research into this in 2024-27.

In November 2024, NZTA Waka Kotahi announced that bike racks on buses were to be temporily disabled due to safety concerns.

ORC have acknowledged that "Cycling and public transport go hand-in-hand for many of our passengers, and we're committed to a solution that ensures safe, seamless travel. This temporary pause prioritises safety as we work closely with NZ Transport Agency (NZTA Waka Kotahi) and our operators to understand these potential compliance issues."

The timeframe for setting the criteria and testing has not been released.

A ferry service is also in operation on Lake Whakatipu with four stops available from Queenstown bay, Bayview Jetty, Frankton Marina and the Hilton Jetty.

The Otago Regional Council (ORC) together with its Way to Go partner agencies, Queenstown Lakes District Council and NZTA Waka Kotahi New Zealand Transport Agency are developing a 30-year plan to inform future public transport investment decisions for Queenstown.

The Queenstown Public Transport Business Case focused on:

- what the public transport network will look like in the future (bus and ferry)

- how to decarbonise public transport
- where on-demand bus services should be considered
- future capacity and configuration of bus hubs
- what the future ownership, operating, and management systems should look like
- what the proposals will cost and how they can be funded.

This study does not look at roading and other infrastructure which has already been considered through the Queenstown Business Case 2020.

6.2.18.1 THE BEE CARD

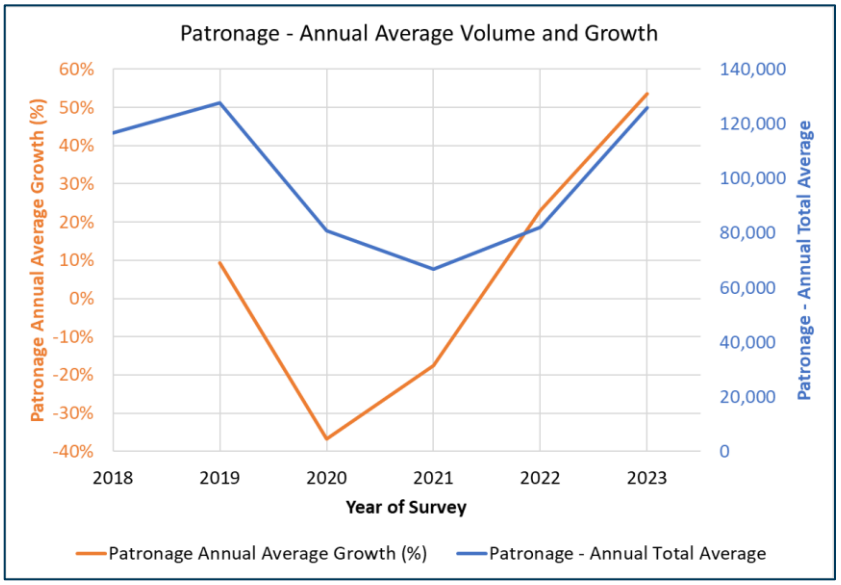
In September 2020, QLDC joined Dunedin to represent Otago with eight other regions in the Bee Card scheme. This electronic smart card makes using public transportation in these regions much easier. It is a tag-on tag-off system that is easy to use, gets you boarding faster, and for most trips is cheaper than using cash. This is available for both the bus and ferry service.

Figure 119: The Bee Card

6.2.18.2 PT PATRONAGE

Public Transport uptake was heavily impact by COVID, but there is a positive trend back to pre-covid levels.

Figure 120: Whakatipu Patronage (ORC, August 2024)



In August 2024 ORC reported that the number of bus trips in Queenstown from July 2023 to June 2024 was 1,897,200. January, February and March 2024 all registered record patronage of over 168,000 trips per month.

Prior to 23/24 the highest patrongage year was pre-Covid in 2018/19 with 1,468,057 trips meaning that Queenstown patronage for the 23/24 year exceeds the full year patronage for each of the past six years, and exceeds the previous highest trip record since the network's inception in 2017 by over 400,000 trips.

https://www.orc.govt.nz/your-council/latest-news/news/2024/may/huge-rise-in-bus-use-in-queenstown-and-dunedin/

20240807-patc-agenda.pdf (orc.govt.nz)

6.2.18.3 QUALITY OF LIFE – PUBLIC TRANSPORT

The QLDC 2023 Quality of life (QoL) survey shows that this year residents were asked a number of questions around alternative modes of transport.

Respondents were asked about their views of public transport in the district. Fifty two percent of respondents agree that public transport is affordable, 43% agree it is easy to get to from their home, and 29% agree it is accessible for their needs. Much lower levels of agreement are seen for statements relating to public transport's frequency (17% agreement), reliability (14% agreement), and its ability to meet the needs of residents (12% agreement).

Figure 121: View of public transport in the district (QLDC QoL Results 2023)

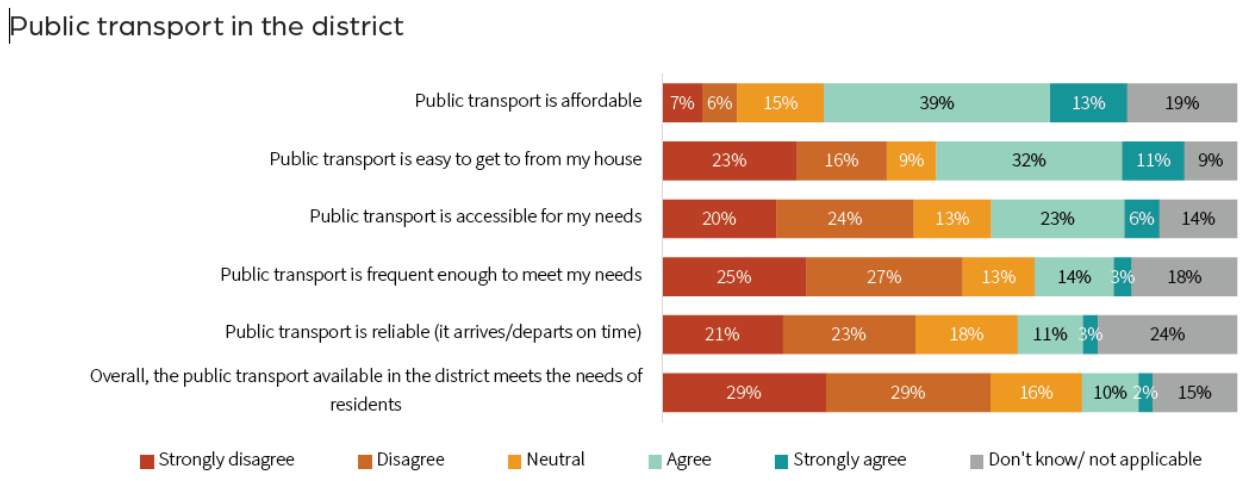
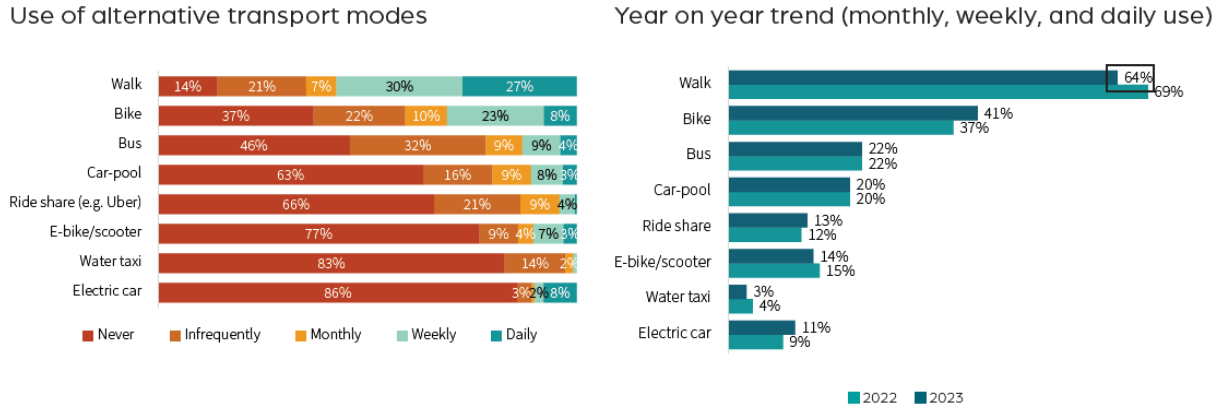


Figure 122: Alternative modes of transport

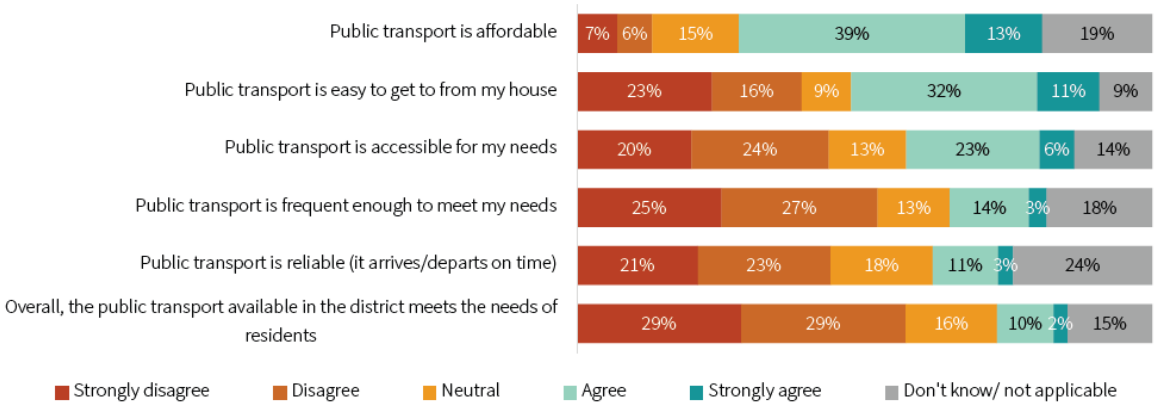


Respondents were asked how often they used alternative transport modes to a car. This year's results are similar to those seen in 2022 with the majority of respondents walking at least monthly (64%) as an alternative to using their car, although this has declined in the past year. The next most common form of transport is biking (used by 41% at least monthly), busing (used by 22% at least monthly), or car-pooling (used by 20% at least monthly). These transport patterns are similar to those in 2022.

The most frequent users of public transport (bus) are those aged between 18 and 24 years, females, Other Europeans, those with a household income of under $60,000 per annum, students, those in full-time paid work (commuters), and those working in the Accommodation and Food Services sector.

Respondents were asked about their views of public transport in the district. Fifty two percent of respondents agree that public transport is affordable, 43% agree it is easy to get to from their home, and 29% agree it is accessible for their needs. Much lower levels of agreement are seen for statements relating to public transport's frequency (17% agreement), reliability (14% agreement), and its ability to meet the needs of residents (12% agreement).

Figure 123: Public Transport perception. (QLDC Quality of Life Survey 2023)



As per the Otago Regional Council Final Public Transport Business Case the proposed programme recommends the implementation of additional bus routes, a more regular service across all routes, improvements/more infrastructure and bus lanes across parts of the network.

Figure 124: Public Transport Statistics (Source: Te Ringa Maimoa RCA Report), Sept 2024

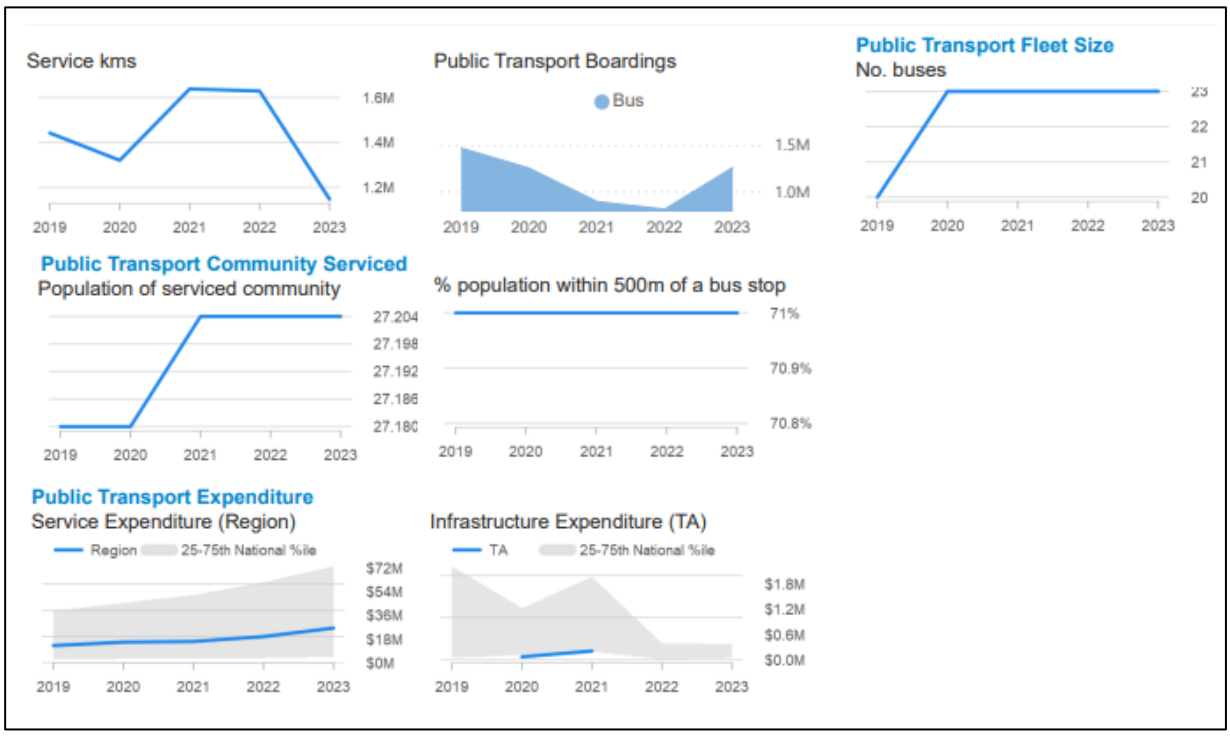
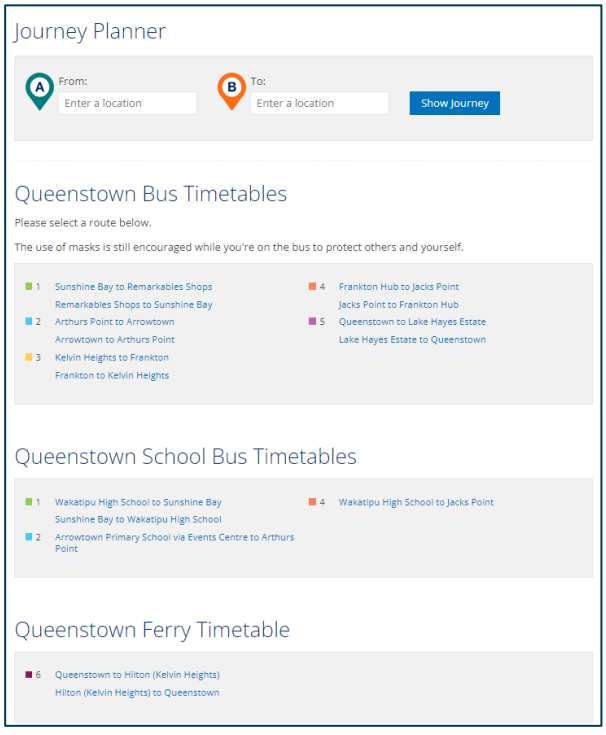


Figure 125: Journey Planner - Public Transport



6.2.18.4 UPPER CLUTHA PUBLIC TRANSPORT

The Wānaka Community bus service pilot commenced in Wānaka, connecting Hāwea, Albert Town and Wānaka in late 2022.

For the 2024-27 NLTP, ORC have indicated they will run another trial in the Upper Clutha to better understand the community's needs. At this time a regular public transport service is not expected to be implemented within this NLTP period.

6.3. IMPROVEMENT ACTIONS –ASSETS AND ACTIVITIES

Improvement Actions – Assets and Activties

SAFETY

QLDC wants to ensure the safety of our transport network remains a top priority. With recent updates to the Land Transport Rule: Setting of Speed Limits 2024, along with new safety initiatives and a focus on data-driven improvements, we are committed to enhancing road safety across the district. The key safety-related actions and monitoring efforts that will be actioned over the next 3 years.

1. Monitoring the Land Transport Rule: Setting of Speed Limits 2024

A key development in the 2024-27 AMP is the implementation of the updated *Land Transport Rule: Setting of Speed Limits*. This new regulation will allow for more targeted speed limit settings to enhance safety in high-risk areas, including urban centres and high-speed rural corridors. Monitoring the effects of these changes will be critical in assessing their impact on overall network safety. Ongoing review processes will ensure that speed limits are optimised to reduce the risk of accidents and fatalities.

2. Collective Risk: Understanding and Addressing Above-Average Risk Ratings

Work will be done to understand and address these elevated risks. This will include targeted safety improvements, review infrastructure upgrades, and the deployment of technologies aimed at reducing incidents in high-risk zones.

3. Evaluating the Benefits of Guardrails on High-Speed Rural Corridors

Investing in road infrastructure, such as guardrails, remains a key safety initiative in rural areas with high-speed limits. Guardrails are proven to reduce the severity of crashes by acting as a barrier between vehicles and hazardous roadside elements. During the 2024-27 AMP period, we will closely monitor the effectiveness of these guardrails on rural corridors. This monitoring will help assess whether further investment is needed in other high-risk areas.

4. Enhanced Speed Monitoring for Improved Safety Outcomes

In addition to speed limit changes, enhanced speed monitoring will play a pivotal role in improving road safety. Automated systems, combined with regular traffic surveillance, will allow us to gather more accurate data on speed-related behaviours. This will enable more proactive measures to address speeding violations and further align enforcement efforts with safety objectives.

5. Review of High-Performance Motor Vehicle (HMPV) Routes and Compliance

The review and compliance assessment of High-Performance Motor Vehicle (HMPV) routes will be critical in ensuring that these specialized vehicles operate safely within the network. Compliance with established guidelines and regulations will be rigorously monitored to minimize risks associated with HMPV operations. This will include assessments of vehicle specifications, route suitability, and operational safety practices.

6. Ensuring Success of the Road Safety Action Plan Embedded in the AMP

The Road Safety Action Plan will be regularly reviewed to ensure it is fully embedded in all safety strategies and actions. This plan focuses on education related to reducing fatalities and serious injuries across the network, aligning with New Zealand's broader road safety goals. By incorporating the latest data and research, the Action Plan will adapt to evolving safety challenges and continue to guide decision-making.

7. Compliance with Road Safety Audits

To ensure that safety is continually prioritised, post construction road safety audits will be reviewed after all road related infrastructure projects and signed off by all parties. Compliance with audit recommendations will be closely tracked to maintain high safety standards.

The safety of our Districts transport network is an ongoing priority, and the 2024-27 AMP period presents a significant opportunity to build on recent advancements in road safety. By focusing on targeted speed limit adjustments, improving infrastructure, enhancing monitoring systems, and rigorously reviewing safety audits, we can continue to reduce risk and improve outcomes for all road users. Through collaborative efforts and data-driven strategies, we will work towards a safer and more resilient transport system for the future.

ROADS

- Develop dTIMS modelling in house, starting with the sealed road modelling.
- Develop the unsealed road model, explore the footpath and bridge deterioration modelling options.
- Following NZTA Waka Kotahi technical Audit – consider developing a seal extension strategy.

OPERATIONAL TRAFFIC MANAGEMENT

- Support the Ops team with development of contracts to look after increasing number traffic signals
- Develop the relationship with Wellington Traffic Operations Centre

STRUCTURES

- Continue to improve risk monitoring of structures (scour and seismic)

LLIFECYCLE MANAGEMENT AMP SECTION

- reintroduce the one pagers for each asset group

7. DEFINING AND MEASURING LEVELS OF SERVICE

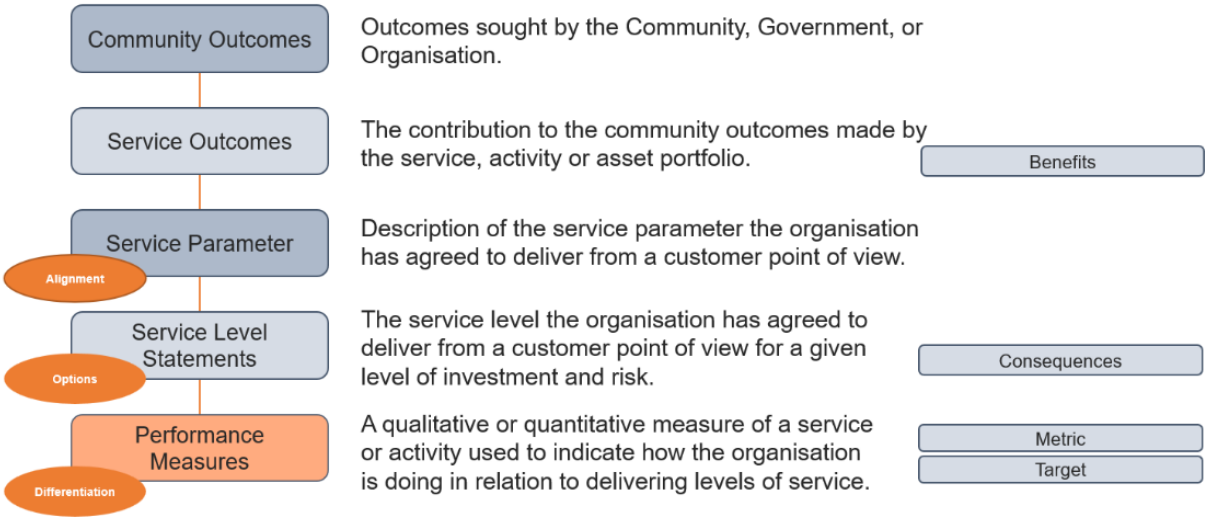
This section outlines key Level of Service drivers, including customer and stakeholder expectations, legislative requirements and Council's strategic priorities. It sets out the proposed levels of service and performance measures and provides information on how Council has been performing in recent years.

7.1. QLDC LEVELS OF SERVICE FRAMEWORK

QLDC have developed a level of service Framework to help show the alignement of the services we offer with the outcomes we seek as an organisation. We produced these outcomes to meet the needs of both community and the government.

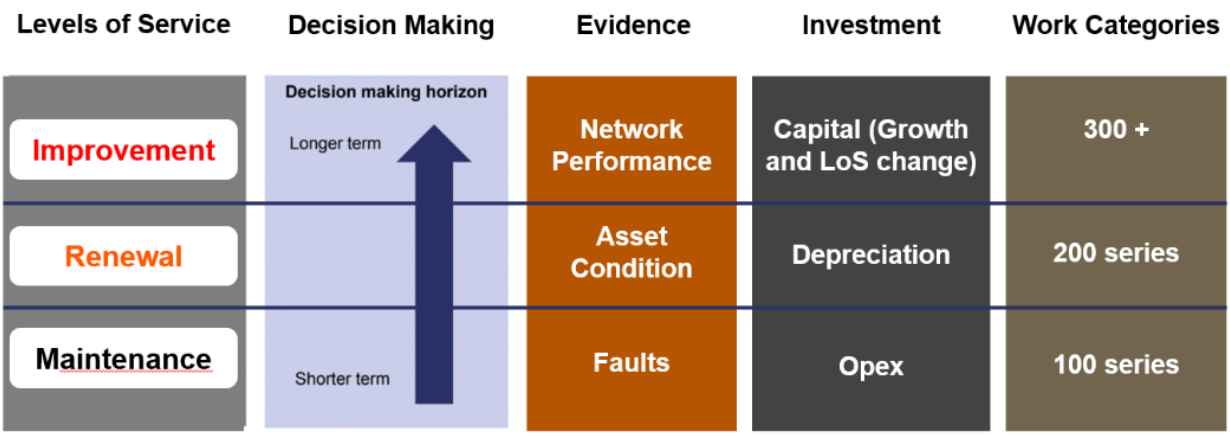
Level of Service (LoS) clearly describe the quality, quantity and the cost of Transport services that customers and otyher stakeholders can expect from us. The level of service framework is made up of five parts.The figure below shows how the framework combines together.

Figure 126: Level of service framework



Our service Parameters have been grouped by investment category the diagram below shows the relationship between Service, Cost and Risk.

Figure 127: Service Parameters Relationship



7.2. STRATEGIC ALIGNMENT

Our levels of service have been aligned to strategic objectives, our problem statements and our measurable works categories. A key aspect of this framework is to ensure that the outcomes we seek are SMART – Specific, Measurable, Achievable, Relevant.

The table below shows the alignment from National, regional or local objectives and how we measure them.

GPS Strategic Priority	GPS Transport Outcome	Regional Transport Objective	Local Transport Objective	Service Outcome	LMI Ref	Level of Service	Metric	GPS Activity Class	NZTA Waka Kotahi Activity Class	WC ref	Work Category	Risk
Economic growth and increased productivity	Reduced journey times and increased travel time reliability	Connectivity and Choice: Develop a range of travel choices that are used by communities and business to connect	Transport modal choices are available	Health	I05	Modal Shift	% journeys on public transport		Public transport services and infrastructure	524	Public transport operations and maintenance	Roads remain congested due to traffic
				Efficiency	I09	Travel Time Reliability	% network with reliable travel times		Investment management	421	travel demand management and behaviour change	Customer travel time delays
	Less congestion and increased patronage on public transport			Liveability	R10	Public Transport Asset Condition	% Fair, Good or Very Good		Public transport services and infrastructure	534	Public transport renewals	Public transport use decreases
	Improved access to markets, employment and areas that contribute to economic growth		Transport network provides reliable and consistent travel time	Accessibility	I03	Connected Network	% network connected		Local road and state highway improvements	323	New Roads	Accessibility is adversely impacted
				Liveability	I04	Unsealed Roads	% network unsealed		Local road and state highway improvements	325	Seal Extensions	Environmental and health is adversey impacted
				Accessibility	I08	Heavy Vehicle Access	% bridges available to HPMVs		Local road and state highway improvements	322	Bridge Replacement	Economic growth is inhibited
	More efficient supply chains for freight			Efficiency	I06	Heavy Vehicle Capacity	% network available to heavy traffic	Local Road Improvements	Local road and state highway maintenance	324	Road Improvements	Economic growth is inhibited
Increased maintenance and resilience	More kilometres of the road network resealed and rehabilitated each year	Asset Condition: Prioritise maintenance and renewals to ensure the road network is fit-for-purpose and resilient	A resilient transport system that enables connection	Safety	R01	Road Surface Condition	% Fair, Good or Very Good	Local Road Pothole Prevention	Local Road Maintenance	212	Sealed road resurfacing	Contirbution to DSIs from road condition
	Fewer potholes			Safety	M01	Sealed Pavement Maintenance	No of pavement faults per km	Local Road Pothole Prevention	Local Road Improvements	111	Sealed pavement maintenance	Harm to customers and vehicles, deferred maint cost
				Liveability	M02	Unsealed Pavement Maintenance	No of complaints	Local Road Pothole Prevention	Local Road Maintenance	112	Unsealed pavement maintenance	Damage to vehicles
	A more resilient network			Resilience	I07	Resilient Network	% network vulnerable to weather events	Local Road Improvements	Local Road Improvements	357	Resilience Improvements	Network is disrupted due to weather events
				Service Sustainability	R02	Pavement Condition	% Fair, Good or Very Good	Local Road Pothole Prevention	Local Road Maintenance	214	Sealed road pavement rehabilitation	Life cycle costs increase
				Health	R03	Footpath Condition	% Fair, Good or Very Good	Walking and Cycling	Walking and Cycling	225	Footpath renewal	Trip Hazards
				Environmental Sustainability	R04	Drainage Condition	% Fair, Good or Very Good	Local Road Pothole Prevention	Local Road Maintenance	213	Drainage renewals	Flooding and pavement deterioration
				Service Sustainability	R05	Structures Condition	% Fair, Good or Very Good	Local Road Improvements	Local Road Improvements	216	Bridge and structures renewals	Roads closed due to structures
		Environmental Sustainability: Facilitate understanding and support responses that help meet environmental and emissions targets	Transport does not negatively impact biodiversity	Liveability	R06	Unsealed Roads Condition	% Fair, Good or Very Good	Local Road Pothole Prevention	Local Road Maintenance	211	Unsealed road metalling	Safety, lifecycle cost
				Risk	R07	Traffic Services Condition	% Fair, Good or Very Good	Local Road Operations	Local Road Maintenance	222	Traffic services renewals	Safety impacted, harm increased, DSIs
				Health	R08	Cycleway Condition	% Fair, Good or Very Good	Walking and Cycling	Walking and Cycling	224	Cycle path renewal	Active travel discouraged
				Environmental Sustainability	R09	Environmental Asset Condition	% Fair, Good or Very Good	Local Road Operations	Local Road Maintenance	221	Environmental renewals	Water quality is not managed at source
			Transport emissions are reduced	Environmental Sustainability	M04	Routine Drainage Maintenance	No of drainage faults per km	Local Road Pothole Prevention	Local Road Maintenance	113	Routine drainage maintenance	Road condition is adversely affected, flooding occurs

				Service Sustainability	M05	Structures Maintenance	No of structures faults	Local Road Operations	Local Road Maintenance	114	Structures maintenance	Structure condition deteriorates
				Resilience	M06	Emergency Response	% Damage remedied	Local Road Operations	Local Road Maintenance	140	Minor events	Road closures
				Safety	M07	Network Services Maintenance	No of traffic services faults per km	Local Road Operations	Local Road Maintenance	122	Network service maintenance	Safety impacted, harm increased, DSIs
				Safety	M09	Environmental Maintenance	Number of ice related crashes or No of days the crown range is closed every winter	Local Road Operations	Local Road Maintenance	121	Environmental maintenance	Roads and pathways are not safe enough to be used
Improved Safety	Reduction in deaths and serious injuries	Road Safety: Prioritise high risk areas to create a safe transport system free of death or serious injury	Road Safety is prioritised	Safety	I01	Safe Travel	No of DSI reductions	Local Road Improvements	Local Road Improvements	341	Minor Improvements / Road to Zero	DSIs do not reduce
				Health	I02	Active Travel	% of active travel journeys	Local Road Improvements	Local Road Improvements	451	Walking Facilities	Health is not improved through active travel
				Health	M03	Footpath Maintenance	No of footpath faults per km	Walking and Cycling	Walking and Cycling	125	Footpath maintenance	Trip Hazards
				Health	M08	Cycle Path Maintenance	No of cyclepath faults per km	Walking and Cycling	Public transport services and infrastructure	124	Cycle path maintenance	Active travel discouraged
Value for money	Better use of existing capacity	Future Focused: Position the regions to ensure proactive responses to change and challenges	Investment in transport is affordable	Reliability	M10	Network Operations	Uptime of equipment - % time equipment available	Local Road Operations	Local Road Maintenance	123	Network operations	Congestion leading to travel time variability and safety issues, mode shift change is not achieved.

7.3. NATIONAL LEVELS OF SERVICE

7.3.1. DEPARTMENT OF INTERNAL AFFAIRS (DIA) MEASURES

In 2010, the Local Government Act 2002 was amended to require the Secretary for Local Government to make rules specifying non-financial performance measures for local authorities to use when reporting to their communities. The aim was to help the public to contribute to discussions on future levels of service for their communities and to participate more easily in their local authority's decision-making processes. The Department of Internal Affairs (DIA) was tasked with developing these measures. The performance measures cover the following key aspects of service delivery:

Table 23: DIA KPI

KPI	KEY PERFORMANCE INDICATORS - ANNUAL	TARGET
INFRASTRUCTURE ROADING		
DIA	The change from the previous financial year in the number of fatalities and serious injury crashes on the local road network expressed as a number.	To report an increase on the previous year
DIA	Average quality of ride on a sealed local road network, as measured by the Smooth Travel Exposure Index	>80%
DIA	Percentage of sealed network that is resurfaced annually	<10%
DIA	Percentage of local footpath network that is part of the local road network that falls within the Level of Service (LOS) or service standards for the condition of footpaths	95%

7.3.2. SUB-CLASSIFICATION OF ACCESS AND LOW VOLUMES ACCESS ROADS

QLDC has 281km of unsealed roads within the Access and Low Volume Access classifications. Due to the sizable network percentage in these categories, QLDC has adopted the approach taken by Central Otago, Dunedin City Council and Waitaki in utilising a further sub classification of the Access and Low Volume Access Roads. This will enable further prioritisation and management and Level of Service realisation and are realised within our unsealed road asset management strategy.

Some of QLDC's unsealed network is increasing in traffic volumes, particularly areas which access Crown Estate land such as Department of Conservation (DoC) National Parks. This raises questions on the QLDC strategy for dealing with these roads as in some areas (DoC) do not want to increase the capacity at the end of the road or they want the access roads to reflect the 'back country' nature of the environment. However there are safety issues which need to be addressed and this sub-classification will hopefully assist with understanding the LoS issues.

Table 24: Sub-classification of Access and Low Volume Access Roads

ONRC	Traffic Volume	Sub classification	Sub Classification Definition	QLDC roads - example
Acce	>50 vpd	Major	More than 50 vehicles per day and have a higher-than-normal percentage of heavy vehicles or higher use alternative through routes. Significant tourist route.	Skippers Rd
		Intermediate	Through roads which form part of a route which services an area, service significant horticultural, farming or industrial activities, are higher volume gravel roads in lifestyle block areas, are part of school bus routes, or other activity of importance to the community.	
Acce	<50 vpd	Minor	Provide access to more than three houses or are used as an alternative through route by a number of properties.	End of Skippers Rd, Branches Rd
		Lane	Provide access to three or less houses. While these roads may be a through route there are alternative higher classification routes available and they are generally only used as access to farmland or by residents of three or less houses.	
		Track	Back Country Tracks service land use beyond dwellings and buildings and provide high country access.	Macetown Road

7.3.3. ONE NETWORK FRAMEWORK (ONF)

The One Network Road Classification (ONRC) system was a core element of the New Zealand land transport management system over the past eight years, providing a consistent and well-understood classification baseline for a wide range of planning processes. The evolution of the ONRC to a the One Network Framework (ONF) aims to align the ONRC more closely with the Government's outcomes focus areas. It recognises the value of integrated land and transport planning for creating greater liveability and prosperity and acknowledges the distinct geographical challenges of our country's transport network.

Introducing a more granular 'Movement and Place' approach will allow us to better consider different mode priorities, surrounding land use, community wellbeing, economic activity, and growth aspirations for the future.

It will also provide an easy-to-understand common language that all transport, land use and urban planners can share, and help make the classification system more localised and applicable.

Table 25: ONF Framework

	ONF Category	Total Length (km)	Total Length (%)	Sealed (km)	Unsealed (km)	Lane (km)	Vehicle Journeys (m vkt)
URBAN	Urban Connectors	36.1	4%	36.1	0	73.1	56.5
	Activity Streets	15.9	1.8%	15.5	0.4	33.8	27.6
	Main Streets	1.9	0.2%	1.9	0	3.7	4
	Local Streets	266.5	29.4%	255.9	10.6	513.9	47.8
	Civic Spaces	0.6	0.1%	0.6	0	1.2	0.3
	Total Urban Network	**321**	**35.4%**	**309.9**	**11**	**625.7**	**136.2**
RURAL	Stopping Places	1.8	0.2%	1.1	0.7	3.2	1.3
	Rural Connectors	225.6	24.9%	189.1	36.5	447.9	148.1
	Peri-urban Roads	40	4.4%	30	9.9	74	17.8
	Rural Roads	295.7	32.6%	27.5	268.2	411.6	21.1
	Total Rural Network	**563.1**	**62.1%**	**247.8**	**315.2**	**936.7**	**188.3**
	Unclassified	22.3	2.5%	17	5.3	44.1	21
	Total Network	**906.3**	**100%**	**574.7**	**331.6**	**1606.5**	**345.5**

7.3.4. LGNZ ROAD CONTROLLING AUTHORITY REPORT

The RCA report has been created by LGNZ and Te Ringa Maimoa to provide better transparency on the Road Controlling Authorities to the transport sector, enabling open conversation to be had and to support investment decision making. Outputs from this have been utilised throughout the AMP.

7.4. REGIONAL LEVELS OF SERVICE DRIVERS

7.4.1. REGIONAL LAND TRANSPORT PLAN

Table 26: Primary indicators for monitoring RLTP

Primary indicators for monitoring RLTP		
Inclusive access		
Measure	Indicator	Data Sources

Primary indicators for monitoring RLTP		
Public transport patronage	The number of people boarding buses	Ministry of Transport - Public transport NZTA Waka Kotahi - Funding and transport – dashboard and open data
Active travel and public transport journeys to work and education	Percentage of the people who utilise public or active transport for work or education.	2018 Census (Statistics New Zealand) Otago: https://www.stats.govt.nz/tools/2018-census-place-summaries/otago-region#transport Southland: https://www.stats.govt.nz/tools/2018-census-place-summaries/southland-region#transport
Healthy and safe people		
Deaths and serious injuries	Number of deaths and serious injuries (DSI)	Transport Insights - Te Ringa Maimoa: ONF Transport Outcomes NZTA Waka Kotahi NZ Transport Agency: Communities at risk register Ministry of Transport: Safety - Road deaths
Cyclist and pedestrian deaths and serious injuries	Number of pedestrians and cyclists fatally and seriously injured	
Resilience and security		
Road system resilience	Readiness to respond: Coastal inundation	Ministry of Transport: Transport indicators - Resilience and Security
	Readiness to respond: Viable routes	
	Unplanned road closures	Transport Insights: Te Ringa Maimoa - ONF Transport Outcomes
Economic prosperity		
Transport, postal and warehousing's contribution to GDP		Statistics New Zealand: Regional gross domestic product: Year ended March 2022 Ministry of Transport: Transport Indicators – Economic Prosperity
Freight moved by rail between regions		Ministry of Transport: Freight and Logistics
Heavy Vehicle Accessibility	High-productivity motor vehicles (HPMVs) including 50MAX	Transport Insights - Te Ringa Maimoa - ONF Transport Outcomes NZTA Waka Kotahi NZ Transport Agency (list of routes/bridges) - Map of 50MAX routes
Environmental sustainability		
Transport-generated emissions	Transport-generated carbon dioxide emissions	Transport Insights - Te Ringa Maimoa - Regional Reporting (data on regional emissions for transport from Stats NZ) : ONF Transport Outcomes

Primary indicators for monitoring RLTP		
		Climate Assessment of Transport Investment (CATI) CATI will be utilised to understand the influences that activities within this RLTP have on emissions (High-level project assessment tool)
	Ambient air quality	Land, Air, Water Aotearoa (LAWA): Air Quality (Cannot isolate transport emissions to monitor impact on air quality)
Vehicle kilometres travelled by region		NZTA Waka Kotahi - Funding and transport – dashboard and open data Ministry of Transport: Fleet Statistics
Vehicle fleet composition	The number of vehicles that are electric, hybrid, petrol, and diesel	Ministry of Transport: Fleet Statistics
Note: The monitoring framework uses relevant indicators to provide the necessary information to track progress. Data sources will continue to be reviewed and added to this framework as appropriate.		

7.5. LOCAL LEVELS OF SERVICE DRIVERS

7.5.1. TRANSPORT LTP LOS OUTCOME

The LTP is targeting the following LoS outcomes:

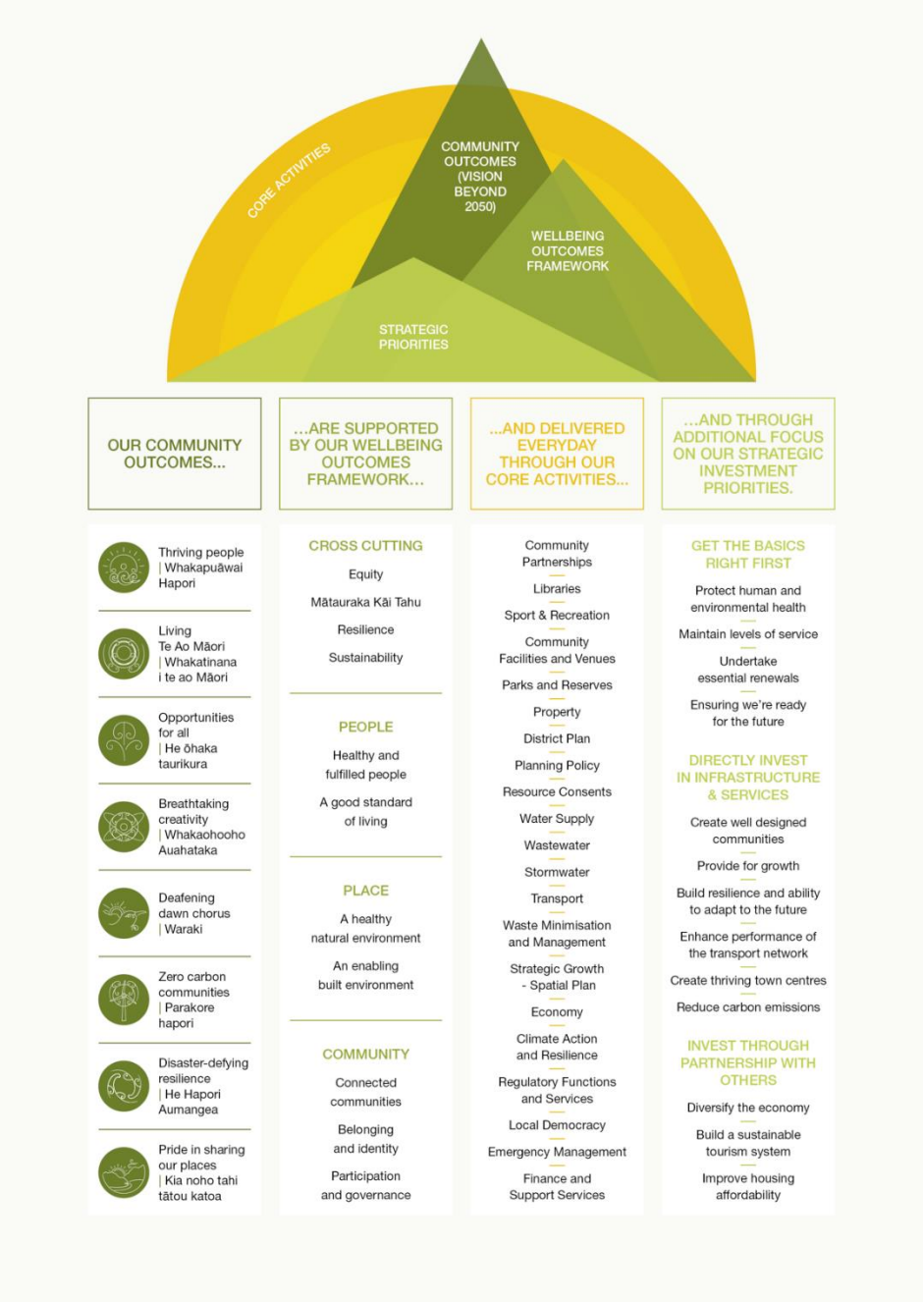
- Road Safety is prioritised;
- Transport modal choices are available;
- Transport network provides reliable and consistent travel time;
- Transport does not negatively impact biodiversity;
- Transport emissions are reduced;
- Investment in transport is affordable;
- A resilient transport system that enables connection

Differential Levels of Service across our network are hierarchical and based on NZTA Waka Kotahi's One Network Framework.

7.5.2. LONG TERM PLAN MEASURES

The QLDC Strategic Framework and Invesment priorities outline how the community's aspirations and wellbeing drive everything we do. The framework identifies areas we need to prioritise to address local issues and make meaningful progress towards meeting community outcomes.

Figure 128: QLDC Strategic Framework LTP24



Local authorities are required to incorporate mandatory performance measures developed by the Department of Internal Affairs (DIA) in the development of their LTPs. QLDC have adopted the DIA measures for infrastructure and have developed additional measures QLDC specific (below).

Targets for all performance measures are be set for the first three years, and are based upon current or 'baseline' performance.

The QLDC measures included in our LTP24 are:

Table 27: Long Term Plan 2024 – KPI

We use the following measures to determine our success against the level of service we aim to provide for the community.

ROADING

LEVEL OF SERVICE	KEY PERFORMANCE INDIATOR (KPI)	2022-23 RESULT	TARGETS			
			YEAR 1	YEAR 2	YEAR 3	Years 4-10
Our Council provides appropriate parking, road and active transport networks to meet the current and future needs of the community.	Percentage of capital works completed annually, including renewals, against the annual budget adopted by the Council for three waters, waste management and roading	88.53%	80-110%	80-110%	80-110%	80-110%
	Percentage of external contractor and internal Request For Service resolved within specified timeframe - Roading	87.40%	>95%	>95%	>95%	>95%
	The change from the previous financial year in the number of fatalities and serious injury crashes on the local road network expressed as a number	5	To report a decrease on the previous year	To report a decrease on the previous year	To report a decrease on the previous year	To report a decrease on the previous year
	Average quality of ride on a sealed local road network, as measured by the Smooth Travel Exposure Index	94%	>90%	>90%	>90%	>90%
	Percentage of sealed network that is resurfaced annually	5.8%	<10%	<10%	<10%	<10%
	Percentage of local footpath network that is part of the local road network that falls within the Level of Service (LOS) or service standards for the condition of footpaths	97.9%	>95%	>95%	>95%	>95%
	Percentage of residents who are choosing to use their petrol or diesel vehicle less by using alternate modes of transport or active travel	New measure	Establish a baseline A year on year increase in alternate modes	Establish a baseline A year on year increase in alternate modes	Establish a baseline A year on year increase in alternate modes	Establish a baseline A year on year increase in alternate modes

7.5.3. CLIMATE AND BIODIVERSITY PLAN MEASURES

The Climate and Biodiversity Plan measures a number of Transport related inputs, and these relate to the Plans 2nd Outcome: *Our transport system is low-emission and better connected.*

This aims to develop transformational options for net-zero emissions public transport. QLDC will partner with the Otago Regional Council to identify options for net-zero emissions public transport. Opportunities to trial innovative ideas will be explored with a view to wider implementation.

The Climate and Biodiversity Plan is a companion document.

7.5.4. QLDC CUSTOMERS - LEVELS OF SERVICE

QLDC is becoming a more customer focused organisation, to this end we are striving to understand the requirements of the Community and our stakeholders to provide robust evidence in decision making. This is achieved through better consultation with the community, and engagement with ratepayers and stakeholders.

Table 28: Key Stakeholders

Stakeholder	Philosophy of Engagement
NZTA Waka Kotahi – System Design & Delivery (SD&D) & State Highways	As a co-investor NZTA Waka Kotahi plays an important role in the management and direction of the roading network. QLDC collaborates with NZTA Waka Kotahi to achieve a customer-focused delivery across one transportation network.
Senior Management and Elected Members	Working to ensure QLDC has accurate data for evidence-based decision making as well as leading a committed and coordinated effort across all sections of an organisation in terms of AM.
Internal Staff	QLDCs approach is to co-ordinate the education, communication, and awareness of asset management processes in the transportation sector.
Supply Partners and Service Providers	Strong relationships are formed on a shared philosophy of delivering value for money for our customers. Specifically, professional services that are focused on developing investment programmes that increase productivity for our customer. Physical works providers that are delivering fit for purpose LoS and are innovating. Continuing to build awareness and understanding of AM processes across QLDC's external partners.
Automobile Association (AA)	Engage with AA to further foster the customer and journey-oriented approach
Collaborative Partners	Partnership with delivering services such as neighbouring, regional and local councils, emergency (NZ Police/Fire/Ambulance) and emergency management authorities, and Department of Conservation. Working with other network providers that utilize the roading corridor for service provision such as electricity, gas, telecommunications and water.
Customers	Engage with customers to communicate the cost to deliver services and where the key focus of spending should be and how can achieve required outcomes including a safe, resilient, reliable, and environmentally aesthetic network. Customers include: All road users All adjoining property owners Local ratepayers and residents associations Local businesses

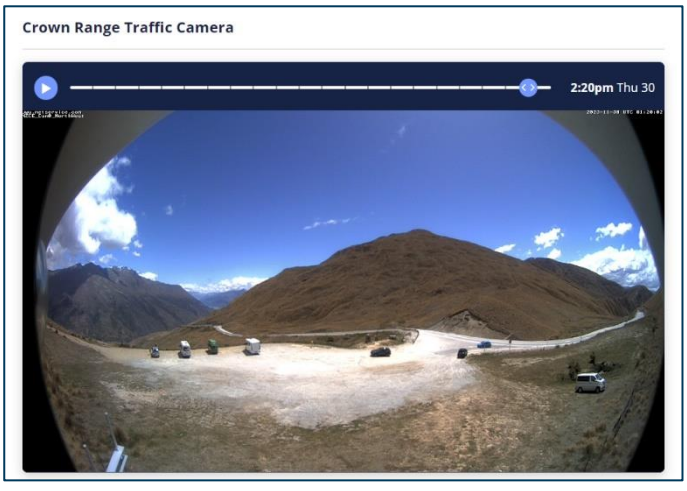
Stakeholder	Philosophy of Engagement
NZ Film Association	Permits for filming to support the arts
Whakatipu Transport Programme Alliance	This alliance between QLDC, NZTA Waka Kotahi, Beca, Downer, Fulton Hogan and WSP will deliver a number of cornerstone transport projects and allows for optimal programme delivery and integration with suppliers and partners.

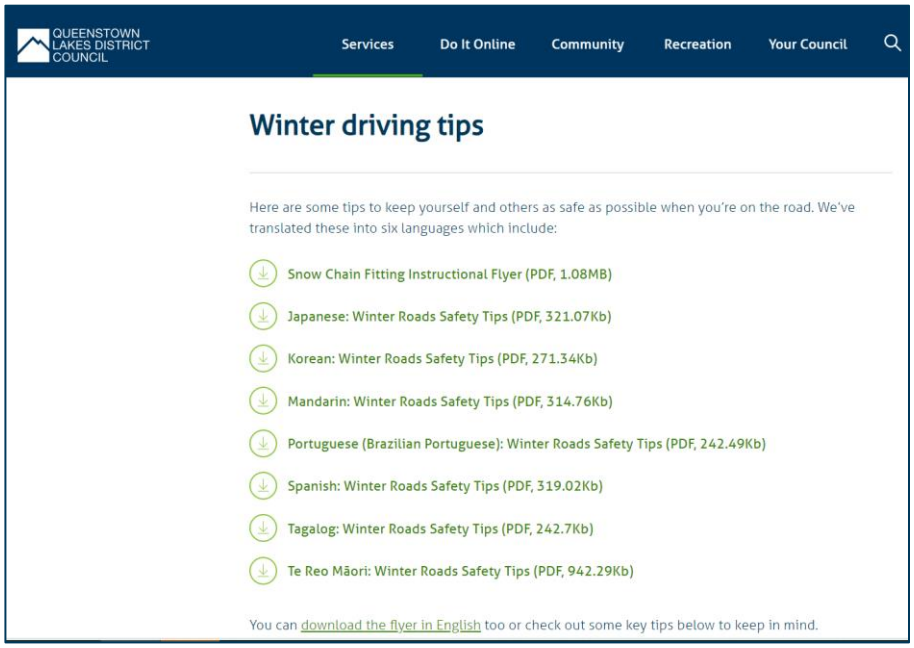
7.5.4.1 COMMUNICATING WITH STAKEHOLDERS

QLDC has adopted a combination of email, social media, radio messaging and websites to inform the travelling public about changing road conditions which may disrupt their travel plans. Disruptions include snow and ice in winter; storm damage; road works; crashes and police operations. QLDC has also relaunched its text alert system. Specific channels are:

- Road report email list (8,582) recipients, sent daily 6.30am in winter (and as required at any time);
- QLDC Facebook page (39k followers);
- Community text alerts (44k + subscribed across various areas);
- Community Facebook pages, chosen to match the location of the disruption);
- Breakfast radio – The Hits, More FM, Radio Wānaka, Radio Glenorchy;
- QLDC website;
- Queenstown traffic web cameras (link to Stanley St and Ballarat St signals via NZTA Waka Kotahi website);
- Crown Range weather station and webcam.

Figure 129: Communicating with Stakeholders





7.5.4.2 COLLABORATION

QLDC believes that collaboration facilitates an important approach in achieving our desired outcome, this is done by working closely with our partners, stakeholders and wider regional peers.

- Closer relationships are being developed between State Highway Operations and QLDC. Regular operational liaison meetings, NZTA Waka Kotahi provide advice and guidance through RAPTs and transport meetings. Early engagement and continued close working with NZTA Waka Kotahi Investment advisors and has been fundamental to building our Activity Management Plan;
- QLDC is heavily invested in the REG programme with QLDC Chief executive on the REG Governance Group, staff chairing a REG working groups and officviers regularily attending the regional workshops;
- We have developed a shared contractual approach to Street Lighting Maintenance and contract manage this for State Highways;
- Corridor Management and skill sharing is being explored between QLDC, CODC and State Highways;
- Way2Go Partnership (QLDC, NZTA Waka Kotahi, ORC);
- Whakatipu Transport Programme Alliance – In November 2020 a partnership between QLDC and Waka Kotahai, along with four design and construction companies; Beca, WSP, Downer NZ and Fulton Hogan. This Alliance has succesfully delivered the Queenstown Street Upgrades project and is in construction of the Stage 1 Arterial Upgrade (estimated completion at time of writing mid 2025). The NZ UP Programme is in the intitial construction stages and will span the next four years. The alliance model means we can achieve the best possible integration and customer focus to ensure the successful delivery of these projects.
- Lifelines – this is a collaboration of infrastructure companies within Otago to make sure people keep moving when there is a significant event. The group covers members from Local Authorities (3 Waters, Roading and Transport), Electricity Companies, and Telecommunications, Emergency Services (St John, Fire, and Police) who meet regulatory. There is also a dedicated Queenstown group - Queenstown Lakes Utilities & Lifelines (QUELL) which includes air and water access.

- Department of Conservation having taken its place as a Road Controlling Authority, QLDC are keen to support and work with them to address the issues our district faces. There are already existing maintenance agreements in place for some of the unsealed roads accessing DoC destinations and the new DoC carpark at Roy's Peak on the Wānaka -Mount Aspiring Road is a great example of this collaborative working. Looking forward there will be a particular area of interest between our organisations and QLDC explore the strategic case for the access to crown estates.
- Internally within Property and Infrastructure, QLDC are working closely with 3Waters and Waste Management, particularly around developing storm water work programmes, coordination of timelines for renewals monitoring of reinstatements and undertaking asset criticality/vulnerability assessments.
- QLDC has created a Forward Works Viewer, this allows Council to map the districts projects and in future will combination with Private Development projects. This will provide oversite of the projects and programmes happening in the district t, and if there isan impact on Utilities, Events etc. A time slider/play button allows for an interactive visual representation.
- The work on the Spatial plan has resulted in much closer engagement with our Planning and Development team to address the requirements of the National Policy Statement on Urban Development
- Across Council collaboration has focus on reviewing the Land and Subdivision Code of Practice and this has resulted in tangible improvements to the vesting process.
- QLDC are approaching the local supply chain early in the procurement process to find the most appropriate method to get the best value for projects. I.e. packages of works and timings.
- QLDC has a strong relationship with the districts business community and is building its relationship with Iwi (Ngai Tahu).
- Industry Engagement – QLDC shows a commitment to the industry and our peers. QLDC has a commitment to Te Ringa Maimoa through the QLDC CEO being on the Governance Group, the QLDC Strategic Asset Manager chairs the Evidence and Insights workgroup and key staff heavily engaged with the Te Ring Maimoa programme and a strong support towards peer learning with Conference attendance.

7.5.4.3 CUSTOMER REQUESTS FOR SERVICE

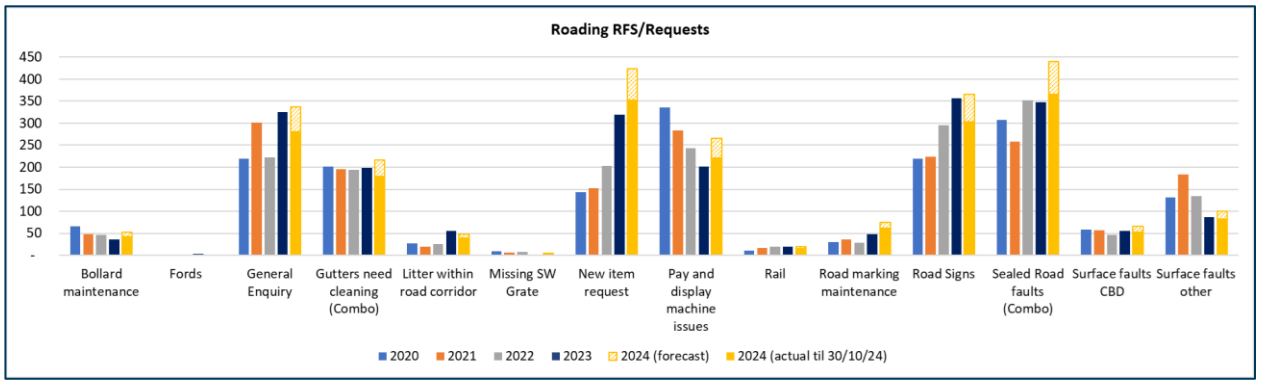
Customer interaction is key metric on how we are delivering the community outcomes. Interaction with customers is largely recorded through our Customer Management System (TechOne). Request for Service are recorded, actioned, and monitored at a corporate level and a councillor level.

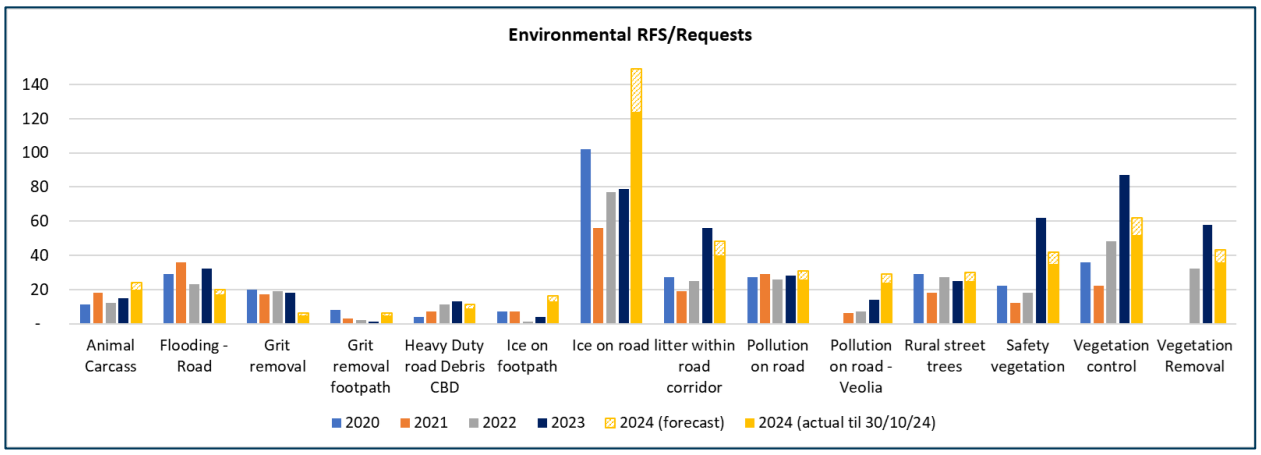
QLDC have worked to integrate the Customer Service System with our RAMM asset management system, which enables the roading contractors to receive almost immediate notification of requests from TechOne into RAMM and to be able to provide response and action back to the customer service team.

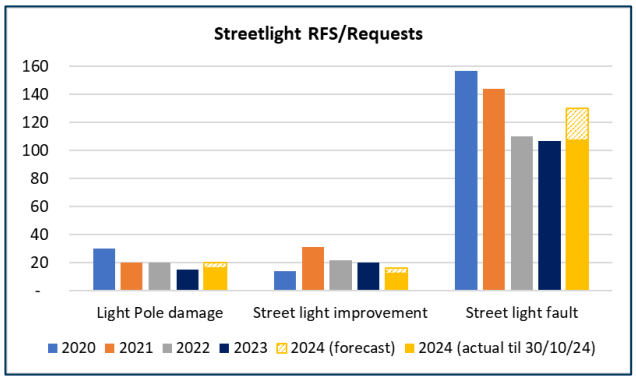
The district has seen major changes in the last few years, QLDC are receiving more requests for traffic calming, line marking, additional lighting in black areas, increased parking charges and requests to assist with congestion. QLDC are working through a central business district master plan which will not deliver resolutions. Internal teams have also been working together to resolve issued line marking issues around new subdivisions.

The charts below show an overview of the Requests for Service received between 2020-July 2022 (RFS) and August 2022-July 2023 (Request Management) (2023 actual data incomplete).

Figure 130: Overview of total RFS/Request Counts







Note: 2024 actual data until 30/10/24, 2024 whole year total data extrapolated only.

7.6. IMPROVEMENT ACTIONS – DEFINING AND MEASURING LEVELS OF SERVICE

Improvement Actions – Levels of Service

1. Transport Capacity model build - 2025 project to build a new transport model and improve how we manage and run the model.
2. Quality of Life Survey to be updated upon release of 2024 survey.
3. Implement improved future 2024 LTP Transport KPIs and align with monitoring plan.

4. Review the LTP level of service statements in time for next LTP.
5. Ensure 2024 RLTP Transport KPIs are in place and align with the improved monitoring plan.
6. Implement Transport monitoring plan
7. Understand the move to ONF Levels of Service and update where accordingly in systems/documentation.
8. Digital AMP finalisation of optioneering visuals

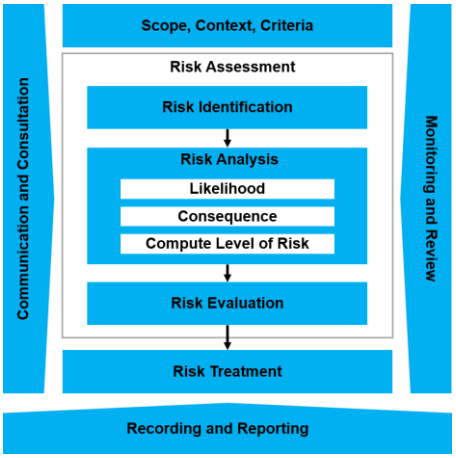
1. MANAGING RISK

This section outlines Council's approach to managing risk, including management of potential significant negative impacts, safety management and Council's risk management approach.

1.1. QLDC RISK MANGEMENT FRAMEWORK

QLDC has reviewed and updated its Corporate Risk Management Framework (RMF) in accordance with ISO 31000. The RMF has been rolled out across QLDC at a corporate level and is in the process of being embedded at an operational level. The RMF provides guidance on the process that QLDC has adopted for the effective identification, analysis, evaluation and treatment of risk. The RMF also details the responsibilities that are associated with risk management governance, risk ownership and risk treatment. QLDC's Audit and Risk Committee provides governance over the effectiveness of the QLDC's RMF, internal controls, legislative and regulatory compliance, external audits and financial reporting.

Figure 131: QLDC Risk Management Framework



QLDC has developed a risk register containing a set of strategic and operational risks, each of which have been assessed for their likelihood and consequences both before and after the mitigations and controls in place are considered. This list provides guidance to the organisation as to the materiality of key risks and the importance of mitigations and controls.

QLDC is moving to better integrate formal risk assessments into its asset decision making. The end result of this integration will be each investment decision being based on a consistent, robust and quantitative assessment of risk.

To mitigate risk, QLDC will:

- Establish and deliver maintenance and renewal service standards that preserve critical assets, mitigate risk and meet the desired service outcomes based on this RMF;
- Not accept the transfer of third party assets, unless minimum acceptable quality standards are met as set out in the QLDC Land Development and Subdivision Code of Practice;
- Prioritise and proactively inspect and protect its assets and their performance;
- Insure all critical assets for loss, damage and public indemnity;
- In the event that an asset can no longer be maintained in a safe condition, it shall be retired from service and any foreseeable hazards to the community are mitigated;
- Perform hazard loss modelling.

1.2. CRITICAL ASSETS

Critical assets can be defined as those that "are especially significant to social wellbeing and therefore merit priority attention by utilities in emergency response and recovery" they are also defined as those which have a "high consequence of failure" for example, a transport route may be critical because it carries high volume of traffic, or if it is the only route to a hospital.

While there are a variety of frameworks for assessing criticality in different asset classes and industries, it is generally understood that a critical asset is one whose consequences of failure, or interruption of service, is very high. While a focus on assets is important, we also need to consider the events that lead to interruption of service (which may occur across a group of assets). Importantly for QLDC's criticality assessment, the Corporate Risk Management Framework contains guidance on how to assess the consequence of a particular event.

In the roading context, criticality is an important component of a key level of service: resilience. While resilience is the ability of the network to recover following an event, the criticality of the assets in question will drive the level of desired resilience (Hughes and Healy, 2014).

QLDC recently began its application of a first generation criticality assessment to its roading infrastructure. This approach is involves working closely with NZTA Waka Kotahi and contractors. The process is intended to be generational, inevitably, there will be endless opportunities for future refinements, but our near-term objective is to apply a credible framework and obtain some experience in using it for decision making, rather than perfecting the framework.

The criticality of our network drives a number of activities.

- Structural assessment programme
- Slope check
- Winter maintenance routes priorities
- Emergency response
- Prioritisation of renewals

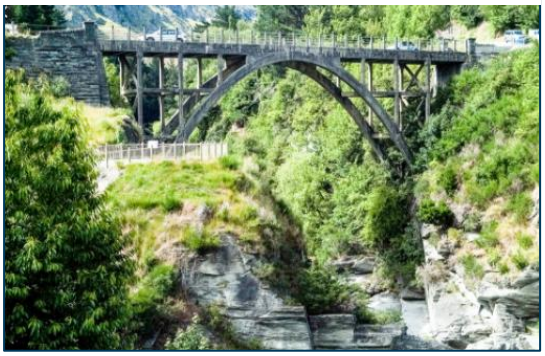
Table 29: Critical Assets

Critical Asset(s)	Examples	Failure Mode	Consequence	Safety- and risk-specific assessments
Structures – Bridges	Skippers Bridge	Extreme loading, washouts, scouring	Collapse	Minimum 2 yearly structural assessments. Annual visual assessments. (annual for posted bridges).
Retaining walls	Glenorchy Road	Slow settlement or collapse	Collapse of cantilever wall	Annual visual inspections by road maintenance contractor. Two yearly structural inspections
Roads	Crown Range Road /Mt Aspiring Road	Landslides, scour from weather events	Risk of falling onto people or assets. Closure of network	S7 Geotechnical structures inspection on high risk assets. Annual All-Faults programme

Resilience is considered an activity that is key to managing risk on the QLDC Network, more information can be found in Assets and activities in section 6.2.12.

1.3. HERITAGE ASSETS AND PROTECTED FEATURES

Figure 132: Edith Cavell Bridge



QLDC have a number of Heritage assets in our district and these are referenced in the District Plan. QLDC have endorsed a new Arts, Culture and Heritage (ACH) Strategy. It is proposed an idea of creating a 'heritage operational framework' within Council to connect touchpoints across departments. QLDC will align with the NZTA Waka Kotahi Heritage policy where possible.

Figure 133: Horne Creek Bridge

Figure 134: The Creativity, Culture and Heritage Strategy

The following Heritage transportation assets are identified in the District Plan:

Table 30: District Plan Heritage Assets

Skippers Road	The Mace Town Road*
Edith Cavell Bridge	Albert Town Bridge James Horn Plaque
Horne Creek Bridge	Kawarau Falls Bridge
Kawarau Gorge Suspension Bridge	Skippers Bridge
Old Shotover Bridge	Luggate Red Bridge
Domain Road Historic Hedge	Arthur Thomas Monument
Lombardy Poplar	King Edward VII Memorial Lamp
Chard Road	Hotops Rise
Ballarat Street Bridge	Victoria Bridge Supports
Studholme Nursey Plaque Cardrona	

* Mace Town Track administered by LINZ has granted consent to QLDC to undertake minimum track maintenance until March 2025

The QLDC / Downer Maintenance Management Plan (MMP) now references QLDC Heritage assets and the information links to a RAMM User Defined Table 'Network Knowledge', along with any specific requirements. This highlights these important assets and provides better visibility and knowledge retention as to how they should be managed.

Figure 135: Ballart Street Bridge Entry No 7097 | Cobbled Gutters Arrowtown Entry No 2086

1.4. CONSENTS

QLDC must meet its requirements under the Resource Management Act. For transportation purposes, QLDC holds consents in the areas:

- To extract gravel for roading purposes;
- To apply CMA to the roads during winter;
- To install and maintain flood protection works;
- Maintaining bridges and culverts.

Consent compliance is maintained as follows:

- The Council shall comply with the RMA and the conditions of resource consents that apply;
- The Council is responsible for applying for new resource consents that are due to expire. In some instances a new resource consent may be applied for well in advance of the expiry date where current and projected demands require an increase in the rate of abstraction and/or an alteration to an existing designation;
- The Council shall gather and collect data required by the resource consent conditions and complete reports as required;
- The Council shall report the monitoring results to Otago Regional Council to demonstrate compliance with resource consent conditions.

A number of consents have recently expired and are underway to be replaced. will be expiring within the next NLTP period, and QLDC will also be reviewing the longer term approach to aggregate resourcing, ensure sustainable access to suitable aggregate, with a view to minimising risk and future costs. A Consent Register can be found in the APPENDIX.

Consents Register is a companion document

1.5. IMPROVEMENT ACTIONS – MANAGING RISK

Improvement Actions – Managing Risk

1. Develop the Risk Framework Tier 2 Risks
2. Update the Network Risk Plan with the Ops team and Roading Contractor

2. EFFICIENTLY AND EFFECTIVELY PROCURE & MANAGE

2.1. PROCUREMENT

Delivering our intended outcomes to our community is essential; effective service delivery through procurement and management of our contracts enables us to deliver our programme.

2.1.1. QLDC (PROPERTY & INFRASTRUCTURE) PROCUREMENT

QLDC has had an increasing focus on procurement capability, capacity and consistency, QLDC has:

- Introduced a new Procurement Policy (2021) and new Procurement Guide (2022) and continue to build procurement capability, capacity and consistency; and
- Adopted a QLDC-wide Procurement Strategy (2023) setting up a Centre-led procurement function with the creation of new roles for a Procurement Manager and Procurement Excellence Advisor.
- Developed the Strategy for the Procurement of Transport Infrastructure 2023

Table 31: Key Goals of Procurement

Optimise public value	Get the best possible result over the whole-of-life of the goods, services or works by maximizing the benefits and outcomes generated by QLDC's procurement activities.
Supporting the delivery of QLDC objectives through efficient and effective procurement	Make conscious decisions to use procurement to assist the delivery of QLDC objectives. Ensure procurement activity has consideration for QLDC's Procurement Principles and Procurement Charter, including planning for broader outcomes.
Build procurement capability and capacity	Develop QLDC's procurement, knowledge, systems, processes and resources to support efficient and effective procurement that aligns with industry best practice.

All procurement is supported by a Procurement Plan that addresses the entire project or service. It is intended that a short-form procurement plan be developed for simple procurements (low cost/low value) and a more detailed plan for complex procurements with higher costs, risk and/or high customer or community profile.

QLDC intends to utilise a variety of supplier selection methods as defined in each specific procurement plan. These may include direct appointment, lowest price conforming, price quality and quality based. QLDC has identified the use of advanced components being contemplated in multiple scenarios, including Supplier Panel – Engineering and Specialist Support Services Panel, Supplier Panel – Minor Works, and Way to Go – Quality Based and Shared Risk.

Contractors are QLDC workers too - to fulfil our duties under the Health and Safety at Work Act when engaging contractors WorkSafe expects that at minimum, we will:

- Be a health and safety leader;
- Set clear health and safety expectations and incorporate these into contracts with contractors;

- Work with designers to eliminate risks so far as is reasonably practicable, or minimise risks if they cannot be eliminated;
- Choose the best contractors for the job using pre-qualification, not simply choosing them based on cost;
- Check health and safety records of potential contractors;
- Put clear and effective reporting procedures in place so they can be confident all duties are being met;
- Set up a clear framework for information sharing for the duration of the project.

Contractors are classified based on the frequency of engagement and the risk profile of the work ahead. They are either Low, Medium or High risk contractors and each requires a different level of tender assessment, induction, monitoring and post contract evaluation.

To help in engaging contractors for or on behalf of QLDC and to ensure that the contractor has suitable safety systems and appropriate training in place QLDC requires contractors to undergo pre-qualification before being engaged to perform work. At QLDC our recommended supplier to do this is SiteWise. Contractors must attain SiteWise Green Status. SiteWise is a pre-qualification system that grades a contractor's health and safety capability and publishes that grade in a database that can be viewed by main contractors and principal organisations. We can also accept other pre-qualification systems that are of an equivalent or higher standard, but you must involve the HS Manager in this process to ensure that the system meets QLDC requirements.

Way to Go is the collaborative partnership between NZTA Waka Kotahi, QLDC, and Otago Regional Council. It operates under a MoU signed by parties in December 2018, and recognises the unique transport challenges faced by QLDC and is committed to working collaboratively to provide residents, visitors and ratepayers with an enduring, affordable, safe transport system.

QLDC's Procurement Policy sets out how goods and services should be purchased. It is based on two complementary principles – value for money, and open and effective competition. It is applied to all purchases made by the QLDC including all goods, services, plant and equipment, civil construction and real property.

The QLDC will undertake regular reviews of the quality and quantity of information to enable it to monitor progress against its own procurement goals. The performance of QLDC's maintenance contracts is tracked through monthly and quarterly KPI reporting, and the application of this strategy will be monitored annually by reviewing the past year's procurement processes.

2.1.2. KĀ HUANUI A TĀHUNA WHAKATIPU TRANSPORT PROGRAMME ALLIANCE

Kā Huanui a Tāhuna, the Whatatipu Transport Programme Alliance (the Alliance) is a six-participant alliance including Owners - QLDC and NZTA Waka Kotahi and Non-Owners - Beca, Downer, Fulton Hogan and WSP. The Alliance is QLDC's largest vendor by spend (some four times larger than next highest vendor) delivering three key QLDC projects and the NZTA Waka Kotahi's NZ UP Programme. The scale of the Alliance creates both risk and opportunity within the local market. The key risk being the consumption of resources.

QLDC has worked with NZTA Waka Kotahi to set up the Whakatipu Transport Programme Alliance. This Alliance will deliver a number of cornerstone transport projects including the Town Centre Street Upgrades, Stage 1 of the Arterial, the NZ Upgrade Programme, and part of the Active Travel Network. The alliance model allows for optimal programme delivery and integration with suppliers and partners, and customer focus can be achieved to ensure the successful delivery of these projects.

Residents and visitors to Queenstown will benefit from safer, more accessible places and real travel choice.

Figure 136: Whakatipu Transport Programme Alliance

2.2. SERVICE DELIVERY

2.2.1. CONTRACTING ARRANGEMENTS

Contract management is a key area where QLDC has focused on improving over the last six years. With a team dedicated to managing operational and maintenance contracts across all disciplines (Transport, 3-Waters, Solid Waste), contract and knowledge and skills have increased. Contract form is now standardised (NZS390/7) across all contracts, which assists better contract management as staff can build better understanding of the contract form.

The majority of the continuous programme is delivered under a traditional contract framework, however there is a collaborative intent and relationship with suppliers and partners which is key to delivering the desired outcomes. An example of this can be seen in our reseals forward works programme where we follow the NZTA Waka Kotahi RAPT process to ensure a collaborative and robust Fordward Work Plan that is agreed between QLDC< contractors and NZTA Waka Kotahi..

2.2.2. CONTINUOUS PROGRAMME DELIVERY MECHANISMS

Table 32: Subsidies Transport Procurement Budget 2023/24 – 2024/25

Name	Work Category	Current Contract Expiry	Indicative budget		Proposed supplier selection method
			23/24	24/25*	
Maintenance & Operations					
Road Maintenance contract	100's	2027	$6.6m	$6.8m	Open Tender
Lighting Maintenance Contract	122	03/2024	$500k	$500k	Open Tender Indicative budget based on 22/23
Structural Assessments	151	06/2023	$80k	$80k	Secondary procurement through the Engineering Specialist Services Panel
Road Safety Education contract Road safety Education Various	432	June 23 +1 +2	$138k	$138k	Open Tender Various contracts – mix of direct award, closed tender, and secondary procurement
Network & Asset Management	151	Annual work programme	$2.6m	$2.6m	Various contracts – mix of direct award, closed tender, and secondary procurement (includes QLDC business unit costs and road maintenance contract overheads)
Renewals					
Reseals	212	2+1 contract term for the period 23/24 – 25/26	$2.2m	$2.3m	Option to extend for one year. PQM
Reseals	212/151	06/2028	$113k	$120k	Design and MSQA for reseals 24/25 – 27/28. PQM
Pavement Rehabilitation	214	Various contracts	$1.4m	$1.5m	PQM

2.2.3. IMPROVEMENT PROGRAMME DELIVERY MECHANISMS

The figure below is taken from the QLDC endorsed Strategy for the Procurement of Transport Infrastructure 2023) and demonstrates capital contracts in progress at that time.

Figure 13733: Improvement Programme Delivery Mechanisms (Source: QLDC endorsed Strategy for the Procurement of Transport Infrastructure 2023)

Name	Work Category	Current Contract Expiry	Indicative budget		Proposed supplier selection method
			23/24	24/25*	
Improvement					
Low Cost Low Risk – Local Road Improvements	341	06/2024	$4.56m	$5m	Minor Improvements Professional Services Panel Construction – Open market / PQM
Activity Management Planning	003	Annual work programme	$90k	$100k	Various contracts – mix of direct award, closed tender, and secondary procurement
Travel Demand Management: Stage 1: Development of SSBC Stage 2: Implementation of SSBC outcomes	421	N/A	S1: $150k S2: $1.35m	$0.0	Procurement planning in progress S1: Indicative – Closed market / PQM S2: Indicative – Open market / PQM
Wanaka SSBC	324/004	N/A	$468k	$166k	Procurement planning complete Open market / PQM
Transport Modelling	002	N/A	$100k	$1m	Procurement planning not commenced Indicative – Open market / PQM
Transport Choices (Active travel part Route C5, Anderson Road			$8.6m		Procurement planning complete Open market / PQM
Masterplanning - Transport	Unsub / 004	TBC	$500k	$500k	Procurement planning not commenced Indicative – Open market / PQM
Corporate					
Engineering & Specialist Support Services Panel – new Project Management Discipline	Various	New Discipline	N/A**	N/A**	Procurement planning in progress. Indicative Go to Market June 2023 Open market / PQM – without disclosure of the estimate
Engineering & Specialist Support Services Panel	Various	June 2024	N/A**	N/A**	Procurement planning in progress Open market / PQM – without disclosure of the estimate

**Confirmation of 24/25 budgets will depend on the outcome of QLDC TYP24-27 and NLTP24-27.*
**23/24 budgets will be subject to change based on year-end carry forwards and budget readjustments within the NLTP21-24.*
*** Expenditure is not currently recorded against the contract but allocated direct to Work Categories. QLDC systems have developed to the point where contract spend will be recorded in the next iteration of the Engineering & Specialist Support Services Panel.*

2.2.4. STRATEGY FOR PROCUREMENT OF LAND TRANSPORT ACTIVITIES 2023

QLDC has an approved Strategy for the Procurement of Transport Infrastructure 2023 which is attached in the appendices. The strategy outlines the QLDC's intentions for the procurement of transport infrastructure services and works up to 30 June 2025. A strategic approach to procurement enables QLDC to better increase its chances of obtaining value for money. The strategy has been endorsed by NZTA Waka Kotahi. QLDC's primary infrastructure procurement objective is to deliver the right infrastructure, to the right standard, at the right time, at best value.

The objectives and outcomes in this strategy are consistent with Council's strategic and organisation-wide procurement policy as well as the NZTA Waka Kotahi requirements. The QLDC delivers transportation services through third party contracts for professional services, maintenance & operations, renewals and capital projects.

Where appropriate QLDC generally utilises the following supplier selection methods (more detail can be found in the appended Strategy):

- Direct appointments for low value, low risk projects
- Closed tenders

- Open tenders

2.2.5. SMART BUYER ASSESSMENT

QLDC's approach to procurement is covered through our organisational structure, our asset management enablers and our procurement strategy.

To be a smart buyer of services and QLDC strive to adhere to the 'three Es'.

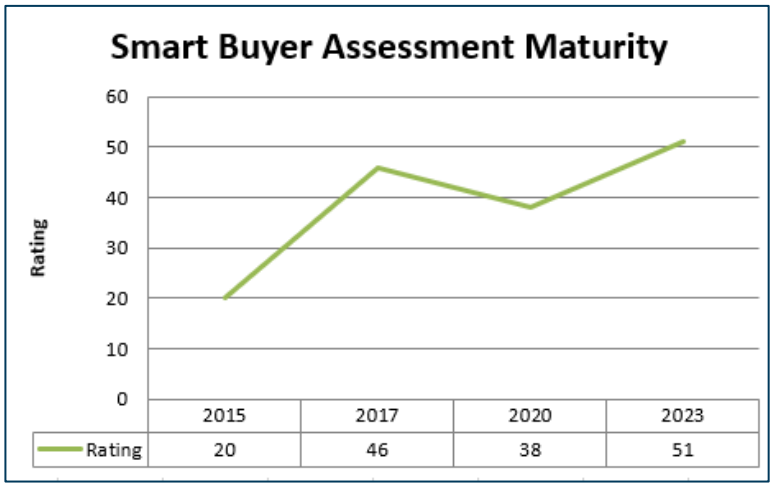
- **Economy** – through securing (or supporting) the provision of products, materials and expertise at the quality, in the volumes and at the times and locations required, at the lowest price;
- **Efficiency** – through the processes used, including standard documentation and contracting forms selected for achieving best cost / quality and outcomes; and knowledge of the product / materials and supplier market applied;
- **Effectiveness** – taking opportunities for changing from traditional products and materials by maintaining support for innovation in the nature and characteristics of products and materials, and for a strong supplier market.

QLDC has undertaken the REG Smart Buyer self-assessment for 2023. The 2023 assessment is based on the Property and Infrastructure Department and will be undertaken bi-annually with improvements included in the Performance Plan and results published in future AMPs. The scoring is carried out collaboratively with Tier Three management from the following teams (Procurement, Operations, Strategy and Asset Planning, Project Management Team). QLDC take a critical approach to the score and challenge our practices.

QLDC's organisational change and approach to continual improvement and external audits is facilitating a much 'smarter' way of working. These improvements are reflected throughout the AMP, captured through our responses and our Performance Plan. These include:

- A more collaborative working with NZTA Waka Kotahi, Otago Regional Council, our RCA peers and other transport providers (QAC);
- Better understanding of our costs, aligning and changing contract delivery models to more collaborative styles with high level governance engagement and enhancing understanding of non-price attributes;
- Better asset and data management and robust forward works programmes for whole of life value for money and clearer risk management.

Figure 138: Smart Buyer Assessment Maturity



2.3. IMPROVEMENT ACTIONS – EFFICIENTLY AND EFFECTIVELY PROCURE AND MANAGE

Improvement Actions – Efficiently and Effectively Procure and Manage

a) Continue to embed QLDC Procurement strategy and policy into BAU and upskill P&I staff.
b) Prepare for next Road Maintenance contract.
c) Update NZTA Waka Kotahi procurement strategy and undertake Section 17a Review prior to next maintenance contract renewal.
d) Work with NZTA Waka Kotahi Aspiring Highways to get a joint contractual solution to manage the district's traffic signals.

3. OUR TRANSPORT PROGRAMME

PROGRAMME BUSINESS CASE

This section provides context for the QLDC Transport Programme; the Continuous Programme covers how we will Maintain, Operate and Renew our network, the Improvement Programme addresses key gaps in level of service on our network

Section & 7 form the Programme Business Case

3.1. CONTEXT OF 2024-34 PROGRAMME

This investment plan forms part of the 2024-2034 Long Term Plan (LTP24) which sets out QLDC's long-term direction and investment intentions.

The QLDC 2024-34 LTP has been developed to maximise delivery of benefits within a constrained funding environment. The financial impact of the post-COVID-19 environment on our District cannot be underestimated. QLDC's LTP is $2.2 billion (Inflated to AP24/25) which will trigger an annual rates increase of 7.5% over the next 10 years This has resulted in a rethink on the priorities within our corporate investment programme. QLDC's LTP process has undergone rigorous review across our organisation and takes into account the needs across all investment portfolios (i.e. transport, three waters, waste management and community services). Given the environmental pressures QLDC's network face, priority has been given to protect our current network investment, so maintenance and renewals local investment has been sustained.

The baseline approach has resulted in a review of project timing, and a number of improvement projects have been pushed beyond LTP Years 1-3 or beyond.

Whilst the reduction on capital spend is a necessary hiatus, project and programme planning will continue as funds and resources allow. This will ensure that projects can be advanced quickly, should funding opportunities re-emerge. Essential background work on monitoring programmes and data collection will also continue to ensure that QLDC remain in an informed position to identify trigger points for new projects.

Table 34: Overview of Investment Programme

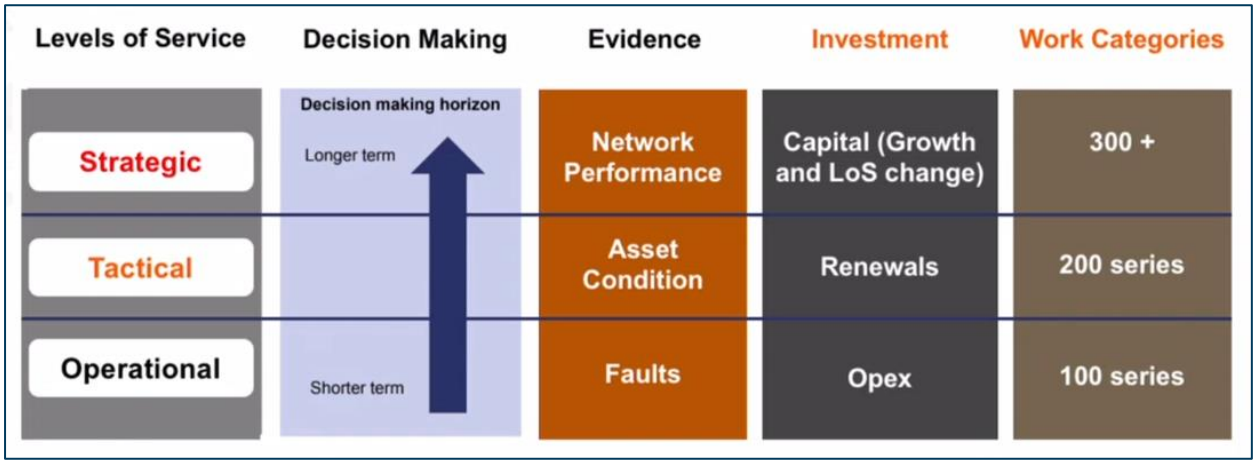
	QLDC Requested 24-27	NZTA Waka Kotahi Approved 24-27	Variance requested vs allocated
Road Safety Promotion	757,546	278,000	-63%
Local Road Operations	28,285,574	25,065,000	-11%
Local Road Pothole Prevention	38,124,610	37,263,000	-2%
Walking & Cycling	1,746,015	450,000	-74%
Capital Projects	15,173,756	4,218,368	-72%
LCLR	23,403,505	1,200,000	-95%
Total	**107,491,006**	**68,474,368**	**-36%**

In October 2024, QLDC received their approved allocation from NZTA Waka Kotahi for the NLTF24-27.

The NLTF is a major source of funding for QLDC's transport activities. The allocation was around 36% less than what was requested from NZTA Waka Kotahi

As a result, QLDC were required to undergo a reprioritisation of transport budgets. In December 2024, options were presented at the QLDC Full Council Meeting. The proposed preferred Transport Programme was approved which includes maximising available funding and advancing key workstreams. Due to the lack of funding, the programme will however result in major project delays, reduced expenditure on minor improvement projects and planning activities.

Figure 139: Strategic | Tactical | Operational Level of Service



3.2. INVESTMENT PRIORITISATION METHOD (IPM) 2024-27

QLDC developed their land transport activities to align with NZTA Waka Kotahi's Investment Prioritisation Method (IPM). The IPM gives effect to both the GPS for Transport and to the Land Transport Management Act.

The IPM is applied at 2 stages in the investment decision-making process:

• **Stage 1: NLTP inclusion decision:** when NZTA Waka Kotahi decides whether to include an activity or phase of an activity in the NLTP.

• **Stage 2: NLTF investment decision:** when NZTA Waka Kotahi decides whether to approve NLTF funding in an activity or phase of an activity.

The Investment Prioritisation Method for 2024–27 NLTP has three factors:

- **GPS Alignment** - GPS alignment indicates the alignment of a proposed activity with addressing the GPS strategic priorities and, at stage 2 (funding approval), how the activity contributes to achieving the GPS strategic priorities.
- **Scheduling** - Scheduling indicates whether the phase of a proposed activity should be included in the 2024–27 NLTP or a subsequent NLTP period. The main criteria for scheduling are: • a critical need to undertake the phase of the activity in the 2024–27 period. • timing of the phase in the 2024–27 period is required because of an interdependency of this activity with another committed activity or other elements of a package or programme.
- **Efficiency** - Efficiency indicates the extent of the contribution to outcomes relative to costs. Efficiency is determined by considering the whole of life costs and benefits primarily through cost-benefit analysis, present value analysis and cost performance benchmarking.

The IPM looks for a good evidence and alignment with the GPS, Regional Transport Plan, Council's LTP and AMP's to support the business case for investment. QLDC has developed its BCA AMP to show alignment between all the strategic drivers and the AMP provides an assessment of the results alignment and Cost-Benefit Appraisal of transport-related problems and opportunities for Queenstown Lakes District Council.

QLDC are confident that appropriate programmes have been put forward to address network needs and meet alinment where required.

3.3. PARTNERING FOR TRANSPORT OUTCOMES

With so many programmes of work within our District, there has been a lot of consideration towards ensuring we have an optimised and integrated approach towards our programmes and our transport outcomes. This is demonstrated in both the planning and delivery phases.

QLDC have partnered with ORC and NZTA Waka Kotahi, into a collaborative entity called Way To Go which facilitates integrated planning. This move has been made to ensure alignment, streamline approvals and ensure land use is integrated with transport.

In addition to the NLTP funded programmes, QLDC, alongside partner investment from NZTA Waka Kotahi and Central Government will deliver significant transport projects as part of the Crown Infrastructure Partnership economic stimulus package (Arterials Stage One) and the New Zealand Upgrade Programme (Queenstown Package). These additional programmes will deliver key elements of the wider transport programme and becomes key enablers for, or additions to a wider integrated approach to addressing the constraints in our district. It should be noted that the local share required for these projects, combined with QLDC's capacity to fund and deliver, constrains the remainder of the improvement programme.

3.3.1. ECONOMIC STIMULUS CROWN INFRASTRUCTURE PARTNERSHIP

As part of the government's COVID-19 Response and Recovery Fund, $3bn was allocated to infrastructure projects nationally, this included $708m for transport. Of this fund, $85m is committed for Queenstown.

The now completed Queenstown Town Centre Street Upgrades project ($35m) includes upgrades of the existing road reserve of Brecon Street, Rees Street, Beach Street and Park Street. The upgrades include new 3 Waters services renewals, paving, street furniture, planting and lighting.

The Queenstown Town Centre Arterials – Stage 1 project ($50m) includes the development of a roading link from the intersection of Henry Street / Gorge Road / Shotover Street to SH6A just east of the Suburb Street intersection. The work involves a combination of upgrading some existing road corridors and development of a completely new roading link from Henry Street to the intersection of Melbourne Street and Beetham Street. The upgrade includes 3 Waters Renewals, signalised intersections, cul-de-sac turning heads, a pedestrian overpass, paving, traffic signals, line markings, street furniture, planting and lighting. Estimated construction completion at time of writing is mid 2025.

3.3.2. HOUSING INFRASTRUCTURE FUND

The Housing Infrastructure Fund was established by the Ministry of Housing and Urban Development to enable the delivery of core infrastructure supporting housing development in response to the national housing affordability crisis. The contestable fund is made up of $1bn worth of 10-year interest-free loans for high growth areas.

Three projects have been approved for Queenstown:

- Kingston (3W Only)
- Quail Rise South (3W & Transport)
- Ladies Mile (3W & Transport)

Funding approved for Quail Rise South includes bus stop shelters, pedestrian/cycleway underpass and an arterial road connecting to SH6. Long term transport issues at Ladies Mile need to be addressed before that development is approved; at the time of writing, a second master planning exercise is underway.

3.3.3. THE NZ UPGRADE PROGRAMME

NZTA Waka Kotahi is delivering the Government's $8.7 billion New Zealand Upgrade Programme, which will provide growing communities across the country with better travel choices that help people get where they're going safely.

The Queenstown Package (estimated at $250m) has prioritised construction of the works in Frankton (currently underway Jan 25) which include installing traffic signals at the SH6 and SH6A Frankton intersection and adjacent SH6/Hansen Road/Joe O'Connell Drive intersection, extending the Bus Hub and adding traffic signals at the entry and exit to make movement easier for buses. Construction of new bus stops, cycle lanes and shared paths are also planned and works to underground services will also be completed. A new roundabout at the SH6 and Howards Drive intersection will also be constructed.
QLDC have supported this NZUP programme with inputs to the design phases and through land acquisitions and Notice of Requirement applications. QLDC continue to work with the NZUP team through both W2G and KHAT. The delay to the programme is beginning to impact the planning and delivery of Public Transport services.

Figure 141: SH6 SH6 Frankton Road intersection map

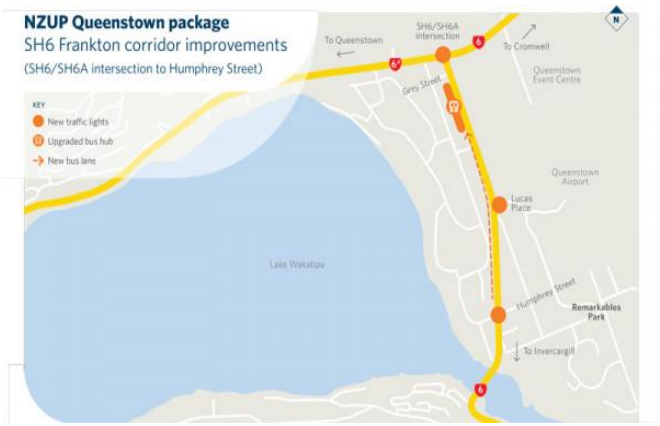


Figure 140: Frankton Corridor Improvements – SH6/SH6A intersection to Humphrey Street

3.4. CONTINUOUS PROGRAMME

The Local Road Maintenance Programme supports the delivery of transport services to QLDC customers at the lowest possible whole of life cost. QLDC is building data and systems to better understand the challenges of the district and look to optimise network management and delivery through application of best practice and considering growth predictions in all activities and providing a value for money service.

The majority of the continuous programme is delivered under a traditional contract framework, however the intent is to build strong collaborative relationship with suppliers and partners is key to delivering the desired outcomes. This approach is demonstrated with our reseal renewals programme which has a joint RAPT to review and agree our forwards works programme.

3.4.4. CONTINUOUS PROGRAMME DEVELOPMENT

A detailed assessment on the key issues faced by the Continuous Programme is embedded in this AMP. For 2024-34, QLDC built on the work undertaken for 2021-31 (which built on 2018-21) and held a collaborative ILM workshop, facilitated by external consultant Steven Browning.

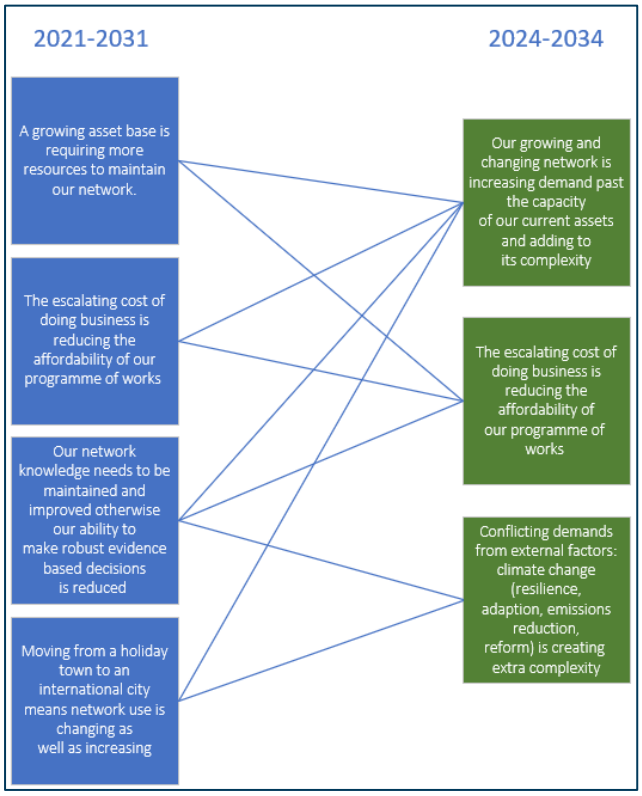
It involved key programme stakeholders:

Figure 142: Key Programme Stakeholder

3.4.1. EVOLUTION OF PROBLEM STATEMENTS

The 2023 workshop reviewed the 2021-31 problem statements, benefits and responses required to deliver a robust M, O & R programme for the District. This review highlighted that QLDC's transport asset management has matured, and this is reflected in updated problem statements. The outputs from the detailed workshop sessions, along with QLDC evidence and analysis can be found throughout this document in the Programme Business Case, with a focus on the Assets and Activities and the Programme section.

Figure 143: Evolution of QLDC Problem Statements



The 24-34 AMP, there has been a focus on the relationship between COST – RISK – and LEVEL OF SERVICE. This is explored further in the PBC Continuous Programme optioneering section.

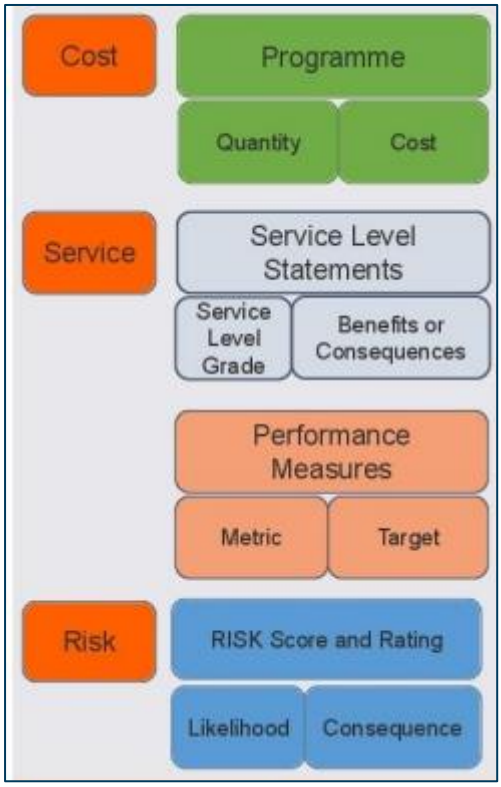
3.4.2. CONTINOUS PROGRAMME STRATEGIC RESPONSE

QLDC's Continuous Programme has a number of specific strategic responses that it applies in all activities, these are driven through a strong asset management approach, this is shown in our Network and Asset Management Strategy, but some key response are below:

- Continue to collect data and information on assets, (condition, demand)
- Identify, optimise and socialise Levels of Service policy settings developed through the BCA (i.e. trading affordability, customer expectations and benchmarking); i.e. focus on the relationship between LOS-COST-RISK
- Identify, understand, apply and socialise current best practice for optimising life of assets.
- Long term growth predictions are determined and considered in the BCA for all activities.
- Utilise service delivery contracts and their governance arrangements to drive collaboration and continuous improvements.

Throughout these assessments there may be different responses required depending on the Levels of Service led by the road classification, current best practice and accounting for growth.

Figure 144: Continuous Programme Strategic Response



3.4.3. ASSESSMENT OF CONTINOUS PROBLEM STATEMENTS

3.4.3.1 PROBLEM 1 – GROWING & CHANGING NETWORK

Growth has already exceeded pre-COVID numbers exacerbating capacity issues on the network due to the historic under investment. Recent figures show that growth in subdivisions is still high and increasing, so the risk that we don't address our growing asset base needs to be monitored. Network is becoming more complex through more 'city-like' interventions e.g., traffic signals, more intensification/urbanisation leading to asset densification.

Table 35: Problem 1 - Growing & Changing Network

Problem 1 - Our growing and changing network is increasing demand past the capacity of our current assets and adding to its complexity. 30%			
Key Change from 2021-24	**Consequences**	**Continuous Programme Response**	**Benefits of addressing**
Not just capturing growth, but changing demands on the network	• Growth and urbanisation is changing the use of existing network. Impacts number and types of journeys made. • Pressures on alternative routes as people try to avoid congestion • Increase demand on rural roads. seeing more edge break as vehicles using more roads. • Congestion –TTM issues, timings of works increasing costs. Increase and change of heavy vehicle usage. • Increasing RFSs and social media complaints – higher complaints, not meeting expectations - needs further investigation. • Changes to types of infrastructure supported/maintained i.e. operational TM, active travel massively increasing (knowledge/skills required for different work types, demand monitoring and funding requests for different categories. Capex impact on Opex	• Focus on network and asset management to monitor data on condition and demand. • Demand data capture is moving to more multi modal. Investment in monitoring active modes (cycling and pedestrians) • Benefits realisation is expanding • Focusing on programming (maintenance &renewals) • Focus expanding from sealed pavements into unsealed, footpaths and structures. • Look for opportunities around modelling (unsealed roads, footpaths, structures) • Still pressure on existing assets from previous growth, so need current investment levels. • We have better knowledge of assets being vested, better control and remedials if required. Money for second coats. • Altering cost, provision and management of parking across the area to support the goals	• Enhanced strategic transport planning, better alignment with planning and land use with developed of masterplans, network operating plans. Collaboration with central government on Spatial Plan. • Better connections with regional transport partners; State Highways, Otago Regional Council, Queenstown Airport Corporation and neighbouring Authorities. • Development of Queenstown Integrated Transport Strategy and now the creation of 'Way to Go'. This is creating joint programmes to tackle problems with Traffic demand management and physical works.

Problem 1 - Our growing and changing network is increasing demand past the capacity of our current assets and adding to its complexity. 30%			
Key Change from 2021-24	**Consequences**	**Continuous Programme Response**	**Benefits of addressing**
	• Increase in heavies – servicing retail and construction e.g. Camphill road • Higher visitor numbers on higher risk road – unsealed roads, access to crown estates – more safety infrastructure required (edge markers, signs, line delineation, drainage, ottas) on unsealed roads (many would meet previous seal extension criteria. Often in more vulnerable roads for resilience (Skippers/Glenorchy) so emergency money increases • Heaps of developments being vested – impacting lump sums in contracts • QLDC has been playing catch up with infrastructure, delivery of more projects through operational mechanisms is increasing e.g. Low cost low risk	of reducing private vehicle usage, and encouraging greater use of public transport • 24-27 will build on the previous step change in our structural asset management – building on current good practice for bridges, and aligning retaining walls assessments. • Unsealed roads management increase inspections as carry out less work. • Operational traffic management budgets increasing over the next 3-5 years • Maintaining and supporting active mode network (increase in footpath and cycle paths maintenance and renewals.) • Programmes will likely be delayed, at this point, still benefits in progressing preparation for projects, but construction will take delay.	

3.4.3.2 PROBLEM 2 – ESCALATING COSTS

The post-COVID-19 economy with all the current issues is still reflecting high costs and impacting the affordability of our programme. This is also impacting now by the capacity of the market, as the economic stimulus packages place supply and demand pressures on the market. QLDC has severe financial constraints from leaky home payouts.

Table 36: Problem 2 - Escalating Costs

Problem 2 - The escalating cost of doing business is reducing the affordability of our Programme of works 40%			
Key Change from 2021-24	**Consequences**	**Continuous Programme Response**	**Benefits of addressing**
• This was the only problem statement to remain the same as 21-24, however, there was round the table agreement that this has worsened	There is clear evidence that the cost of doing business is increasing. This results in not being able to do as much work for the same funding as previously. • Seen nationwide, but exacerbated in QLDC due to growth • Nature of network and isolation, costs more to get goods in and waste out. • Network constraints; landscape and limited journey choices in and out the district. • Competition -not just capital investment by QLDC/ NZTA Waka Kotahi but also private market (developments) • Sub-contractors are busy with private works – more competition and better pay rates • Skills shortage increasing cost. Contractors are struggling to get skilled staff, therefore pay a premium. • Cost of congestion. Network is busier, it takes longer to get around • Cost of compliance CopTTm, has increased costs and created more paperwork, NTE 037 v2 from Downers to QLDC	• M,O &R was prioritised in the BASELINE LTP • Some escalations, especially where TTM a large portion (e.g. sealed pavements) • More evidence driven and focus on programme development. Business case approach and internal challenges – all projects go through Engineering Challenge Group and Project Challenge Group. • Changing work practices to look for efficiencies –Environmental maintenance saw successful trial in Arrowtown – with increased CMA – now applying to a wider Whakatipu basin. • Changing network needs different focus – reducing some unsealed investment to areas where LoS is needed, .i.e. take more risk (amenity on unsealed roads - Otta seals • Trying to understand impact through economic modelling – infometrics analysis. • Focus on more mature procurement and supply chain engagement. Now have a procurement manager who is looking at procurement mechanisms - panels, early engagement with suppliers to give the market	• Continue to provide the expected level of Service, or be able to understand and socialise the risk and or the cost associated with any changes

Problem 2 - The escalating cost of doing business is reducing the affordability of our Programme of works 40%			
Key Change from 2021-24	**Consequences**	**Continuous Programme Response**	**Benefits of addressing**
	• Regulatory costs NEW Cost of compliance – a new statement? • Valuation unit rates review saw a big increase in some rates. Requests for minor equipment	signals of upcoming work and to try and align timings. • Now have a Transport panel as well and a panel for specific low-cost low risk projects. • Continue to model i.e. dTIMS to understand long term impact of changes	

3.4.3.3 PROBLEM 3 – NETWORK KNOWLEDGE

As resource constraints continue, but demands increase, understanding our network is more important than ever. Monitoring the changes in demand, growth and usage is crucial to being agile with our programmes and to support our decision making.

Table 37: Problem 3 - Network Knowledge

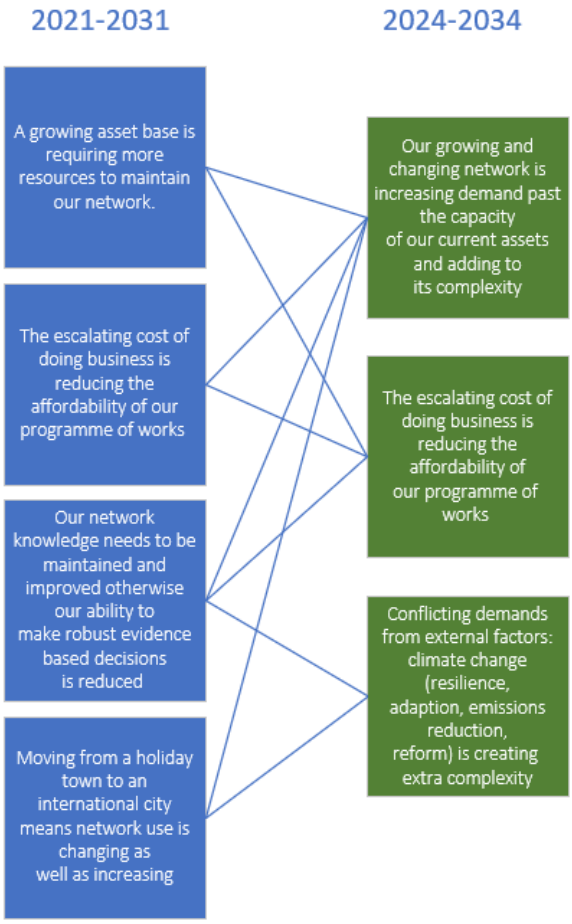
Problem 3 - Conflicting demands from external factors: climate change (resilience, adaption, emissions reduction, reform) is creating extra complexity - 20%			
Key Change from 2021-24	**Consequences**	**Continuous Programme Response**	**Benefits of addressing**
The biggest change to the problem statements, resounding concerns at the increasing demands and pressures from external factors. Central Governments ambitious programmes of reforms as well as increasing expectations from the public on key issues such as climate change urbanisation, land use change and network complexities	QLDC historically had limited internal knowledge of the network, partly resulting from a high turnover of staff and reliance on consultants. Internal understanding of data quality was questionable or non-existent. This was a big focus through 2018-21. It is important to maintain and improve our practices, but the weighting of this statement did decrease from 18-21.	• Focus on building and retaining knowledge in house through process mapping, asset data improvements. • Have focused on pavements/ surfacing, now developing in other asset categories. • Utilise tools and service provided by the industry such as dTIMS, JunoViewer, RAMM, GHD dashboard, REG Transport Insights, Process mapping (Promapp) • Asset data capture, particularly newly vested data has undergone a huge focus in the process (both P&I & P&D), specifying data requirements and formats and tracking the process. • Data quality development, using DQ tools as BAU, amending processes • Focusing on multi modal demand/use data, seal analysis. Travel time, origin and	• A simplified ecosystem would enable better focus on the basics, or how change impacts us • Better knowledge and data enable better multicriteria analysis • Better decision making

Problem 3 - Conflicting demands from external factors: climate change (resilience, adaption, emissions reduction, reform) is creating extra complexity - 20%			
Key Change from 2021-24	**Consequences**	**Continuous Programme Response**	**Benefits of addressing**
		destination. Cycle/pedestrian counting, investigating other methods for all counting • Increase roles focussed on asset management in both client and contractor structure, more training in tools and data	

3.4.4. BENEFIT SUMMARY OF ADDRESSING ISSUES

The benefits of investing in programmes that address our issues are clear and are summarised below.

Table 38: Benefits of Addressing Issues

Strategic Issues	Maintenance, Operations and Renewals	Benefits of Addressing the Issues Sumary	
Climate change mitigation & biodiversity Growth Resource Constraints Resilience and adaption Government Settings		Realise our vision. "To provide a safe, resilient, efficient transport system that supports modal choice and addresses current and future demand for economic and social opportunities"	• Optimise asset life • Meet current & future challenges • Manage growth and intensification. • Keep network users healthy and safe

3.4.5. MAINTENANCE OPERATIONS AND RENEWALS (MOR)

This AMP Programme Business Case provides the context for the QLDC Transport Programme, indicating how we will maintain, operate and renew our network, as well as our capital improvement programme (which addresses some of the key gaps in level of service on our network).

A vital component of any asset management system is ensuring that processes and procedures are in place to maximise the value from the asset throughout its useful life. To this end, QLDC has partnered with its delivery contractors to provide a robust programme of preventative maintenance, coupled with the resource pool and expertise to address reactive works as they arise. Into the future QLDC must continue to mature its asset management by building on available data, processes and technology to achieve a better

understanding of the existing asset base, and to enable informed and targeted capital investments. This approach will provide true value to the ratepayers, whilst providing a sound infrastructure platform to support the growing district.

Throughout the ILM process various ideas were discussed and explored:

- More analysis is required to get a better understanding of LoS at each classification level;
- Where should we focus funding on the network;
- Understanding investment level by asset – it was identified that the value of our footpath asset was very substantial, and this is potentially not being given suitable priority;
- Identifying LoS discrepancies/ gaps to prove the case for funding;
- Ensuring the BCA AMP aligns with maintenance activities and doesn't become a paper weight, but instead becomes a living document providing a continuing perspective on our network and direction on what we want for the district;
- Historically, all assets (with the exception of the sealed pavement network) have been run to failure, i.e. not for optimal asset preservation. This is a strategy that QLDC wants to understand and address where appropriate;
- Budgets have been driven by contract not outputs;

QLDC has progressed and matured considerably from where they were 3 to 6 years ago, but are contionously looking for impprovement.. This AMP signals an overall request for an increase in the budgets for the Local Roads Maintenance Programme, most of this increase is to align with cost escalations and will not result in an increased level of service.

We believe that setting out the business case in this plan, supported by robust evidence, represents an important step in developing our programmes and meeting the needs of our wider community and our business partners.

The investment level of the Continuous Programme has been developed based on:

- Strategic Assessment indicates the impact on our network in economic context of our marketplace.
- The Consumer Price Index(CPI). The procurement of the roading maintenance contract reflects market place increases. QLDC have budgeted for a CPI, growth and maintenance escalation increases over the term of the contract, however the contract has been written so that the Contractor's option to take this increase may impact on possible contract extensions.
- Efficiencies through an innovative contractor. Placing more responsibility and self-determination on the contractor with significant Key Performance Indicators (KPI), encourages the Contractor to deliver efficiencies through best practice. Renewals are not guaranteed to Maintenance contract, this is seen as a motivation to do well in operations.
- Efficiencies through collaborative approach with contractor/Contract Model using a Target Cost Contract. When implemented in 2016+, the road maintenance contract saw significant savings and with this contract form and through improved collaboration with the Contractor. The commencement combination of the Target Cost plus Provisional Sum has delivered significant saving since the previous NEC Contract. NZTA Waka Kotahi do not directly see the savings as this has been absorbed through the unsubsidised expenditure.

- Extra funding in new categories such as Operational Traffic Management, to support our maturing network as traffic signals, web cams and weather stations are introduced.
- Provision for emergency works
- Provision for unsubsidised investmetn in footpaths and cycyelways where funding was not aligned.
- Better and increasing understanding of the network and its needs - the asset management approach is maturing and now provides more data driven escalation. Network and Asset Management is certainly under more demand
- QLDC's unprecedented growth has resulted in massive physical growth and in actual demand on the network. Strategic Assessment Demand explores the issues, problems and consequences that growth brings as well as responses being undertaken and planned
- Better alignment of claims with NZTA Waka Kotahi categories. Improved transparency and better understanding of the claim process and where money should be allocated.
- A re-adjustment of where costs are allocated. This is especially seen in Network and Asset Management which now includes the contract network management costs e.g. routine inspections and patrols, joint inspections, programming, reporting, plans implementation and compliance. Previously this was allocated as a percentage split across the asset categories.
- A significant increase in QLDC's capability and capacity to deliver programmes to meet budgets.

The programme case aims to show that the balance of activity within the budget bid is optimal for the objectives set out in the strategic case. The following table outlines the main work categories.

Table 39: Local Road Maintenance - Local Roads NLTP Comparison

Expenditure Reporting Lines	Work Category	Description	2021-24 Approved	2024-2027 Total Approved	Percentage Change
Operations	114	Structures maintenance	416,288	519,999	25%
	121	Environmental maintenance	7,735,486	8,750,001	13%
	122	Network service maintenance	3,577,609	3,750,000	5%
	123	Network operations	325,001	570,000	75%
	131	Rail level crossing warning devices maintenance	0	0	0%
	140	Minor events	455,000	0	-100%
	151	Network and asset management	7,597,724	9,000,000	18%
	215	Structures component replacements	1,290,001	1,250,001	-3%
	221	Environmental renewals	534,999	249,999	-53%
	222	Traffic services renewals	828,657	975,000	18%
Total Local road operations		**Total Local road operations**	**22,760,765**	**25,065,000**	**10%**
Pothole prevention	111	Sealed pavement maintenance	4,060,000	5,330,001	31%
	112	Unsealed pavement maintenance	2,144,325	2,649,999	24%
	113	Routine drainage maintenance	1,747,500	2,100,000	20%
	211	Unsealed road metalling	4,095,670	5,250,000	28%
	212	Sealed road resurfacing	6,523,078	13,833,000	112%
	213	Drainage renewals	1,949,463	2,250,000	15%
	214	Sealed road pavement rehabilitation	4,658,155	5,850,000	26%

Total Local road pothole prevention		**Total Local road pothole prevention**	**25,178,191**	**37,263,000**	**48%**
Walking and cycling	124	Cycle path maintenance	110,000	90,000	-18%
	125	Footpath maintenance	555,000	223,200	-60%
	224	Cycle path renewal	0	0	0%
	225	Footpath renewal	375,001	136,800	-64%
Total Walking and cycling improvements		**Total Walking and cycling improvements**	**930,001**	**450,000**	**-52%**
Grand Total			**48,868,957**	**62,778,000**	**28%**

QLDC's Maintenance, Operations and Renewals allocation for the 24-27 period is positive, totalling $62.8m.

Following the release of the NLTF approved budgets for the 24-27 period, QLDC are still working to confirm their budgets for the 100's work categories to ensure contract commitments are met and that the district is provided with adequate service levels across the programme. NZTA Waka Kotahi approved budgets are forecast to be utilised in full however additional local share will be required in this funding period.

For the subsequent AMP update QLDC transport officers in tandem with the finance team will strive to ensure this is updated and representative of our programme for the period.

3.4.6. OPTIONEERING -DIFFERENTIAL LEVEL OF SERVICE

QLDC's approach for asset planning optioneering has been driven through collaborative workshops with our Contractor and Operational teams. This enabled some very challenging conversations on certain practices with the relationship between Risk – Cost and Level of Service at the forefront. This is focused on the understanding that different work categories and ONF classifications can take vary the level of service and risk and thus the cost.

QLDC have undertaken a number of option appraisals within the Continuous programmes. The following tables and graphs provide a summary of the optioneering and indicates the allocated budgets following finlaisation of the NLTF and the QLDC LTP.

Table 40: Continuous Programme Investment Scenarios

Options	Description	Ops & Maintenance (& Road Safety) 24-27	Renewals 24-27	Total Cost 3 Year
Do Minimum Programme	Reduced preferred programme	31,071,336	23,308,801	54,380,137
QLDC NZTA WAKA KOTAHI ALLOCATED PROGRAMME – Total $62m				
Preferred Programme	Programme meets evidenced based requirements to meet accepted LoS	37,898,889	31,640,755	69,539,644

Aspirational Programme	Enabling a step change in some areas	43,071,336	35,308,801	78,380,137

The Do minimum programme will cause a reduction in our LoS across the continuos programme while the the preferred programme will deliver accepted LOS and the aspritational programme will enable a step change in some areas and and increase in our Level of service.

QLDC's ACTUAL ALLOCATION FOR 24-27 is $62.8m. This allocation is between the 'Do Minimum' and 'Preferred' Programme, meaning the LOS across the district is likely to be slightly dimish over this period. A continued reduction in funding in future NLTP periods will likely impact QLDC's ability to maintain the network to an acceptable and safe LoS (as highlighted below).

The biggest concen on LoS is with footpaths and cycleways where the funding allocation was not aqauate to meet contracutal commitments. QLDC are in the process of reviewing the LoS to consider maintaining with unsubsidised funding.

Table 41: Response and consequences of Continuous Programme Investment Scenarios

Options	Description	Strategy Response	Programme Response	Network Risk	Consequence of funding level
Do Minimum Programme	Reduced preferred programme, greater risk and a lower level of service	[1] Programme Adjustment [2] Change Risk Profile [3] Policy Approach [4] Challenge Level of Service	[1] Maintain LoS on High Class & High-Risk Roads [4] Remove partial grader resource (overflow grader) [1,3] Expand CMA vs grit trial-cost savings. [4] Reduce mowing on verges - strict on verge policy LoS. [2] Reduction in Road Safety Promotion. [2] Defer school safety programmes [2,3,4] Decrease LoS on Low class & unsealed roads [1,2,4] Remove cycle way renewal - use maintenance budgets [1,2,4] Reduction in footpath and cyclepath renewals	High	* Some parts of network will deteriorate but will be minimised to lower class roads. * 432 – Reduction in school education programmes and advertising will decrease safety awareness and could increase risk of harm. Promotional activities will be required to be delivered unsubsidised. *Reduced renewals will place pressure on already constrained maintenance budgets *Risk to the community for low LoS on active travel assets. *Reduction in footpath renewals may increase future maintenance * Whole of life costs will rise as deferring renewals will add costs.
Preferred Programme	Programme meets evidenced based requirements to meet accepted LoS and risk		[1] Maintain LoS on High Class & High-Risk Roads [1,3] Expand CMA vs grit trial-cost savings. [1,] Undertake renewals at recommended timings for optimal WoL [2,3,4] Maintain LoS on Low class & unsealed roads [3] Continue with key data collection and asset management maturity [2] Address key safety deficiencies	Medium Risk	*Whole of life costs minimised as renewals undertaken at the right time-protecting current investment *Reduce risk to the community for collective and personal safety risk *Network condition maintained *Safety outcomes supported
Aspirational Programme	Enabling a step change in some areas an increase in LOS and risk is decreased		*[4] Improve LoS on high class and high-risk assets, especially pavement renewals [2] Address key safety deficiencies [3] Deliver exemplar benefits and network monitoring	Low Risk	*Preserve and improve safety deficiencies *Safety outcome Reduce risk to the community for collective and personal safety risk

The following graphs, clearly show that the relationship between the levels of investment in level of service will impact the amount of risk.

Figure 145: 'Do Minimum' Programme Scenario

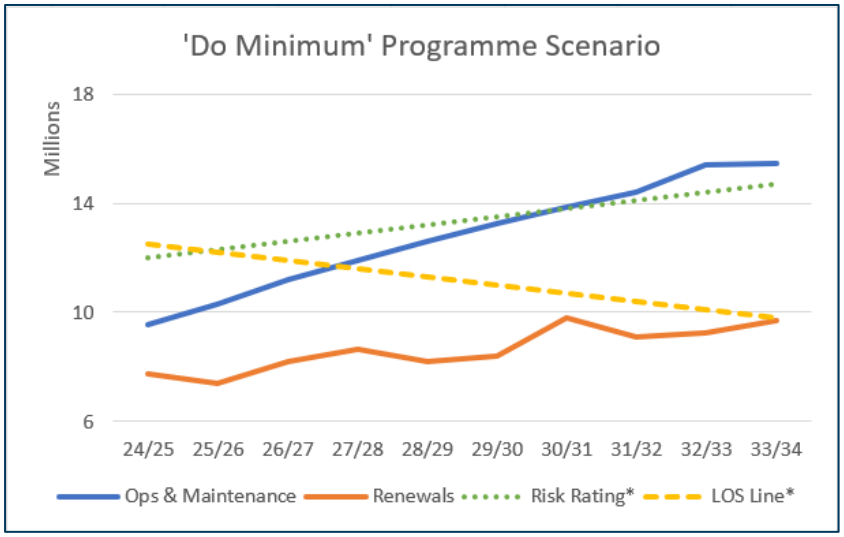


Figure 146: 'Preferred' Programme Scenario

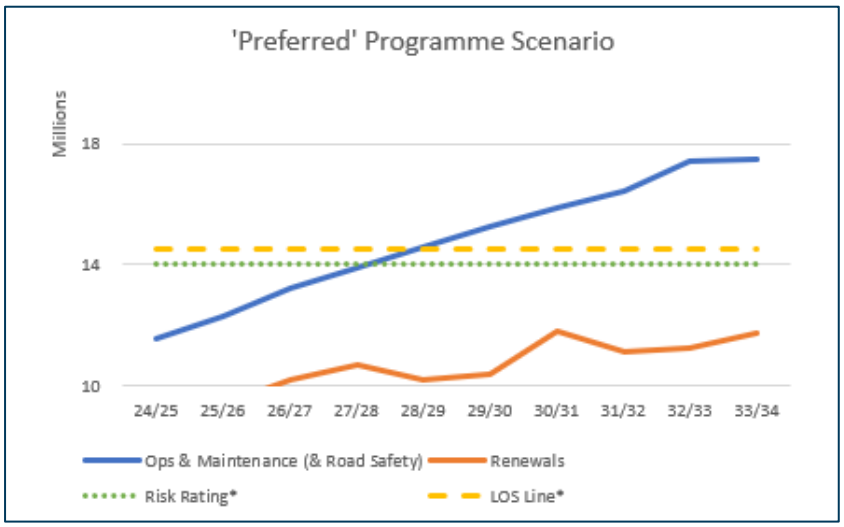
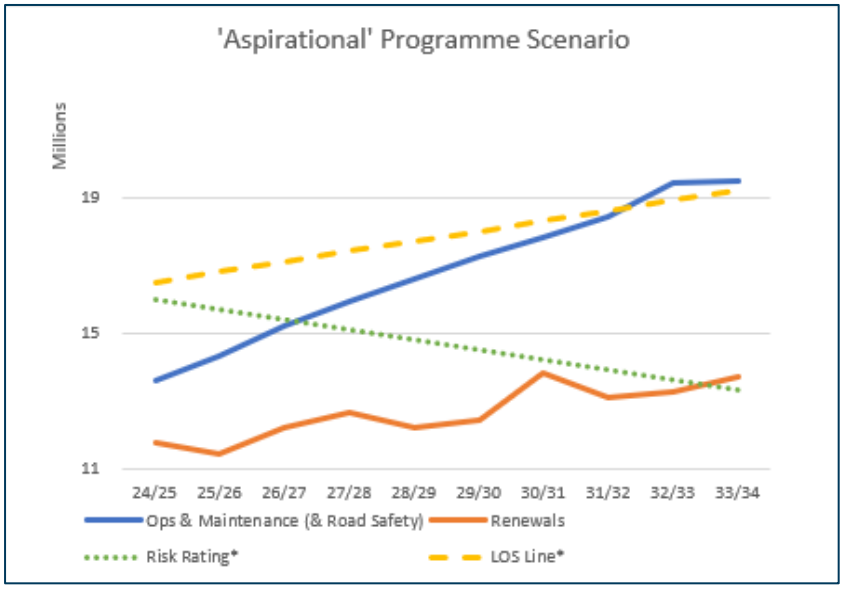


Figure 147: 'Aspirational' Programme Scenario



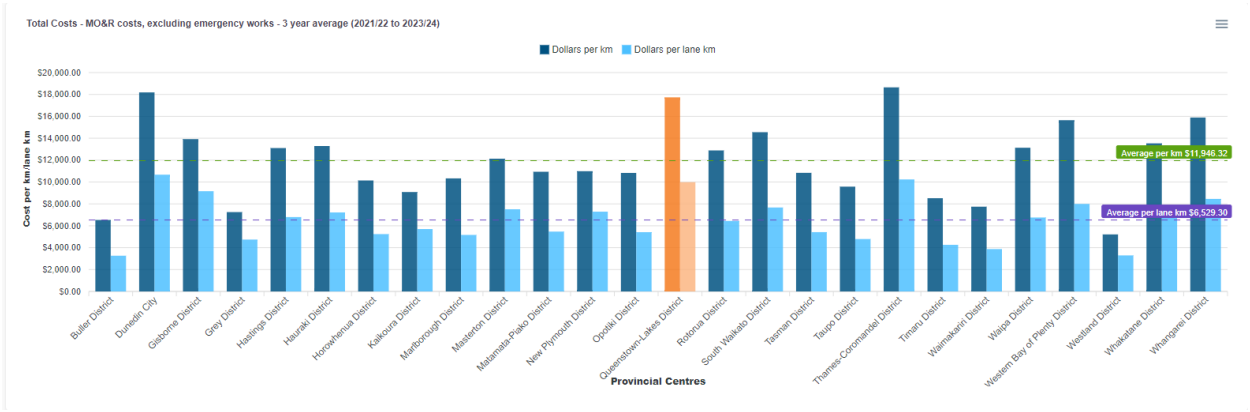
3.4.7. MOR PEER BENCHMARKING

Using the REG Transport Inisghts too, QLDC can compare our expenditure against our peers and nationwide. When comparing total costs, at first glance it appears that QLDC costs significantly more than its peers, but it is clear to see that there are comparable networks have similar costs, specially Dunedin City and Thames Coromandel. These are RCA's which have mixed urban rural, high visitor population and extreme climatic conditions. The growth and changing demand that QLDC are facing, alogside our constrained and increasingly urbanised network has resulted in many challenges and issues usually seen in bigger and more metro networks.

Further context for the work categories can be found throughout the AMP, especially in the Strategic Context and Lifecycle Management Section.

Total Costs

Figure 148: MOR Total Cost Comparison. Source REG Transport Insights Dec 2024



The high total cost compared to our peers is driven by some specific work categories, an overview of the key outstanding work categories is below, with further detail provided below the table:

Table 42: Work Categories Overview

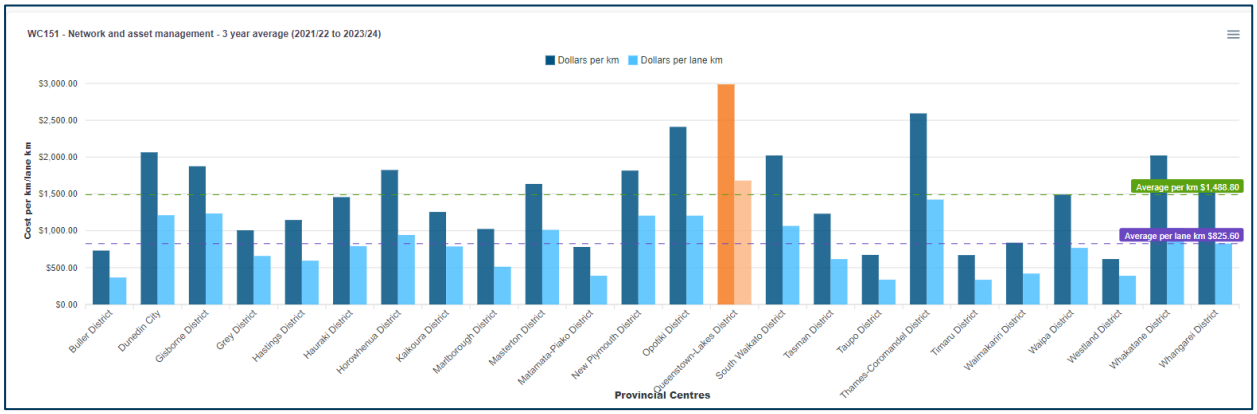
Work Category	Benchmarking Status	Key justification
111 Sealed Pavement Maintenance	Around peer group average per km	
112 Unsealed Pavement Maintenance	Under peer group average per km	
113 Routine Drainage Maintenance	Just over average	
121 Environmental Maintenance	Just over average	snow and grit clearing activities
122 Traffic Services Maintenance	Over average – second highest in peer group	Mountainous region with high wear on signs & markings due to environmental factors, large number of signs on the network due to curvy terrain
123 Operational; Traffic Management	Over average 4th highest	
151 Network and Asset Management	Highest cost of peer group	
211 Unsealed Road Metaling	3rd highest in peer group	Gravels in the region do not contain clay and generate dust and break down rapidly requiring frequent grading and gravel renewals
212 Sealed Road Resurfacing	Over average, but 8th in peer group	
213 Routine Drainage Renewal	Just over average	
214 Sealed Road Pavement Rehabilitation	Over average, 6th in peer group	

Work Category	Benchmarking Status	Key justification
221 Environmental Renewal	One of only 3 RCAs using this category	Utilised only for renewing rock catch fences eg on Crown range, Glenorchy road etc. Some years it is reallocated to other renewals budgets if there are no catch fence to renew
222 Traffic Services Renewal	Over average, 5th in peer group	

WC 151 - Network and Asset Management

Facing such rapid growth and urban development and asset densification means that in order to effectively manage and operate our network, QLDC have focused investment in data collection, condition and demand monitoring, modelling and analysis. Queenstown Lakes District Council has relatively high staff turnover, meaning more effort needs to be put in to prepare documents that record past experience and to substantiate historic data and data gaps.

Figure 149: WC 151 Network and Asset Management

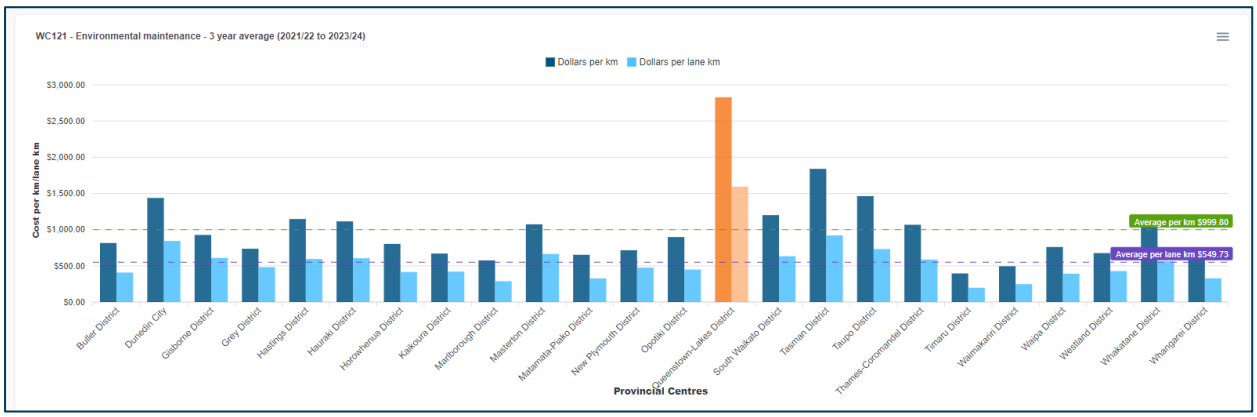


WC 121 - Environmental Maintenance

The management of the environmental aspects of our network is key to providing a safe and resilient network which supports safety and economic growth. This is delivered through winter maintenance, vegetation control, land stability and dangerous trees. Environmental activities are often difficult to predict and reliant on the seasons, therefore QLDC are focusing on building better data and forecasting. **Winter maintenance is a key element of QLDC's high 121 costs.** When investigating annual NIWA data, there is a clear correlation to high spend when we have a high number of frost days. Under a target cost model, QLDC have a contract KPI that refers to the level of winter and aims to encourage the right behaviour regards to delivery in a state of uncertainty, enabling target cost budgets to be redirected to alternative activities.

Vegetation management is an important part of customer safety. Where a higher level of service is required, especially in urban areas, this is delivered thrugh QLDC's parks and open spaces contracts as unsubsidised work.

Figure 150: WC 121 Environmental Maintenance Source REG Transport Insights Dec 2024



WC 122 – Traffic Services Maintenance

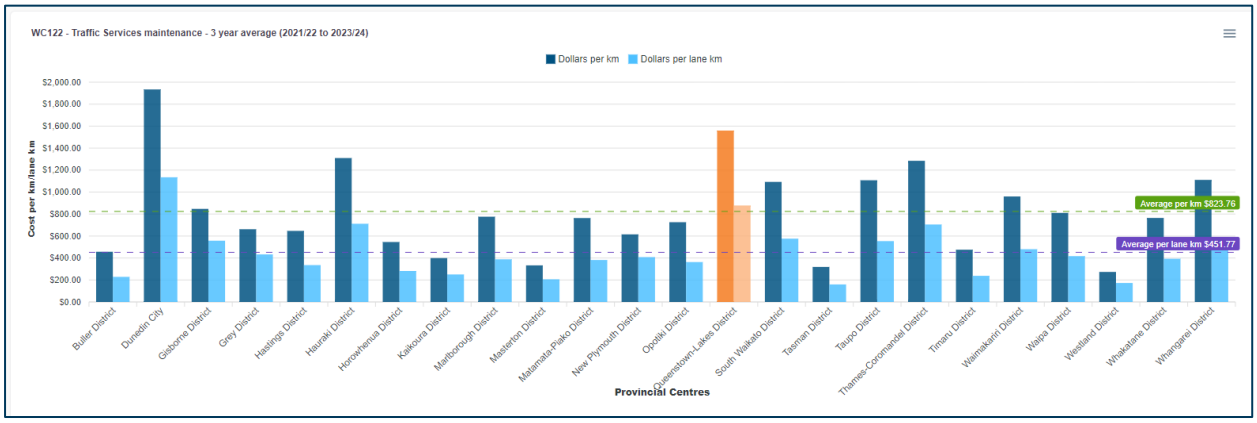
Mountainous region with high wear on our signs and markings due to environmental factors, large number of signs on the network due to curvy terrain

Line Marking - Line marking includes a full network re-mark annually, plus additional re-marks of the CBD and a list of sites defined as "high wear". Compared to our peers, QLDC have a relatively high concentrated urban areas with a large number of makings, these face high wear on road makings from winter maintenance, especially gritting. QLDC have had recent focus on reducing spend in this area. In 2023/24 QLDC advised of cost mitigations to be found against Road Marking budgets by reducing high wear marking, and removed a nominal $100k from the line marking aspect of the target cost budget. QLDC require this approach to continue to be considered. However, these 'high wear sites' have been monitored and the majority of them have been built up over time as a list of sites where the line marking faded prematurely, so the hoped for saving opportunities is unlikely to be realised. Have commenced a trial to monitor is a higher application of paint will provide better value for money on line marking life.

Street Lighting – A disparate and bespoke lighting can lead to high maintenance costs, QLDC have been targeting these are moving to more standard lighting units through the Code of Practice and renewal programmes.

WC 122 - Traffic Services

Figure 151: WC 122 Traffic Services Maintenance



WC 122 – Unsealed Road Maintenance

Gravels in the region do not contain clay and generate dust and break down rapidly requiring frequent grading and gravel renewals

3.4.8. IPM CONTINUOUS PROGRAMME

NZTA Waka Kotahi proposes to assign continuous programmes ratings of HHM, priority order 3, as the 'starting point' for investment prioritisation, reflecting the importance of such programmes to maintaining ongoing levels of service.

QLDC have clearly demonstrated in our activity management plan:

- The complexities and challenges that QLDC face.
- The proposed programme identifies and prioritises gaps that align with and contribute to GPS strategic priorities
- Our decision-making framework for our high priority continuous programmes; providing clarity on how we optimise our programmes and activities.
- Our performance over the last NLTP; highlighting our improvements made and those in our improvement plan
- Our efficiency in our last technical audit demonstrated that we are a value for money network and whilst benchmarking indicates that some areas we are a high cost network. this is justified due to the nature of our network, our remotes ness and our market costs.
- As demonstrated in the most recent Investment and Procedural audits, QLDC is shown to be a valued partner with sound financial and procurement supporting practices

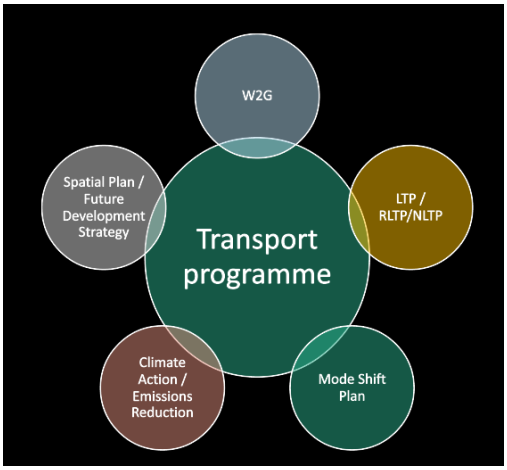
The approved allocation for the Maintenance, Operations and Renewals Programme demonstrates that QLDC have strong alignment with the GPS.

Table 43: IPM and the Continuous Programme

GPS Alignment	**HIGH**. Rating is considered to be high as it demonstrates clear lines of sight to national, regional and local strategic drivers. This is required to continue to meet appropriate customer levels of service and the proposed programme addresses opportunities in delivering the right level of service to support the priority areas in the GPS. QLDC has high costs due to a combination of factors which create a complex network: geographic isolation, a challenging environment and intense growth. The NZTA Waka Kotahi Arataki identified the struggles QLDC face and as a key contributor to the National economy, supporting levels of service in QLDC is fundamental to delivering key GPS priorities and in delivering a number of customer outcomes. With high population and visitor growth forecasts, the function of the network will be not able to meet expected demand. This inability to meet future traffic demands could have significant effects on the local environment and constrain the economic development of the region
Scheduling Alignment	**MEDIUM-HIGH**. Due to the physical constraints and complexities of our network, the success in the delivery of our improvement programme is reliant on the successful delivery of our continuous programmes. Keeping multimodal transport options open to move customers through the district.
Efficiency	**MEDIUM** based on the cost efficiencies are supported by the Programme Business Case. Cost reflects our challenging and complex operating environment.

3.5. STRATEGIC TRANSPORT IMPROVEMENT PROGRAMME

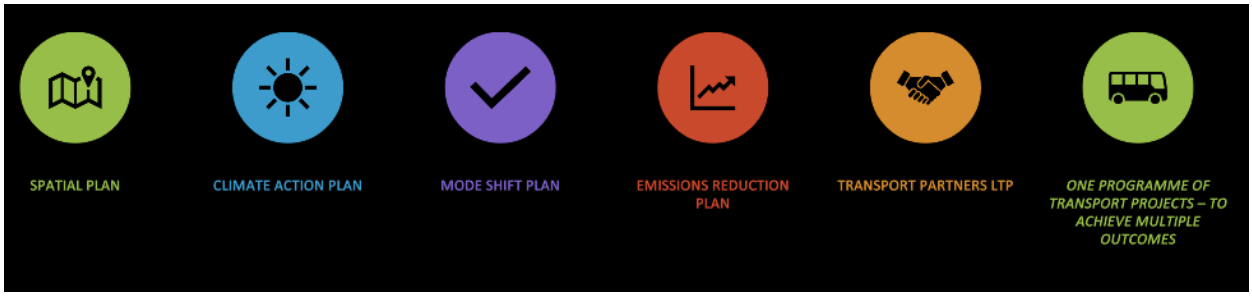
Figure 152: Transport Improvement Programme



The Improvement Programme Business Case intended to demonstrate QLDC, alogisde its Way2Go partners aim to achceive a step change in LoS to address the impact of the sustained and rapid growth. A history of car-oriented development and dispersed land use led to a lack of travel options, while the ability to provide additional capacity, cost-effectively, is restricted by the area's challenging terrain. The existing transport network is showing signs of strain, unable to maintain an adequate level of service for the unprecedented number of users, which is negatively impacting the liveability of the town for residents and degrading the visitor experience. The district's historically reactive approach to transport planning has allowed land use to lead infrastructure development to address growth rather than a forward thinking, integrated programme of planned infrastructure leading the direction and locations of development and land use change. However, since the 2018 and 2021 AMPs, QLDC has built on the previous strategic review of transport planning to complete the Masterplan / Programme Business Case layer for its main urban centres and will continue to progress strategic planning through the Detailed Business Case stages.

The approach to transport planning has been refocussed, through integration with our Way to Go partners and land use planning, to create a more combined and coordinated outcome. With external influences such as the Queenstown Lakes Spatial Plan also applying a strategic layer to the "Master" level, individual project level interventions can be identified (although these can be significant sized project) for delivery / implementation. QLDC have advanced its planning practice to ensure that new requirements are accommodated immediately, such as the revised NZTA Waka Kotahi Point of Entry processes in order to continue to have projects 'race' ready. This allows us to take advantage of any funding opportunities with NZTA Waka Kotahi, and Central Government, as the success of the NZ Upgrade Programme ($250m) and Crown Infrastructure Partners ($85,000,000) has demonstrated. QLDC will continue to actively submit on policy documents (Arataki, RLTP, RPTP, GPS, NPS UD, etc.) that relate to transport, to ensure ongoing alignment with local, regional and national funding plans.

Figure 153: Key focus for Strategic Transport Programme



These programmes show how QLDC and investment partners are aligning to support the objectives of the GPS for Transport, to meet NZTA Waka Kotahi's Arataki as well as align with QLDC's own strategic framework.

However, the reality that Way to Go face is that funding is no longer aligned with the aims of the programme.

3.5.1. 2024-2027 NLTP CAPITAL FUNDING SHORTFALL

Following the significant shortfall from the NLTP24-27 funding period, Council needed to reprioritise QLDC's residual transportation capital expenditure.

In December 2024, QLDC transport officers presented Councillors with a recommended option to reallocate unmatched QLDC Local The recommended option offered a balance way forward focusing on maximising available funding assistance whilst maintaining a balanced expenditure approach across renewals, minor improvements, major projects, and planning activities. This option was approved by councillors and will form the 24-27 programme for QLDC.

24-27 programme budgets:

- **Arthurs Point and Capell Avenue Road Extension** – sufficient funding is provided to advance early planning activities, and for the exploration of alternative funding and/or delivery approaches for these important strategic network improvements. However, the planned delivery of these major projectswill be delayed relative to the timing set down in the LTP.
- **Renewals** – cycleways and footpaths received a reduced funding assistance from NZTA Waka Kotahi , local share is likely to maintain Los for 24-27 period. Most other asset renewal classes where expenditure will be higher than originally budgeted in the LTP. Renewal investment is fundamental for protecting the integrity of QLDC's existing infrastructure and will help to protect against reductions in levels of service.
- **Low Cost Low Risk (Minor improvements)** expenditure across the roading, public transport, and active travel networks will be lower than originally planned in the LTP. This reduced level of expenditure will result in delivery of fewer interventions. Retention of the available local share (approx $9m) will enable a prioritised programme (WIP) to be delivered.
- **Road Safety Promotion** – Partial subsidy was received for road safety promotion, but only for delivering the educational elements, any advertising or promotion will need to be unsubsidisied the addition of the remaining local share means a reduced and reprioritised programme is able to continue to be delivered across the district.

  Unsubsidised - Approx $49m of projects are planned to be delivered. Approximately $12.6m of budget in the NLTF period will be delivered with local share only due to no funding. This includes works such as Arthur's Point bridge, Capell Avenue, public transport infrastructure, asset management planning, network planning, strategic planning, minor improvements and active travel.

3.5.2. THE STRATEGIC 'TOOLKIT' APPROACH

With huge financial constraints impacting the delivery for significant strategic work for 24-34 NLTP, QLDC is looking to improve its "toolkit". These projects are considered to be the bare minimum of tasks. It is not anticipated that these will allow QLDC to keep pace with servicing growth, but place QLDC in a position to respond with clear evidence and programmes at a later date. Some of the projects below are enabling activities for the Improvement Programme and will be delivered through the Activity Management

Planning funding categories. However the reduced NLTP funding for asset and network planning expenditure relative to the LTP presents some risk to QLDC's readiness for future budgeting and funding cycles. This will be mitigated as far as practicable by careful and deliberate prioritisation of planning activities and making best use of internal capacity and capability.

The table below presents an overview of the intended capital transport programme with an update to funding status and key impacts of the overall programme an network.

Table 44: Strategic Improvement Programme Status

Strategic Improvement Projects	NZTA Waka Kotahi Funding	Project Description	Intended Approach for 2024-27	Status	Impact
Comprehensive Parking Management Plans	None	Community specific Parking Management Plans (PMPs) will then be developed for Queenstown, Frankton and Wānaka. These PMPs will outline how we will manage parking in each area, recognising the uniqueness of each community. The PMPs will be based on the tools and hierarchies within the Parking Guidelines that align with and deliver the objectives and principles of the QLDC Parking Strategy. These tailored PMPs will address existing problems and identified future issues within defined areas that will contribute to wider transport outcomes and create pleasant and high-quality urban environments. The actions within the PMPs will be further informed by parking data and conversations with each specific community.	Finalising the Parking Management Strategy and Guidelines document to consult with Infrastructure Committee in 3rd quarter of 2024/2025 financial year. Finalise community specific Parking Management Plans to go out for public consultation early in 2025/2026 financial year.	In Progress	Parking management is a key element of the wider TDM approach. PT services in particular are heavily dependent of the influence of reducing trip generation.
Benefits Realisation	None	We will look to create and then improve our Benefits Realisation programme, to confirm that our strategic direction is producing the anticipated results. This will form part of our improved monitoring programme.	No planned work in this LTP	Revisit in 2027 – 2030 LTP	Without testing that we are maintaining or improving our levels of service, we cannot know whether we are investing in the right areas.
Network	None	The NOP outlines how the transport network	Due to a lack of NZTA Waka	Revisit in	NZTA Waka Kotahi

Strategic Improvement Projects	NZTA Waka Kotahi Funding	Project Description	Intended Approach for 2024-27	Status	Impact
Operating Plan (NOP)		functions on a day to day basis to ensure the safe and efficient movement of people and goods. The plan mainly focuses on the operational aspects of the network ensuring it can meet both the current and future demands, maintain service quality and optimise resources. The budget will be used to update and combine several of the districts Network Operating Frameworks (Frankton, Southern Corridor and Wānaka) into a District Wide Network Operating Plan. This will bring a number of benefits and enable QLDC to highlight key issues on the network.	Kotahi funding to deliver this plan, work will be put on hold for this funding period and revisited in future NLTF cycles.	2027 – 2030 LTP	This is likely to impact the districts continually expanding network pressures.
Travel Demand Management	Budget carried forward from NLTP21-24	QLDC are incorporating more “soft” measures such as behaviour change and Travel Demand Management (TDM), into our tranpsort programmes, inlcuding the y delivery of ‘Better Ways to Go’,the Mode Shift Plan (required as a high growth district). This will see focus on optimising existing infrastructure wherever possible, although investment in “hard infrastructure” will still be required. QLDC’s approach is to look at the transport system as	The future programme of interventions identified in the SSBC will require delivery/advocacy from others for delivery.	In Progress - Policy review completed	Less likely to achieve the required behaviour change e.g. mode shift which places further pressure on our infrastructure.

Strategic Improvement Projects	NZTA Waka Kotahi Funding	Project Description	Intended Approach for 2024-27	Status	Impact
		a whole and takes a network approach, inclusive of all modes. TDM is key pillar of the combined approach to addressing growth.			
Emissions Reduction Plan for Transport	None	Creation of a District Wide plan that identifies transport interventions that focus on reducing environmental impacts.	On hold indefinitely from transport perspective – after consultation with Climate Action and Biodiversity Plan team	On Hold – Revisit in 2027 – 2030 LTP	Resulting transport interventions will not be specifically tailored to reducing emissions.
Mode Shift Plan reviews	None	Update required to 2022 Better Ways to Go	Reduced funding will limit this work to internal review, including W2G.	In scoping phase as at January 2025	Opportunities to expand and refine the strategic fit of this document will not be pursued.
Strategic Review of Transport	None	The QLD continues to grow placing futher demand and challenges on our transport network. The Strategic Review will consider the long term direction for transport and ensure the network is able to optimially service the district.	Budget will be utilised to undergo a comprehensive evaluation process of our current transport system and outline a long term plan to improve it.	Not planned for 24-27	This will signficiantly impact our future planning and investment programme. Strategic planning budgets are highly constrained in this funding cycle and this budget was not prioritised. Due to the document being key in informing our improvement programme for future years, this is likely to impact our

Strategic Improvement Projects	NZTA Waka Kotahi Funding	Project Description	Intended Approach for 2024-27	Status	Impact
					programme for the next 27-30 NLTF.
Speed Management	None	Address speed management issues. Meet requirements of 2024 Setting of Speed Rule.	Proceeding with minimum approach required under new 2024 Speed Rule and areas that have high public and or safety concern.	In Progress	Proactive management of the network is greatly reduced if speed controls are strongly prescribed nationally rather than locally. Timing and budget constraints mean that only compliance can be achieved. Improvements will be deferred.
Capell Avenue Road Formation	None	The extension of Capell Avenue (following unformed legal road) will support the rapidly growing Hāwea township and create link to the developing areas to the south.	QLDC will continue planning for the implementation of the road with local share funding which will advance early planning activities for and for the exploration of alternative funding and/or delivery approaches for this important strategic network improvement. QLDC will investigate other potential investment opportunities with developers.	Reduced approach - In Progress	With no subsidised funding for this project the planned delivery will likely be delayed relative to the timing set down in QLDC's LTP.

Strategic Improvement Projects	NZTA Waka Kotahi Funding	Project Description	Intended Approach for 2024-27	Status	Impact
Arthur's Point Bridge	None	The existing Arthur's Point Bridge is a single lane sole crossing of Shotover River on the route between Arthur' point and Arrowtown and Queenstown (the only alternative route for SH6A). The heritage listed bridge was constructed in 1919 and is indicated to fail catastrophically in a major earthquake event substantially impacting surrounding communities economically and socially. The bridge services between 4,500 and 8,000 vehicle movements per day depending on the time of year. The implementation of a new two-lane vehicle and active travel bridge will provide an alternative route and ensure there is a resilient alternative travel option for both residents and tourists.	QLDC will continue planning for the implementation of the bridge with local share funding. The funding will advance early planning activities for the exploration of alternative funding and/or delivery approaches for this important strategic network improvement. QLDC will investigate the opportunity for regional deals for prioritisation via IPP.	Reduced approach - In Progress	With no subsidised funding for this project the planned delivery will likely be delayed relative to the timing set down in QLDC's LTP.
Wānaka Network Optimisation SSBC	Budget carried forward from NLTP21-24	The Wānaka Network Optimisation business case (designed to advance the wider Masterplan) commenced in 2023. The Single Stage Business Case (SSBC) is underway and has reached a draft of the strategic case which will be reviewed by W2G partners. There are three main elements:	The project will be curtailed at the end of a strategic and economic case. This will give direction to future planning. Investment signals from W2G partners in the short term (current day to 2030) was the	Due completion by 30 June 2025.	Removal of any significant interventions in the short / medium term adversely affects the opportunities to promote behavioural change and influence land use / transport integration.

Strategic Improvement Projects	NZTA Waka Kotahi Funding	Project Description	Intended Approach for 2024-27	Status	Impact
		• Cycle infrastructure is included, but equally important is walking routes. • A Public Transport trial route, leading to ORC's potential establishment of an initial network • Future route protection and identification of any major intersection improvements that are not covered in other programmes such as LCLR and SNP.	main rationale to halt the project.		
Active Travel	None	Whakatipu Active Travel Network Programme is an integrated network of trails for walking and cycling that connects to public transport, providing a genuine alternative to getting around by car. It is designed to connect key destinations such as Arrowtown, Arthur's Point, Kelvin Heights, Jacks Point, Lake Hayes Estate and Shotover Country, Fernhill, Frankton and Queenstown.	Due to the recent change in government policy, the QLDC bid to NZTA Waka Kotahi only allocated active travel budget within the LCLR bid to NZTA Waka Kotahi. This budget was intended to implement key routes as required the districts network. Both Wānaka and Whakatipu have active travel network programmes developed, but with no allocated funding there is not likely to be any progress other than some minor unsubsidised	Very reduced approach - In Progress	Failing to progress these active travel projects and no further planning will adversely impact on the provision of alternative modes. Behavioural changes will be far less likely to be achieved in the short and medium terms.

Strategic Improvement Projects	NZTA Waka Kotahi Funding	Project Description	Intended Approach for 2024-27	Status	Impact
			safety improvements where local share funding will be used to deliver small 'quick wins' across the district where required.		
Transport Model Build	Yes	In 2025 QLDC and Way to Go Alliance partners (NZTA Waka Kotahi & ORC) are working together to create a suite of transport planning and forecasting tools that can be used to inform, guide and assess decisions about the regions land-use and transport network. An update of the transport model will provide greater confidence in transport forecasts and sufficient flexibility to allow decision makers to be provided with multiple scenarios representing potential futures. There is currently a significant gap in the ability of the existing District-wide transport model in relation to meeting these requirements and Council intend to address this project.	A joint initiative led by QLDC alongside the Way to Go Partners to develop a suite of forecasting tools to support future planning. Key focus is a new demand model.	On track for 2024-27	Will provide a critical and robust evidence base for forward and spatial planning.

3.5.3. CAPELL AVE ROAD FORMATION

Hāwea is a rapidly growing township. The environment court has recently approved a significant extension to the Urban Growth Boundary south of Cemetery Road. The extension of Capell Ave (following unformed legal road) will facilitate a critical multi modal connection between the established township and the newly developing area to the south. This will support safe and equitable access to education, social, and commercial facilities. There is a time limited opportunity to align formation of this road with the installation of a planned water supply main.

QLDC's application to NZTA Waka Kotahi included budget for: (1) initiation of an SSBC Lite and (2) implemention of the preferred solution.

The extension of Capell Avenue Road will ensure adaquate connectivity to these newly developing areas delivering optimal level of service to users as well as increasing productivity and assiting with the management of traffic flows and congestion in the township.

3.5.4. ARTHURS POINT BRIDGE

The single lane Edith Cavell Bridge at Arthurs Point is the sole crossing of the Shotover River on the route between Arrowtown and Queenstown. The primary constraint on the crossing is that the carriageway is currently 3.9m wide, with a 3.1m wide vehicle lane and two 0.4m wide kerbs. No dedicated facilities are provided for pedestrians or cyclists, which the community has indicated deters even the most confident users. The lack of a suitable crossing for pedestrians and cyclists at Arthurs Point is one of the few remaining barriers to completing the Whakatipu Active Travel Network (WATN).

Tourist attractions at Arrowtown, Skippers Canyon, Coronet Peak and Shotover Jet at least partially rely on the bridge for bus and car access by customers from the Town Centre. The bridge also lies on the only alternative route to SH6A Frankton Road for travel to/from Queenstown. A serious crash on SH6A on 11 January 2020 provided evidence of the network's fraught reliance on the bridge to provide a secondary route during disruption events when queues extended from the bridge into the Town Centre, causing delays of up to 50 minutes. The existing bridge itself has been estimated to have a remaining useful life of 20 years and is unlikely to be useable after a large seismic event.

3.5.5. IPM IMPROVEMENT PROGRAMME – SELF ASSESSMENT

For GPS Alignment, the new Very High rating criteria directly link to specific results in the GPS.

Table 45: IPM and the Improvement Programme

GPS Alignment	HIGH ALIGNMENT - An assessment of the relevance and significance of Queenstown's current transport-related problems with the Government Policy Statement's transport objectives indicate a high GPS alignment and strong case for investment. Queenstown's transport network is struggling to meet current demand, with poor travel time reliability on key corridors. Congestion compromises the ability of public and private enterprises, (that rely on the road network to function) to operate efficiently. With high population and visitor growth forecasts, the function of the network will be not able to meet expected demand. This inability to meet future traffic demands could have significant effects on the local network and constrain the economic development of the region.

	The Queenstown Lakes area is a high growth urban area with its combined resident and visitor population exceeding 30,000. QLDC has been identified in Araktaki as a high growth area and in the NPS for Urban Development.
Scheduling Alignment	HIGH – There is strong interdependencies between many of the projects submitted in our improvement programme. The integrated planning of our programme through Way to Go and then to delivery through the new Whakatipu Transport alliance reflects these.
Efficiency	MEDIUM – Majority of recent Business Cases reflect the efficiency of our programme and achieve high BCRs.

3.6. IMPROVEMENT ACTIONS – OUR TRANSPORT PROGRAMME

Improvement Actions – Our Transport Programme

1. Continuous programme – Update unsubsidised programme for 100's work categories once budgets have been confirmed by QLDC-.
2. Review any released GPS and associated IPM and re-assess programme
3. Update AMP following completion of Business cases (E.g. Wānaka Network Optimisation) and/or other strategies/documents

4. FINANCIAL MANAGEMENT

This section highlights budget allocations, expenditure projections, funding sources and financial strategies related to the management & maintenance of the transport assets.

4.1. INTRODUCTION

Over the next 10 years and beyond, QLDC continues to face its largest and compounding complex infrastructure capital works programme. In addition to the transport programme, QLDC is reacting to growth pressures across multiple services, and the issues described in this AMP are relevant across all of council's infrastructure portfolios and include:

- $91 million to renew existing wastewater assets
- $116m to meet additional demand in stormwater;
- Waste minimisation and management;
- Delivery of 3W HIF projects in Kingston;
- Internal projects such as Manawa Stage 1 (One Council building);
- $269m million to improve level of service for water supply over the next 10 years;
- Infrastructure Acceleration Fund (IAF)
- Crown Infrastructure Partnerships (CIP);
- NZ Upgrade Programme (NZUP);

The enormity of the programme places immense pressure on QLDC from a financial perspective and a capacity to deliver, as well as coordinating with external agencies and stakeholders, e.g. NZTA Waka Kotahi, ORC and QAC.

It is worth noting that CIP budgets do not cover the full cost of the Arterials programmes.

Pressure on market capacity and the supply chain constrains the regional ability to deliver not just the QLDC programmes, but a carry on impact in neighbouring areas. This has led to substantial cost escalation, which in turn limits ability to deliver the programme to budget and on time.

With a constrained funding environment, the LTP24 will focus on resetting the needs of our network by protecting the asset we have, there will be some focus on reducing the demand on our network; through travel demand management, and reviewing and planning for future needs through network operating plans and revisiting our transport strategy.

QLDC are exploring options and mechanisms to address the risk around the capacity of the market to deliver our intended programmes.

- Approaching the supply chain early in the procurement process to find the most appropriate method to get the best value for projects. I.e. packages of works and timings;
- Grouping similar projects together to incentivise the supply chain by increasing potential value. i.e. a programme around multiple 3-waters reservoirs;
- Reviewing the Build, Operate, Manage, Transfer models;

- Maximising good rates by having longer contract periods and potential extensions.

The Local Road Maintenance Programme may see some minor amendments however, QLDC deems this will deliver the outcomes as outlined in this AMP.

4.2. FINANCIAL IMPACT LARGE DEFECTIVE BUILDING CLAIMS

The settlement of large defective building claims – this has led to higher borrowing and interest costs. The annual cost of the borrowing required to fund the settlements made in the past two years is $5.3M and the increase in interest costs for annually is $4.4M.

4.3. FUNDING SOURCES

4.3.1. NZTA WAKA KOTAHI

In 2024, confirmed through the National Funding Assistance Review (FAR) that funding for QLDC Local Roads will be 51%.

As with our 21-24 programme, the 24-27 programme with regards to LoS (i.e. quality of roads or acceptable levels of congestion) will have to change as QLDC seeks to deliver its roading programme with reduced local and NZTA Waka Kotahi funding.

4.3.2. OTHER FUNDING SOURCES

QLDC will look at different options for alternative funding arrangements including:

- Absorbing the additional cost as a District wide strategy for important tourist routes;
- Exploring NZTA Waka Kotahi targeted enhanced funding rates e.g. for Glenorchy and Precipice Bridge, (South Wairarapa example);
- Liaising with local stakeholders for a supported rate (ski fields, DoC);
- Reviewing user pays opprtunities such as tolls or new policy chnages such time in use charging;
- Utilsing revenue opportunities from parking charges;
- Efficient use of collaboration for funding opportunities e.g. Way To Go, Alliance, ORC for public transport costs;
- Changing LoS to reduce demand/costs/risks. This could include restricting opening hours of the road, lower winter maintenance, reverting surface type. As LoS is not well understood, the continued monitoring and analysis will be undertaken;
- Central Government partnerships and grants, i.e. Housing Infrastructure Fund HIF, Crown Infrastructure Partners CIP, NZUP, CERF Climate emergency and TIF, Infrastructure Acceleration Fund IAF (Hāwea Waste Water);

- We will foster strategic partnerships with existing and new funders, establish alliances where possible, and engage frequently to ensure planning and investment programmes are aligned and expectations are managed.

The costs are recorded under the headings listed, and funded from the sources shown, as shown in the table below.

Table 46: Funding Sources

WORK	QLDC (in addition to NZTA Waka Kotahi subsidy)
MAINTENANCE	• After any available user charges and/or operating revenue by two targeted rates levied differentially in Queenstown / Whakatipu / Arrowtown Wards and in Wānaka • Petrol Tax • ORC Grants • Parking Meters Receipting • Traffic Management Notices
RENEWALS	The depreciation provision and then by two targeted rates levied differentially in Queenstown/Whakatipu/Arrowtown Wards and in Wānaka
NEW CAPITAL	The full cost of growth, if possible, by Development Contributions. If not possible the balance and other works by loan (external or internal) and/or then by two targeted rates levied differentially in Queenstown/Whakatipu/Arrowtown Wards and in Wānaka. Also, the value of vested assets
MANAGEMENT OVERHEADS	By two targeted rates levied differentially in Queenstown / Whakatipu / Arrowtown Wards and in Wānaka.

4.4. REVENUE AND FINANCING POLICY

Section 102(4) (a) of the Local Government Act 2002 requires each council to adopt a Revenue and Financing Policy. This Policy states QLDC's policies in respect of the funding of both capital and operational expenditure. Further information can be found in QLDC's Revenue and Financing Policy.

4.4.1. QLDC WARDS

QLDC wards for funding are set into two wards, even though we have three political wards. This is driven from a pragmatic approach to financial management and enables contribution against all roads in those bigger wards.

Figure 154: QLDC Wards

Table 47: Ward & Description

Funding Ward	Political Ward
Wānaka	Wānaka-Upper Clutha (four Councillors)
Whakatipu	Queenstown-Whakatipu (four Councillors)
	Arrowtown-Kawarau (three Councillors)

4.4.2. SPECIAL PURPOSE ROADS – TRANSITION TO LOCAL ROADS

Glenorchy Road and Crown Range Road became Special Purpose Roads (SPRs) in the early 1990's. The key function of SPRs was intended to provide access to tourist destinations such as Mt Aspiring National Park, acknowledging that Crown Estate does not pay rates. The high funding assistance rates reflected their previous status when they were 100% funded by Central Government. Under the 2014 Funding Assistance Review, NZTA Waka Kotahi decided to do away with SPRs. There have been several historic conversations to discuss the option whereby the previously special purpose roads such as the Crown Range and the road to Glenorchy could be moved from QLDC to NZTA Waka Kotahi. Although this would save QLDC money in maintenance, it may also result in changes to the LoS (i.e. quality of roads or number of closure days) on those roads.

With funding for Special Purpose Roads being standardised for all roads and NZTA Waka Kotahi providing funding as one 'local roads' budget, QLDC have decided for the 24-34 period to combine the Glenorchy ward with Whakatipu and split the Crown Range ward between Whakatipu and Wānaka.

Table 48: QLDC's historical Special Purpose Roads

WARD	Description
Wānaka	based on electoral boundary
Whakatipu	based on electoral boundary
Glenorchy Special Purpose Road:	Defined in the NZ Gazette 18 June 1992 as '*The section of public highway from Twelve Mile Creek on the Queenstown Glenorchy Road through Glenorchy and over the Dart River to Routeburn'.* It has a total length of approximately 63 kilometres.
Crown Range Special Purpose Road:	Defined in the NZ Gazette 18 June 1992 as '*the section of public highway previously part of No 89 State Highway from its conjunction with Crown Terrace Road at Route Position 0/4.78 at the foot of the Crown Range to the Cardrona Hotel at Route Position 16/9.71 in the Cardrona Valley*'. It has a total length of approximately 21 kilometres.

4.4.3. FUNDING RISKS

QLDC has identified several financial challenges that are explained in and managed in its Risk Register. The significant risks are:

- NZTA Waka Kotahi funding (diversion of funding to areas impacted by weather events e.g. Cyclone Gabrielle).
- NZTA Waka Kotahi funding model of hypothecated income from user charges and petrol tax being may be at risk by moves to electrical vehicles.
- QLDC funding to meet the levels of service;
  - Revenue to debt ratio needs to be maintained.
  - Cost escalations and
  - Rising interest rates
- Changing central government priorities;
- Changing NZTA Waka Kotahi priorities
- Availability of revenue (rates and NLTF);
- Funding sources for the repair of damage caused to roads by natural hazard events (including climate change).

Other financial risks that QLDC is managing (or may potentially need to manage in future) are:

- Fraud and corruption;
- Inadequate management of contract retentions and of potential claims for cost escalation or other contract variations;
- Excessive tender prices (or no tenders submitted);
- Contractor non-performance (or company failure);
- A 'sensitive expenditure' issue occurs;
- Substantially increased QLDC liabilities due to reduced Emergency works FAR;
- Poor project cost estimation;
- Poor forward financial forecasting/budget formulation;
- Poor general financial management;
- FAR rates for SPR's reducing and impact on levels of service (reducing spend to maintain local share.

4.5. AMP FINANCIAL ASSUMPTIONS

The following general assumptions were made in preparing the AMP forecast and may change over time/following NLTF approvals:

- The extent to which NZTA Waka Kotahi will subsidise QLDC road costs will be as forecasted;
- Subdividers and developers will contribute towards QLDC's costs by paying development contributions at the levels and times forecasted;
- The depreciation provision will be as forecasted;
- QLDC will fund depreciation only relating to its share of roading funding. The component attributable to the NZTA Waka Kotahi is excluded;
- An extraordinary major event such as a natural hazard will not occur;
- Government legislative, regulatory, or policy changes will not cause higher QLDC costs;
- No unforeseen significant asset failures will occur (or other unexpected costs be incurred);

- QLDC will be able to obtain all designations for new or widened roads (and acquire all necessary properties), and all required resource consents, in a timely manner;
- The extent to which new transportation assets will be vested in QLDC will be as forecasted;
- Low maintenance and construction cost escalation.
- Increasing inflation rates and it's effect on construction costs, sourcing matierlas, labour costs etc

4.6. ASSET VALUATION

Transport assets are valued every two years for QLDC's financial statements in accordance with the Public Benefit Entity International Public Sector Accounting Standard 17, Property Plant and Equipment (PBE IPSAS 17). The transportation asset information for the 2020 valuation has been complied in a fixed asset register for financial reporting purposes.

Table 49 summarises the assets as valued by WSP NZ Limited (WSP) as at 30 June 2023.

Table 49: QLDC Valued Road Assets

Asset	Asset Description
Bridges and Bridge Culverts	Bridges and large culverts (area >3.4m2) classified as bridges.
Drainage	Culverts, flumes, catchpits, subsoil drains, soakhole and headwalls.
Equipment Register	Contains assets that are moved around the network, this primarily consists of counters and smart devices used for patronage tracking.
Footpath	Roadside footpaths and pedestrian accessways.
Minor Structure	Roadside furniture and utilities including bus shelters.
Railing	Includes all railing types and use.
Retaining Wall	Constructed walls.
SW Channel	Kerb and channel, concrete channels.
Sign	Includes all signage associated with guiding the flow of traffic.
Street Light	Street light poles, brackets and lanterns.
Traffic Facility	Paint markings and road markers.
Traffic Signal	Components of traffic signals.
Pavement Formation	Road platform including shoulders as well as earthworks required to shape the land
Pavement Sealed Layers	The pavement granular layers including: Subbase and basecourse used to form the road carriageway, where the surface is sealed.
Pavement Unsealed Layers	The pavement granular layers including: Subbase and basecourse used to form the road carriageway, where the surface is unsealed. The unsealed running course is also included in this group.
Pavement Surface	The pavement material (chip seal, asphalt concrete) that forms the running surface on the road.
Bridges and Bridge Culverts	Bridges and large culverts (area >3.4m2) classified as bridges.

The movement between the 2022 and the 2023 valuation can be seen below.

Table 50: QLDC Asset Valuation Comparison **2022 to 2023**

	30-Jun-23			30-Jun-22			Difference					
Asset Type	ORD	ODRC	AD	ORC	ODRC	AD	ORC	ODRC	AD	%ORC	%ODRC	%AD
	$	$	$	$	$	$	$	$	$	%	%	%
Bridges and Bridge Culverts	$73,522,409	$34,205,580	$684,889	$64,599,260	$30,598,512	$605,688	$8,923,149	$3,607,068	$79,201	13.8%	11.8%	13.1%
Drainage	$53,151,983	$33,005,592	$887,681	$46,781,023	$29,157,162	$797,753	$6,370,960	$3,848,430	$89,928	13.6%	13.2%	11.3%
Equipment Register	$176,211	$157,310	$17,621	$-	$-	$-	$176,211	$157,310	$17,621	N/A	N/A	N/A
Footpath	$91,463,752	$49,130,506	$2,870,229	$83,079,123	$44,503,421	$2,666,994	$8,384,629	$4,625,085	$203,235	10.1%	10.4%	7.6%
Minor Structure	$5,614,828	$1,819,856	$165,715	$5,251,005	$1,762,835	$156,350	$363,823	$57,021	$9,365	6.9%	3.2%	6.0%
Railing	$12,524,486	$3,840,234	$658,221	$11,436,359	$3,617,821	$609,928	$1,088,127	$222,413	$48,293	9.5%	6.1%	7.9%
Retaining Wall	$116,061,757	$89,272,184	$1,603,568	$112,685,432	$90,456,322	$1,549,351	$3,376,325	-$1,184,138	$54,217	3.0%	-1.3%	3.5%
SW Channel	$108,579,655	$77,691,383	$1,449,845	$99,197,307	$71,506,540	$1,324,717	$9,382,348	$6,184,843	$125,128	9.5%	8.6%	9.4%
Sign	$9,619,782	$3,676,286	$630,503	$8,506,488	$2,830,840	$557,685	$1,113,294	$845,446	$92,818	13.1%	29.9%	17.3%
Street Light	$29,250,809	$14,900,771	$1,105,776	$28,135,257	$14,106,089	$1,050,063	$1,115,552	$794,682	$55,713	4.0%	5.6%	5.3%
Traffic Facility	$161,619	$14,732	$7,366	$152,484	$14,755	$7,352	$9,135	-$23	$14	6.0%	-0.2%	0.2%
Traffic Signals	$276,236	$221,492	$18,248	$-	$-	$-	$276,236	$221,492	$18,248	N/A	N/A	N/A
Pavement Formation	$250,338,176	$250,338,176	$0	$234,653,700	$234,653,700	$-	$15,684,476	$15,684,476	$-	6.7%	6.7%	0.0%
Pavement Sealed Layers	$323,450,467	$239,119,266	$3,286,956	$301,443,691	$224,255,125	$3,072,139	$22,006,776	$14,864,141	$214,817	7.3%	6.6%	7.0%
Pavement Unsealed Layers	$16,036,288	$11,703,173	$345,329	$14,988,095	$11,107,083	$338,306	$1,048,193	$596,090	$7,023	7.0%	5.4%	2.1%
Pavement Surface	$90,710,308	$35,147,778	$6,599,473	$87,654,867	$37,158,440	$6,211,395	$3,055,441	-$2,010,662	$388,078	3.5%	-5.4%	6.2%
Total	$1,180,938,767	$844,244,320	$20,331,420	$1,098,564,091	$795,710,645	$18,927,721	$82,374,676	$48,533,675	$1,403,699	7.5%	6.1%	7.4%

Note: Green shading shows increases and red decreases. The darker contrast represents the magnitude of the change.

4.6.1. EXCLUSIONS

The following were specifically excluded from the valuation:

The effect of the relevant provisions of the RMA or other legislation on any asset replacement.

- Service utility assets including pipes, poles or cabling servicing QLDC assets;
- Assets identified as privately owned, and not owned by QLDC, NZTA Waka Kotahi;
- Land under roads;
- Stormwater pipes and catch pits/sumps leads (valued separately as part of QLDC storm water assets);
- Intangible assets.

4.6.2. DEPRECIATION (LOSS OF SERVICE POTENTIAL)

Depreciation is the extent to which QLDC's assets decrease in value each year - due to their use, age, obsolescence through technological and market changes, change in use, or neglect.

4.6.3. DEPRECIATION PROVISION

Operational assets with the exception of land, are depreciated on a straight-line basis to write off the asset to its estimated residual value over its estimated useful life.

Infrastructural assets, with the exception of land under roads, are depreciated on a straight-line basis to write off the fair value of the asset to its estimated residual values over its estimated useful life.

For Roading the estimated useful lives used in the calculation of depreciation is in the range of 1.68% - 10%.

On Revaluation Infrastructural assets, other than land under roads, are stated at fair value less accumulated depreciation and any impairment losses recognised after the date of revaluation.

The useful lives and associated depreciation rates of the various classes of assets have been estimated generally based upon the New Zealand Infrastructure Asset Valuation & Depreciation Guidelines – Version 2. In specific cases these have been modified for reasons explained in the valuation report.

The depreciation rates are applied at the component level and the depreciation sum is calculated on the remaining useful life of each component. Where the age or condition is unknown it is assumed the asset is half way through its useful life.

The residual value and useful life of an asset is reviewed, and adjusted if applicable, each financial year end.

4.6.4. CONFIDENCE

The depreciation confidence is as recorded for the revaluation. QLDC uses the International Infrastructure Management Manual (IIMM) rating system for data integrity and confidence.

The overall confidence rating for the 2023 valuation is:

Table 51: Confidence Rating for Roading Assets

	Confidence Grading			
Asset	Quantity	Unit Cost	Age/Life	Overall
Bridges and Bridge Culverts	A	A	B	A
Drainage	C	A	B	B
Equipment Register	C	B	C	C
Footpath	A	A	A	A
Minor Structure	B	A	B	B
Railing	A	A	B	A
Retaining Wall	B	A	B	B
SW Channel	A	A	A	A
Sign	B	A	B	B
Street Light	B	A	B	B
Traffic Facility	B	A	B	B
Traffic Signal	A	A	A	A
Pavement Formation	A	A	-	A
Pavement Sealed Layers	A	A	C	B
Pavement Unsealed Layers	A	A	C	B
Pavement Surface	A	A	B	A
Overall				A-B

The overall accuracy of the confidence grading for roading assets has been assessed to be approximately ±10%.

A	*Highly Reliable Data based on sound records, procedures, investigations and analysis, which is documented properly and recognised as the best method of assessment.*
B	*Reliable Data based on sound records, procedures, investigations and analysis, which is documented properly but has minor shortcomings, for example the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation.*
C	*Uncertain Data based on sound records, procedures, investigations and analysis, which is incomplete or unsupported, or extrapolation from a limited sample for which grade A or B data is available.*
D	*Very Uncertain Data based on unconfirmed verbal reports and/or cursory inspection and analysis. Dataset may not be fully complete and most data is estimated or extrapolated.*
N/A	*Data does not exist or is not relevant.*

4.6.5. BACKLOG (DEFERRED MAINTENANCE AND DEFERRED RENEWALS)

Backlog is the value of maintenance and renewal work that has not been done when it should have been – in order to meet the prescribed levels of service.

If maintenance and renewal work is not carried out at the optimum time in the asset lifecycle:

- The assets will deteriorate further;
- The repair, renewal or replacement work that will have to be done later may be more extensive than it would have been if it had been carried out at the optimum time;
- The cost of doing the work later may be more expensive (in real terms) than it would have been if the work had been carried out at the optimum time. A delay in road maintenance of 3 to 5 years can increase the required repair costs by more than six times;
- (Until it is done) the annual cost of maintaining the asset may be more expensive than it would have been if the work had been done at the optimum time (e.g. the higher cost of repairing the road as more and more potholes appear as the road further deteriorates);
- The asset may not be able to continue to perform to its original design capacity or performance standard, or to deliver the specified levels of service, and, if the work continues to be delayed, may ultimately be unable to provide the required service altogether (e.g. the necessity to close a bridge because the lack of maintenance resulted in it now being structurally unsafe).

4.6.6. MONITORING THE BACKLOG TRENDS

The sufficiency of QLDC's annual maintenance and renewal budget is determined by comparing the depreciation provision (the extent to which the assets are being 'consumed' or continuing to wear out every year) with the annual renewals and replacement expenditure.

If the two are 'in sync' over time the current state of the network is being maintained. If there is a gap the network is continuing to deteriorate (and the 'backlog' will have increased). If the renewals expenditure exceeds the depreciation provision the network is being improved.

Another way of ensuring a sustainable network (after any deferred maintenance and deferred renewals have been eliminated) is to require that not less than the annual depreciation provision (after taking into account the share of the cost of renewals that is funded by the NZTA Waka Kotai be funded annually and the proceeds be set aside and used only for renewals. This is the approach adopted by QLDC.

4.7. TOTAL EXPENDITURE

The graphs below provide a high-level overview of the QLDC Capital Investment Programme, all financials have been drawn from Tech One, QLDC's Enterprise Financial system. All capital and operational expenditure in this document is inflated to funding year.

As previously mentioned, the QLDC TYP24-34 is much more constrained compared to our 21-31. This means that our investment across the network for new infrastructure is focused on core/legislative spend. Our replacement infrastructure will focus on keeping LOS as high as possible with the funding available.

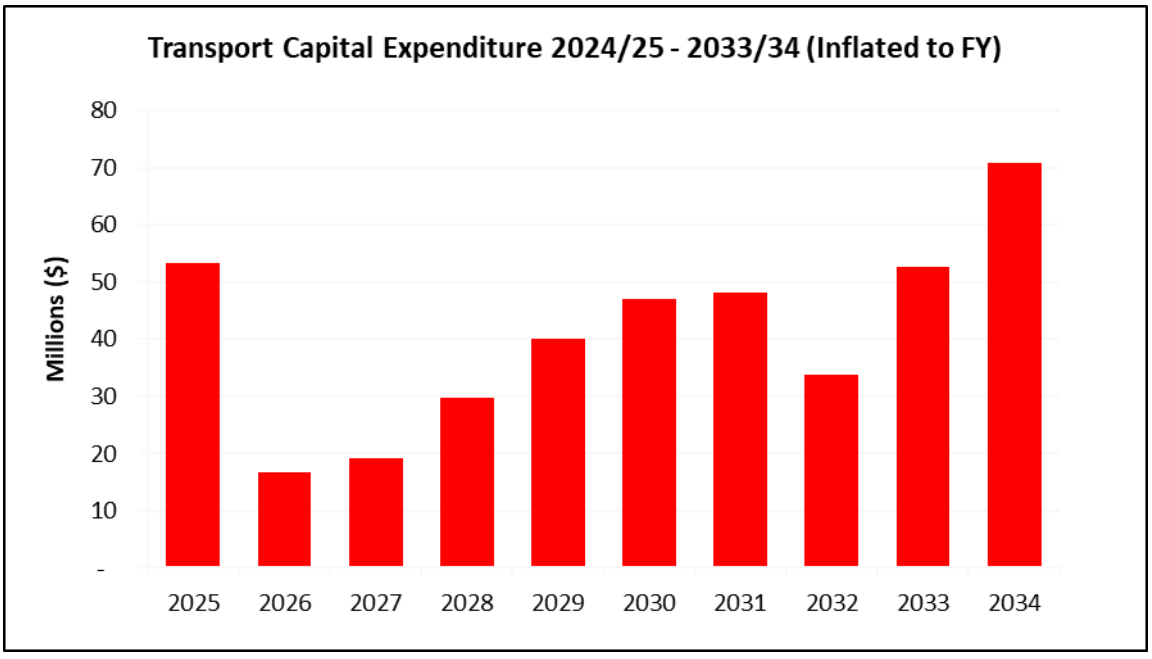
Table 52: QLDC NLTF24-27 Requested vs Approved Budgets

	QLDC Requested 24-27	NZTA Waka Kotahi Approved 24-27	Variance requested vs allocated
Road Safety Promotion	757,546	278,000	-63%
Local Road Operations	28,285,574	25,065,000	-11%
Local Road Pothole Prevention	38,124,610	37,263,000	-2%
Walking & Cycling	1,746,015	450,000	-74%
Capital Projects	15,173,756	4,218,368	-72%
LCLR	23,403,505	1,200,000	-95%
Total	**107,491,006**	**68,474,368**	**-36%**

4.7.1. CAPITAL EXPENDITURE

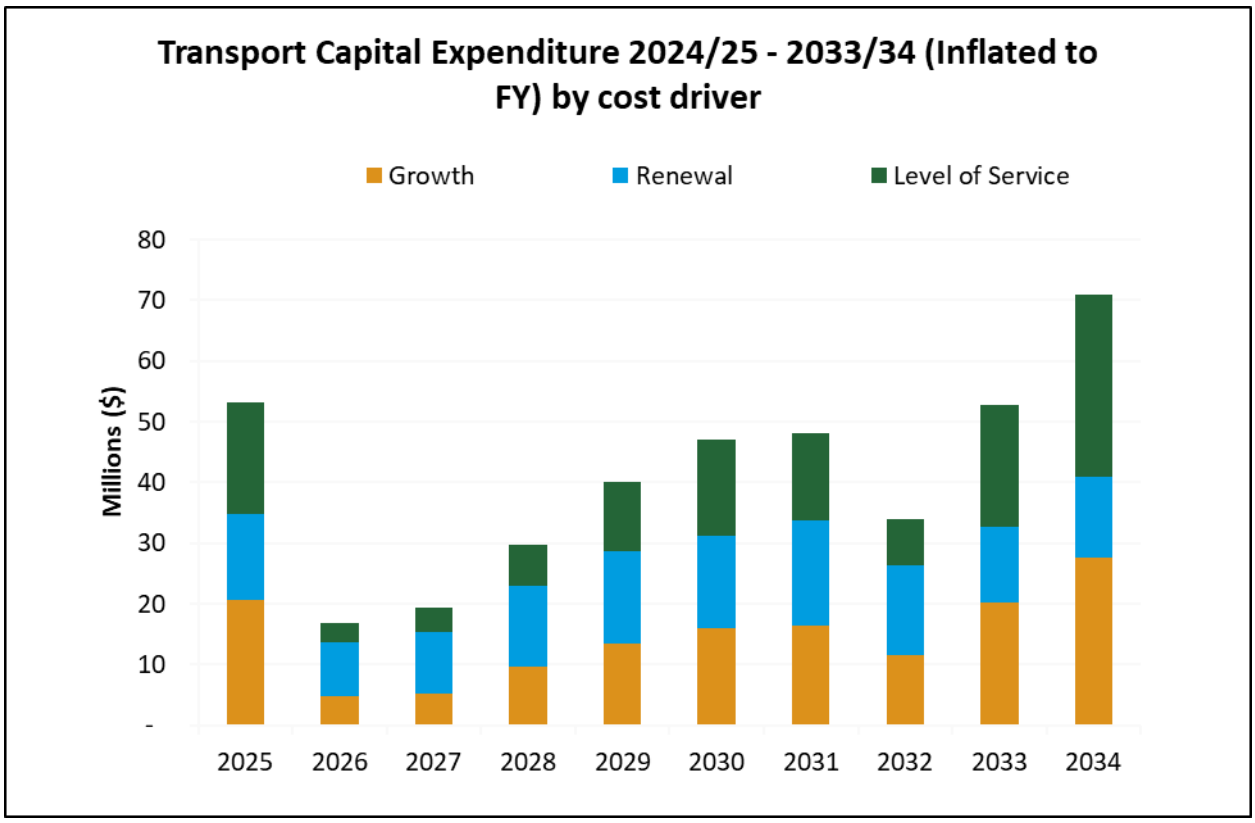
The figure below shows the expected expenditure inflated to funding year, year-on-year up to 2033/34 It is important to note, due to the size of the programme the years 1 to 3 is being developed in detail, the majority of the $'s in the remaining years are being developed as part of the Queenstown Detailed Business Case and the Wānaka Master planning process.

Figure 155: Transport Capital Expenditure Projections – subsidised and unsubsidised (as per approved December 24 reforecast)



The below chart presents the capital expenditure by cost driver, it highlights the growth driver is addressing previous high growth in the last LTP cycle. FAs expected finding for renewal is remaining constant over the ten years.

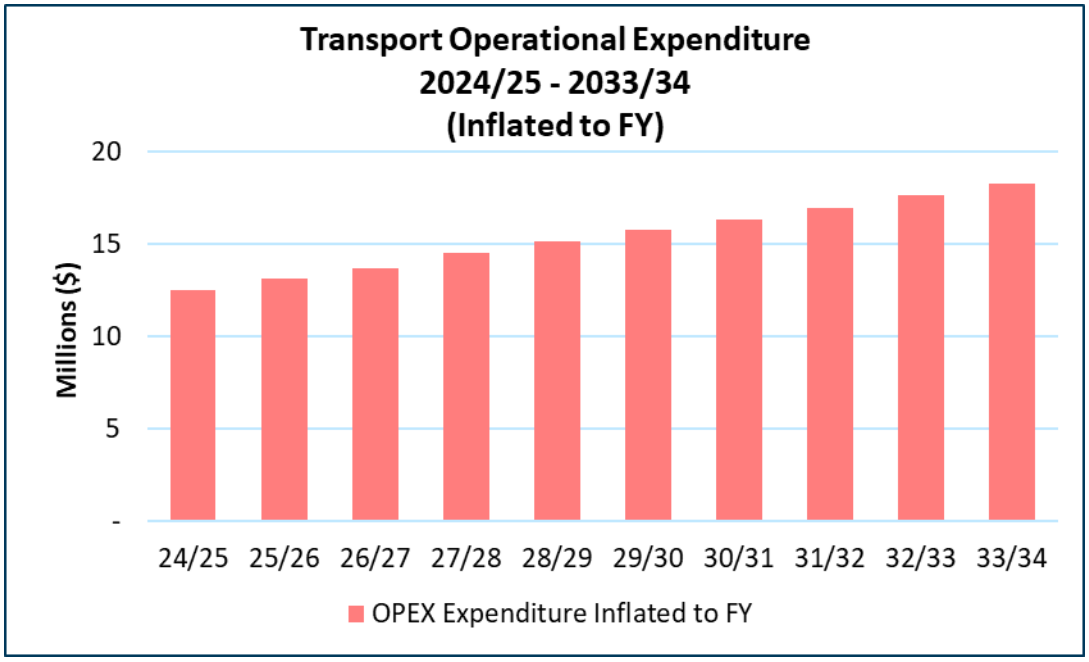
Figure 156: Transport Capital Expenditure Drivers – subsidised and unsubsidised (as per approved December 24 reforecast)



4.7.2. OPERATIONAL EXPENDITURE

Operational expenditure consists of maintenance and operational activities for the management of our network. These $'s havebeen inflated and exclude depreciation, interest and overheads.

Figure 157: Total Transport Operational Expenditure – subsidised and unsubsidised (Infl. FY24/25, as per approved LTP24-34, to be updated following internal review))



4.7.3. KEY ASSUMPTIONS, CONFIDENCE AND RELIABILITY

Improvements to public transportation patronage and use of cycle trails, combined with education programmes could go some way to ensuring QLDC's roads continue to deliver current levels of service. Diversification of transport options is a key tool in managing congestion (user demand) at peak times of the day. Other options such as increases to local funding may also provide an alternative, however this solution would need to be well understood and consulted on with the community ahead of any such decision.

There is a degree of uncertainty around the conditions that may be placed on the resource consents for any new roading project and the levels of investment in stormwater treatment that might be required in the future. This may impact on future costs and revised timings for scheme delivery. It is important that QLDC put forward robust arguments during consenting processes to ensure that the construction and operation of a new road best balances environmental outcomes with community affordability.

4.8. IMPROVEMENT ACTIONS – FINANCIAL MANAGEMENT

Improvement Actions – Financial Management

1. Ensure the AMP is updated with both subsidised and unsubsidised budget (specifically operational expenditure (100's and 432))
2. All numbers and charts to be updated once operational expenditure finalised.
3. Update Valuation and depreciation information to represent new/additional assets

5. CONTINOUS AMP IMPROVEMENT

This Section outlines the current maturity of Council's Transport asset management practices and areas where it intends to improve processes, data, information systems and people capability and capacity.

5.1. CONTINOUS IMPROVEMENT

Continuous improvement refers to an ongoing process of enhancing efficiency, effectiveness and performance throughout the asset lifecycle. It involves regularly assessing and refining strategies, processes and systems to optimise the management operation and maintenance of assets. This iterative approach aims to adapt to changing conditions, incorporate lessons learned and ensure the asset management practices align with evolving goals, standards and best practice.

The last 10 years has seen positive rewards in QLDC's approach to continuous improvement in transport asset management as described in the asset maturity assessment below.

5.2. ASSET MANAGEMENT MATURITY

As referenced in the SAMP, QLDC have an independent audit of Asset Management Maturity undertaken every two years. This covers the wider organisation than just transport and drives organisational asset management improvement as well as activity-based improvements.

This audit is based on NAMS IIMM guidelines and forms part of the continuous improvements in AM practices. The review has previously focused on the activities of Transport, Three Waters, and Waste Management, but the 2022 review included the activities of Property and Parks. It also inlcuded achievements and key areas of strength and opportunities for improvement for each activity. The figure below illustrates the historical trends since 2012 to date for each AM function in Transport:

Figure 158: 2012 to 2022 Transport Asset Management Assessment Average Scores

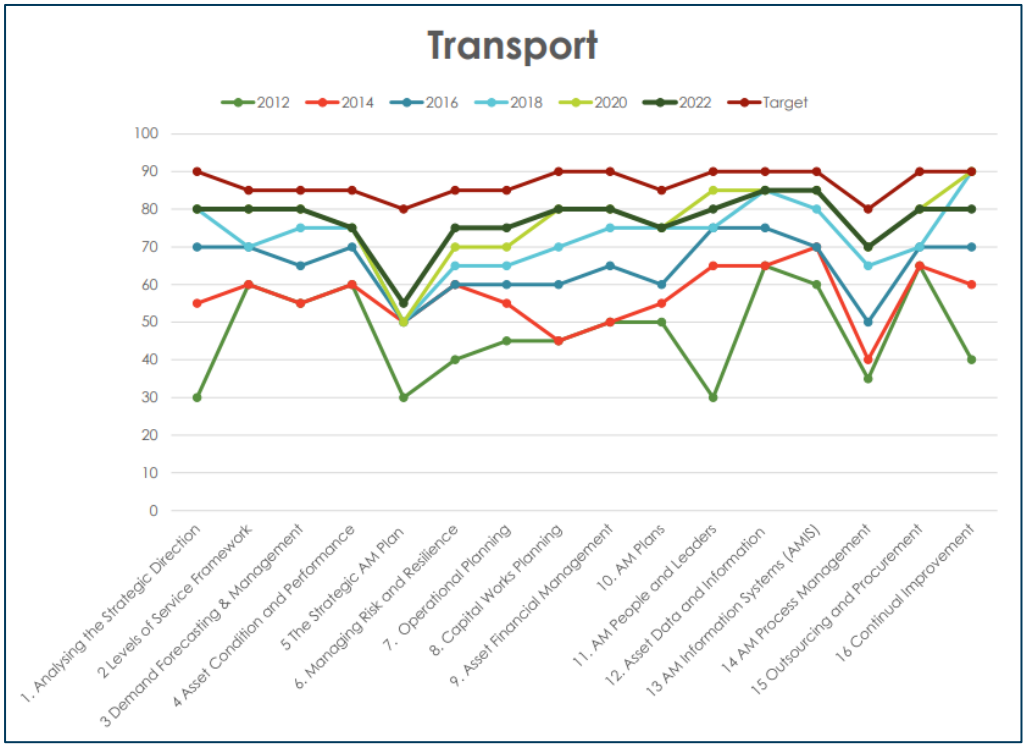
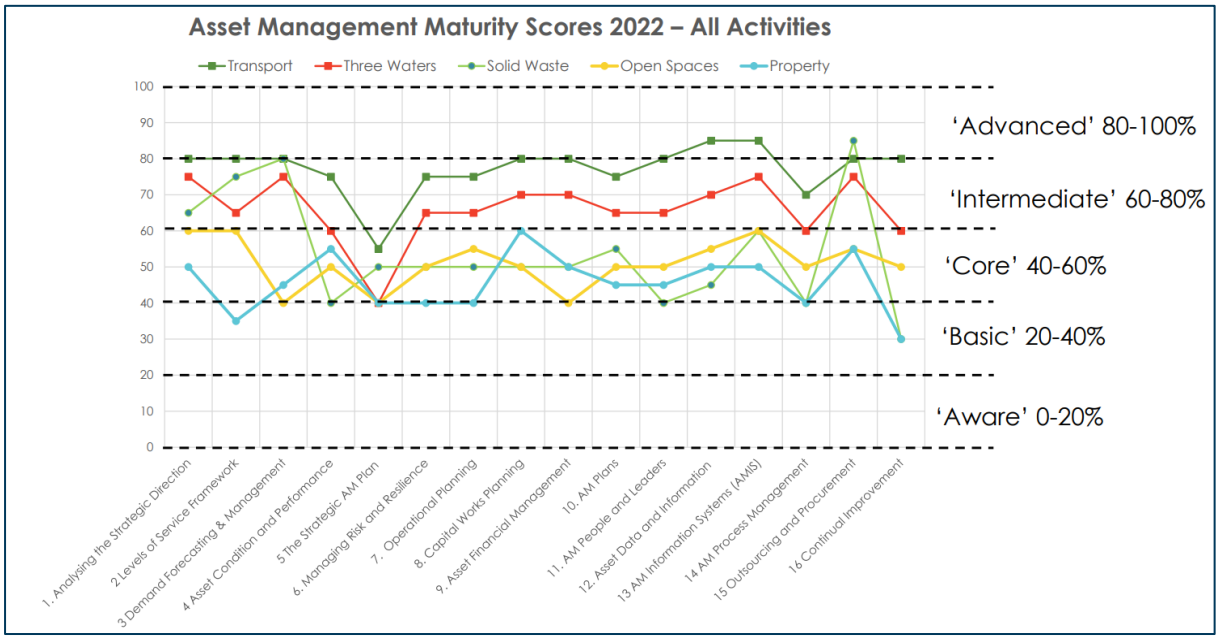


Figure 159: Comparison of asset management maturity (AMMA Review 2022)



5.3. PROGRESS AGAINST PREVIOUS AMP (2021-24)

QLDC are continuously maturing, and below highlights some of the biggest achieved improvements since the 2021/31 AMP.

The main achievements since the 2021-31 plan are:

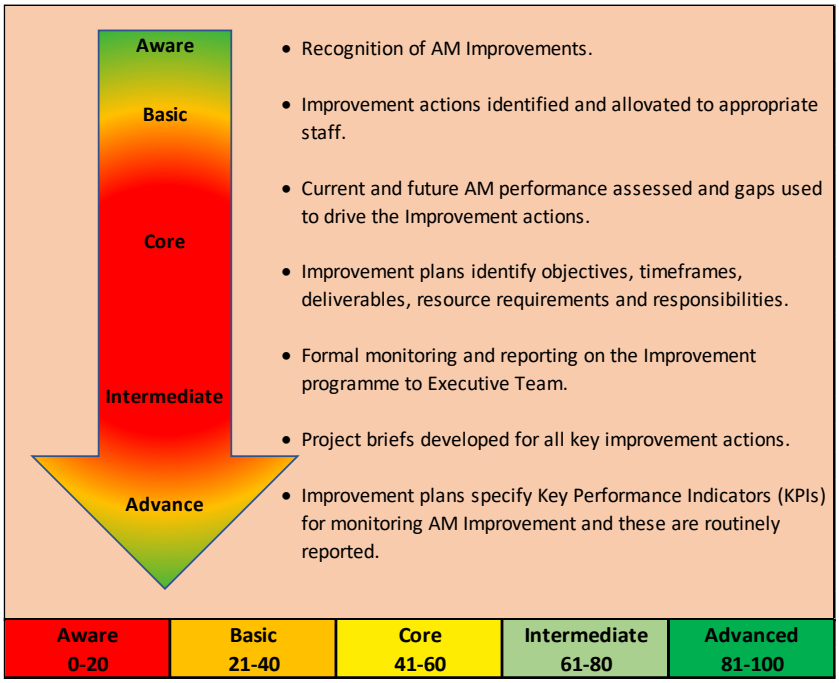
- Update to the strategic context section to provide clearer and more concise reference in the Strategic Case (strategic context and drivers).
- Introduction of a Strategic Asset Management Plan (SAMP), and an AM Policy update to support a more organisationally structured approach to asset management
- QLDC have a new Corporate Strategy and Policy Directorate with the remit to deliver better strategic clarity across the organisation.
- QLDC Property & Infrastructure Directorate has established a new Strategic Asset Management (SAM) Team which reports direct to the GM and has had increased staffing levels, giving a much stronger mandate to asset management.
- Update to the Corporate Risk Management Framework
- Data improvements (demonstrated in the increasing REG Data Quality score)
- Addition of an enhanced 'AMP at a Glance' summary sheet
- Commenced the process to transition to a digital AMP

5.4. IMPROVEMENT PLAN

5.4.1. ASSET MANAGEMENT IMPROVEMENT PLAN

QLDC's Asset Management Improvement Plan is a plan of the improvement actions identified to enhance the asset management planning process. Implementing this Improvement Plan will align QLDC's Transport AM practices to the higher end of the "Intermediate-Advanced" level as represented in the IIMM.

Figure 160: International Infrastructure Management Manual (IIMM) AM Maturity Index (2015)



Actions are identified following external reviews such NZTA Waka Kotahi Audits, LTP Audits, maturity assessments and internal processes and to align with the REG Action Learning Plans. Timelines for completion are assigned to the actions based on priority. The key focus is on process and data integrity; ensuring that the process to deliver the AMP programme is defined,understood, implemented and resourced to deliver with the appropriate capability and asset information is robust, repeatable and reliable.

5.4.2. AUDITS

5.4.2.1 NZTA WAKA KOTAHI TECHNICAL AUDIT DECEMBER 2023

The latest technical audit of QLDC was undertaken by the NZTA Waka Kotahi in December 2023. The report stated that QLDC has been making good progress in implementing most of the recommendations from the previous technical audit in 2019 and that the road network was in relatively sound condition performing well in comparison with its peer group.

Even though QLDC was commended for the development of their comprehensive forward works programme (FWP), due to low levels of pavement renewals and an increase in pavement maintenance on the council network over the past 5 years, a review is required to ensure an optimal balance of investment. Even though QLDC has been working on this since the last audit in 2019, further involvement of the maintenance and asset management teams in various processes was recommended to ensure all new assets are within council specifications and policy to avoid council inheriting problematic new assets into their vested network.

The unsealed network was rated to be in an appropriate condition with only the extensive use of 'Otta Seals' and its inconsistent performance causing some concern; it was therefore recommended for QLDC to develop an Unsealed Road 'Otta' surface treatment policy and guideline.

In regard to data quality, the auditors were glad to see that QLDC has mostly collected very high-quality data which is used for decision making. QLDC was also one of the first RCAs to be migrating to the new Asset Management Data Standard (AMDS) which is being rolled out nationwide to achieve better and more consistent data which can be compared between different councils.

Another relevant positive progress was noted by the auditors in QLDC addressing safety issues in the district resulting in a noticable downward trend in deaths and serious injuries and crashes involving them in the last 5 years. Although great progress was made in this area with further changes and road safety programmes in the pipeline, a number of areas where further improvements can be made were identified.

The recommendations regarding the management of the road network were identified in the Audit Review Technical Report and can be found in the APPENDIX.

Table 53: NZTA Waka Kotahi Technical Audit 2023

Subject Area		Rating Assessment*
1	Previous Audit Issues	Effective
2	Network Management	Some Improvement Needed
3	Activity Management	Effective
3	Data Quality	Effective
4	Safety	Some Improvement Needed
OVERALL RATING		Effective

5.4.2.2 INVESTMENT AUDIT 2023

The latest investment audit of QLDC was undertaken by the NZTA Waka Kotahi in July 2023. The recommendations regarding the management of the road network were identified in the Investment Audit Review Report and can be found in APPENDIX.

Table 54: NZTA Waka Kotahi Investment Audit 2019 - 2023

Audit Rating Assessment Comparison			
	2019	**2020**	**2023**
Previous Audit Issues	N/A	N/A	N/A
Financial Processes	Effective	Effective	Some Improvement Needed
Procurement Procedures	Some Improvement Needed	Effective	Effective
Contract Management	Some Improvement Needed	Effective	Effective
Professional Services	Effective	Effective	Effective
Overall Rating	**Some Improvement Needed**	**Effective**	**Effective**

5.4.2.3 LONG TERM PLAN (LTP) AND ANNUAL REPORT AUDITS

QLDC uses external auditors (Deloitte on behalf of the Office of the Auditor General) to evaluate the quality and reliability of financial information reported in the Long-Term Plan and Annual Reports. QLDC's 2024 audit has been completed.

5.5. IMPROVEMENT ACTIONS – CONTINUOUS AMP IMPROVEMENTS

Improvement Actions – Continunous AMP Improvements

1. Update the AMP following the December 2023 Technical Audit from NZTA Waka Kotahi
2. Align with update to the new SAMP

Follow up actions from the AAMA and embed in the SAMP improvement plan:

1. Key areas of focus for transport to further development of multi-mode transport modelling and the Network Operating Framework to support a robust road investment programme with a better understanding of alternative transport responses.

2. Complete the implementation of a number of key initiatives aimed at improved optimisation of transport asset maintenance and renewal, including the Maintenance Intervention Strategy, formalised condition and performance assessment programme and ongoing data improvements to support asset deterioration modelling and renewal analysis.
3. Prioritise AM Improvement efforts:
4. Review the AM Improvement Plans with consideration of these review findings, and with a reduced number of tasks. Focus on good project management and delivery of these tasks.
5. Establish AM Improvement Plan progress reporting to responsible Director, so that programme slippages are transparently managed.
6. Strengthen critical AM processes to ensure continuity through staff changes and reforms: Identify critical AM processes and complete process documentation and backups for key roles. (e.g. maintaining the asset register, undertaking asset assessments, renewal forecasting, managing investment programmes).
7. Develop a Council-wide portfolio management process. Including process mapping, role definition across teams, use of common software (or Excel templates).
8. Establish Change Management Processes:
9. Major change management – process for reviewing existing programmes when new funding or direction is given from Council, govt, or other shocks and disruptors.
10. AM Project change management – process for completion of AM (or any type of) Improvement project, sign off required for documentation, training.
11. Strengthen connections from Strategy Development to Delivery:
12. Work with Strategy to identify timely inputs required from I&P staff and ability to support Strategy work.
13. Incorporate actions from Strategies into AM Improvement Plans (process improvements) or CAPEX programmes (asset improvements). Ongoing process as Strategies are developed and updated.
14. Review Council Planning cycle: work with Strategy team to map out the interactions between AMPs and other key documents and processes, appropriate timings, Council engagement with AMPs.
15. This should include consideration of when and how the Council and community are engaged in debating level of service / cost options and selecting preferred approach. (3Waters are currently developing a levels of service document for this purpose).

APPENDIX

QLDC POLICIES, STRATEGIES AND SUPPORT ELEMENTS		
1	Asset Management Policy 2016 – (Under Services)	https://www.qldc.govt.nz/your-council/council-documents/policies/
2	QLDC Lakes Spatial Plan	https://www.qldc.govt.nz/your-council/council-documents/queenstown-lakes-spatial-plan/
3	QLDC Land Development and Subdivision Code of Practice	https://www.qldc.govt.nz/services/resource-consents/land-developments-and-subdivisions
4	QLDC Transport Strategies	https://www.qldc.govt.nz/services/transport-and-parking/transport-strategies
5	QLDC Revenue and Financing Policy – (Under Finance)	https://www.qldc.govt.nz/your-council/council-documents/policies/
PROCUREMENT		
6	Strategy for Procurement of Land Transport Activities & TRANSPORT ACTIVITY PROCUREMENT STRATEGY ENDORSEMENT	https://www.qldc.govt.nz/media/yk5mmgpo/qldc-strategy-for-the-procurement-of-land-transport-activities.pdf Endorsement see below
7	Procurement Policy & Procurement Guidelines	https://www.qldc.govt.nz/media/cgok5mj2/procurement-policy-approved-2-6-2022.pdf & https://www.qldc.govt.nz/media/4ycpi2vu/procurement-guidelines-2016-rev-2021.pdf
8	Smart Buyer Assessment	https://portal.transportinsights.nz/
AUDITS		
9	REG Data Quality Report	https://nzta.govt.nz/planning-and-investment/planning/transport-excellence-partnership/transport-insights/data-quality/national-annual-data-quality-results/
10	NZTA WAKA KOTAHI TECHNICAL AUDIT 2023	See below
11	NZTA WAKA KOTAHI AUDIT INVESTMENT REPORT	See below
COMPANION DOCUMENTS		
12	Strategic Asset Management Plan 2023	To be updated on completion

13	Demand Projections 2022	https://www.qldc.govt.nz/community/population-and-demand/
14	TRANSPORTATION ACTIVITY STRATEGIC FRAMEWORK (TASF)	See below
15	30 Infrastructure Strategy 2024-2054	https://www.qldc.govt.nz/media/o5bprma2/qldc_infrastructure-strategy_2024-2034_final.pdf
16	Better Ways To Go (Modeshift Plan)	https://webadmin.qldc.govt.nz/media/ljzhnppz/item-2a-attachment-1-mode-shift-plan.pdf
17	Climate And Biodiversity Plan	https://www.qldc.govt.nz/your-council/climate-change-and-biodiversity/
18	ACTIVE CONSENTS RELATING TO TRANSPORT	See below
20	INVESTMENT LOGIC MAPS	See below
21	ASSET MANAGEMENT IMPROVEMENT PLAN	See below
22	LGNZ RCA Report	https://www.nzta.govt.nz/planning-and-investment/planning/transport-excellence-partnership/transport-insights/road-controlling-authority-reports/
23	Unsealed Road Asset Management Strategy	To be provided on completion
24	BCA AMP & IMM	See below
25	GLOSSARY OF TERMS	See below

TRANSPORT ACTIVITY PROCUREMENT STRATEGY ENDORSEMENT

Level 2, Chews Lane
50 Victoria Street
Private Bag 6995, Marion Square
Wellington 6141
New Zealand
T 64 4 894 5400
F 64 4 894 6100
www.nzta.govt.nz

7 June 2023

Geoff Mayman
Commercial & Procurement Manager
Queenstown Lakes District Council
Private Bag 50072
Queenstown 9348

Dear Geoff

Transport Activity Procurement Strategy Endorsement

Thank you for your request seeking endorsement from the Waka Kotahi NZ Transport Agency for the Procurement Strategy dated 19 May 2023.

I am pleased to confirm that Waka Kotahi has reviewed the Strategy for the Procurement of Transport Infrastructure dated 19 May 2023. This document forms Queenstown Lakes District Council's Procurement Strategy, the requirements of which are outlined in the Waka Kotahi Procurement Manual.

We are satisfied that it meets the requirements of the Waka Kotahi Procurement Manual and formally endorse the Procurement Strategy effective 6 June 2023.

We would like to draw your attention to the following matters. Waka Kotahi:

1. approves the continued use of in-house professional services by Queenstown Lakes District Council, in accordance with s26 of the Land Transport Management Act, with much the same scope and scale as it has in the past.

2. approves the use of a variation to the rules in the Procurement manual, section 10.21 *Maximum term of a term service contract for infrastructure or planning and advic*e allowing Queenstown Lakes District Council to use a maximum term of ten years and seven months (4 years and 7 months + 3 years + 3 years) for the current roading network maintenance term service contract.

3. approves the use of a variation to the rules in the Procurement manual, section 10.21 *Maximum term of a term service contract for infrastructure or planning and advic*e allowing Queenstown Lakes District Council to use a maximum term of seven years and ten months (4 years and 10 months + 3 years) for the current streetlight maintenance term service contract.

4. approves the use of a variation to the rules in the Procurement manual, section 10.5 *Procurement procedure advanced components* allowing Queenstown Lakes District Council to use the price-quality without disclosure of the estimate supplier selection method for all land transport activities funded in partnership with Waka Kotahi.

5. approves the use of a variation to the rules in the Procurement manual, section 10.5 *Procurement procedure advanced components* allowing Queenstown Lakes District Council to use a supplier panel entitled the Engineering and Specialist Support Services (ESSS) Panel for the delivery of

professional services consistent with the Appendix D – Panel Agreement and Appendix E – Scope of Consultancy Services documents provided to Waka Kotahi.

6. approves the use of variations to the rules in the Procurement manual, section 10.5 *Procurement procedure advanced components* and section 10.21 *Maximum term of a term service contract for infrastructure or planning and advic*e allowing Queenstown Lakes District Council to use a supplier panel entitled the 3-Waters Contract Works Panel for the delivery of land transport physical works with a maximum term of six-years (3 years + 1 year + 1 year + 1 year).

7. approves the use of a variation to the rules in the Procurement manual, section 10.5 *Procurement procedure advanced components* and section 10.21 *Maximum term of a term service contract for infrastructure or planning and advic*e allowing Queenstown Lakes District Council to use a supplier panel entitled the 3-Waters Design Panel for the delivery of land transport professional services with a maximum term of six-years (3 years + 1 year + 1 year + 1 year).

Our endorsement of the Procurement Strategy is subject to the following conditions:

1. Queenstown Lakes District Council noting that the endorsement of the Strategy for the Procurement of Transport Infrastructure is for a period of two years only. The endorsement will expire on the 6 June 2025, and you are encouraged to seek endorsement of a new or revised Procurement Strategy in advance of this date.

If you would like to discuss this matter further, please do not hesitate to contact Philip Walker, Approved Organisations Senior Procurement Advisor, directly on 021 633986.

Yours sincerely

Shane Avers
Acting Senior Manager Procurement

INVESTMENT AUDIT REPORT

Technical Audit of Queenstown Lakes District Council

Monitoring Investment Performance

Report of the investment audit carried out under Section.

95(1)(j)(ii) and (iii) of the Land Transport Management Act 2003.

Sean Rainsford & Sol Hessell

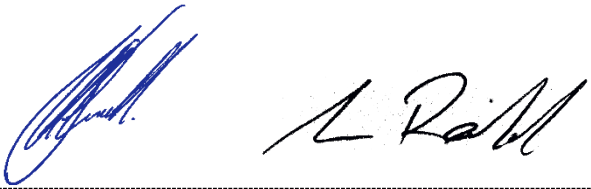
19 July 2024

FINAL

Approved Organisation (AO):	Queenstown Lakes District Council
Waka Kotahi NZ Transport Agency Investment (2021 – 2024 NLTP):	$ 58,287,947 (budgeted programme value)
Date of Investment Audit:	11-13 December 2023
Auditor(s):	Sean Rainsford – Principal Investment Auditor Sol Hessell – Senior Investment Auditor Gordon McDonald – Principal Investment Advisor
Report No:	RASRT-2365

AUTHORITY SIGNATURES

Prepared by:



Sol Hessell, Principal Investment Auditor
Sean Rainsford, Principal Investment Auditor

Approved by:

Vanessa Delegat, Manager - Audit & Assurance

19/7/2024
Date

DISCLAIMER

WHILE EVERY EFFORT HAS BEEN MADE TO ENSURE THE ACCURACY OF THIS REPORT, THE FINDINGS, OPINIONS, AND RECOMMENDATIONS ARE BASED ON AN EXAMINATION OF A SAMPLE ONLY AND MAY NOT ADDRESS ALL ISSUES EXISTING AT THE TIME OF THE AUDIT. THE REPORT IS MADE AVAILABLE STRICTLY ON THE BASIS THAT ANYONE RELYING ON IT DOES SO AT THEIR OWN RISK, THEREFORE READERS ARE ADVISED TO SEEK ADVICE ON SPECIFIC CONTENT.

EXECUTIVE SUMMARY

The Queenstown Lakes District Council land transport programme is being well managed, and Council has made good progress in implementing most of the recommendations from the previous technical audit in 2019 which was great to see.

The network is in a relatively sound condition, with stable condition metrics for pavement integrity and smooth travel and is also performing well in comparison with its peer group.

The audit team commend Council for the development of a comprehensive and longer-term sealed roads renewal forward works programme (FWP), however there have been low levels of pavement renewal and an increase in pavement maintenance on the council network over the past 5 years, so a review is required in order to ensure an optimal balance of investment. There are also opportunities to further involve the maintenance and asset management teams in the consent application and land development processes to ensure that all new assets are within council specifications and policy and that Council does not therefore inherit problems associated with these new assets.

The unsealed network was in an appropriate condition with good shape and crossfall, however the audit team were concerned about the extensive use of 'Otta' seals and the inconsistent performance of these treatments. It is therefore recommended that Council develop an Unsealed Road "Otta" surface treatment policy and guideline.

There were some issues with the TIO annual achievement reporting whereby the forecasted quantities were not updated to reflect adjustments to the approved funding. As such it is recommended that the TIO forecast quantities are updated annually to align with the programme of work to be undertaken for the upcoming financial year.

Council for the most part has very high-quality data which is being used as a basis for decision making which was great to see. At the time of the audit Council had only just migrated to the latest Asset Management Data Standard (AMDS). We commend Council for this early adoption and encourage the sharing of learnings with the industry.

Good progress has been made in addressing safety issues on the network and there has been a noticeable downward trend in deaths and serious injuries, and crashes involving death or serious injury, on the network over the last five years, including no fatalities on the network for the 2023 calendar year at the time of the audit. Council has a clear pipeline of work and targeted safety related programmes that are being well delivered and proving to be effective. It was also great to see such a comprehensive speed management plan and we encourage Council to continue with these proposed changes, if possible, as doing so will further contribute to a safer road network for all road users. There are however a number of areas where improvements can be made to further improve safety across the network.

AUDIT RATING ASSESSMENT

Subject Areas		Rating Assessment*
1	Previous Audit Issues	Effective
2	Network Management	Some Improvement Needed
3	Activity Management	Effective
4	Data Quality	Effective
5	Safety	Some Improvement Needed
Overall Rating		**Effective**

** Please see Introduction for Rating Assessment Classification Definitions*

RECOMMENDATIONS

The tables below capture the audit recommendations and suggestions. The target implementation dates for the recommendations are as provided by Queenstown Lakes District Council.

We recommend that Queenstown Lakes District Council:		Target Implementation Date
R2.1	Undertake a review of the levels of pavement renewal against the impact on pavement maintenance to determine the appropriate pavement renewal level and provide an optimal balanced level of investment for the council sealed road network.	01/07/2024
R2.2	Includes the maintenance and asset management teams in the consent application and land development processes to ensure that all new assets are within council specifications and policy. The vesting process should also include for ongoing inspection and hand-over signoff.	01/07/2024
R2.3	Develop an Unsealed Road “Otta” surface treatment policy and guideline.	01/07/2024
R3.1	Updates the TIO forecast quantities annually to reflect expected programme delivery for the following year.	01/07/2024
R5.1	Review curve advisory and chevron treatments across the network to ensure that they have been installed correctly and are effective.	01/07/2022

We suggest that Queenstown Lakes District Council:	
S2.1	Develop a Footpath and Kerb forward work programme, to gain greater efficiency with the work programmes into the future.
S3.1	Incorporates feedback from the Te Ringa Maimoa AMP review in development of the 24-27 AMP.
S4.1	Document and share their experience of the migration to the Asset Management Data Standard (AMDS) with industry.
S5.1	Review pedestrian amenity and safety in the Queenstown town centre.
S5.2	Explore opportunities to seal private driveways back to the boundary when reseals and rehabilitations are being undertaken in an area. Similarly, unsealed roads where they intersect with sealed roads should be sealed back if they aren’t already.
S5.3	Investigate options to replace the old, ineffective, and failing road safety barriers across the network before installing new barriers in locations of lower need.
S5.4	Investigate options to manage risk and reduce speeds on this Ballantyne Road.

1. INTRODUCTION

1.1. Audit Objective

The objective of this audit is to provide assurance that the Waka Kotahi NZ Transport Agency's (hereafter Waka Kotahi) investment in Council's land transport programme is being well managed and delivering value for money. We also seek assurance that the Council is appropriately managing risk associated with Waka Kotahi investment. We recommend improvements where appropriate.

1.2. Assessment Ratings Definitions

	Effective	Some Improvement Needed	Significant Improvement Needed	Unsatisfactory
Investment management	Effective systems, processes and management practices used.	Acceptable systems, processes, and management practices but opportunities for improvement.	Systems, processes, and management practices require improvement.	Inadequate systems, processes, and management practices.
Compliance	Waka Kotahi and legislative requirements met.	Some omissions with Waka Kotahi requirements. No known breaches of legislative requirements.	Significant breaches of Waka Kotahi and/or legislative requirements.	Multiple and/or serious breaches of Waka Kotahi or legislative requirements.
Findings/ deficiencies	Opportunities for improvement may be identified for consideration.	Error and omission issues identified which need to be addressed.	Issues and/or breaches must be addressed, or on-going Waka Kotahi funding may be at risk.	Systemic and/or serious issues must be urgently addressed, or on-going Waka Kotahi funding will be at risk.

1.3. Council Comments

Prior to this report being approved, Council was invited to comment on the auditors' findings, recommendations, and suggestions. Where appropriate, this report has been amended to reflect this dialogue. Any additional auditee comments are attached in the Appendices.

2. ASSESSMENT FINDINGS

Our findings relating to each subject area are presented in the tables below. Where necessary, we have included recommendations and/or suggestions.

1. Previous Audit Issues	Effective

There were 10 recommendations from the previous technical audit undertaken in December 2019. The recommendations were:

- Ensure new developments comply with current Standards and best practice guidelines.
- At the development consent phase offer guidance on design solutions to reduce whole of life costs e.g., drainage systems.
- Report contractor performance as an item the monthly meeting with the maintenance contractor
- Ensure the contractor acts in a timely manner and responds to network faults that pose a safety risk.
- Ensures that it has complied with the specific and general conditions of funding as specified in the Indicative Funding Letter from April 2018
- Undertakes an analysis of the data gaps identified in the REG data quality dashboard and records actions in the AMP Improvement plan.
- Compares the faults reported by 'All Faults' with those reported by RAMM network survey and seeks to include those missing from the 'All Faults' inspection.
- Undertakes an audit of signs, markings, and delineation to identify inconsistent practice and implement a programme of work to ensure roads comply with the Traffic Control Devices manual.
- Meet the duty of care requirement for Temporary Traffic Management as set in the Code of Practice for Temporary Traffic Management.
- Undertake routine audits of temporary traffic management sites to ensure compliance with the Code of Practice for Temporary Traffic Management.

Council has made good progress in implementing the recommendations from the 2019 audit.

Recommendations	There are no recommendations with respect to 'Previous Audit Issues' as we have new, related recommendations and suggestions that supersede those from the 2019 report.
Queenstown Lakes District Council's comment	No need to respond

* * *

2. Network Management	Some Improvement Needed

Overall, the road network was in a reasonable and stable condition, but the audit team found there is scope for improvement with respect to shoulder maintenance and scenario testing of the renewal forward work programme. There were also some localised safety issues relating to the pavement and surface condition.

Condition metrics for pavement integrity and smooth travel have been stable, with a slight decline in performance. We have not reported the surface performance due to no visual rating data being captured by Council over the past seven years. Council noted the use of supplier inspection and road condition assessment "All Faults" as the basis for inputs to Forward Work Programme (FWP) development. The previous technical audit (Dec 2019) had a recommendation to ensure this process is aligned with the visual rating guidelines, and we note that this has been completed. However, to provide comment on condition performance is not possible by using this data. Council has been an early adopter of capturing High Speed Data, using laser techniques, and this puts Queenstown Lakes in a good position for the upcoming national Consistent Condition Data Collection (CCDC) programme.

Council's sealed road network is performing well in comparison with its peer group.

One of the key areas of concern for the Queenstown Lakes Road network is the extensive use of the Otta seals within the unsealed network. The audit team observed recent completed pavement repairs and scheduled resealing of these dust suppressant surface types, converting them to a sealed road.

Forward Work Programme (FWP)

The audit team commend Council for development of a comprehensive and longer-term sealed roads renewal FWP. From the information that was provided to the audit team and the on-site observations there was found to be a very good correlation with need on the sealed road network. However, the audit team recommend some investigation is undertaken into the impact of the low levels of pavement renewal relating to pavement maintenance and the impact on operational expenditure. There has been an increase in the pavement maintenance on the council network over the past 5 years. Undertaking a review of the levels of pavement renewal against the impact on pavement maintenance could assist with ensuring an optimal balanced level of investment is provided for the council sealed road network.

The audit team suggest that a kerb & channel and footpath FWP also be developed. Benefits include certainty of funding, knowledge of the network need and provide efficiency with programme alignment with renewals and any capital works on the network.

New developments

The audit team noted extensive change of land use development. These new developments require many new assets to be vested into council control. To ensure that Council does not unduly inherit problems associated with these assets it is recommended that the maintenance and asset management teams have direct input into the consent application and development phase to ensure all new assets that are constructed are acceptable and within council specifications and policy. The vesting process should also include for ongoing inspection and hand-over signoff.

Unsealed Roads

Overall, the unsealed network was in an appropriate condition, and we commend Council for maintaining good shape and crossfall on these roads. We note the increase in traffic and impact on ride quality for some roads and suggest the use of an additive to assist with a stronger bond within higher demand areas.

The main concern from the audit team was extensive use of Otta seals on the unsealed network. We noted inconsistent performance of this treatment and challenged the adequacy of the pavement formation and drainage for some locations where this treatment was applied. We also were concerned

about the plan for the next treatment on these sites. The main concern is the perception of the public driving on these roads as these treatments likely lead to higher operating speeds and an expectation that there is adequate surface friction in the wet to support those higher speeds. We recommend the development of a detailed unsealed road policy, with learnings to be captured from the current Otta seal sites on the network. The report should include for: what has worked, what has not worked and what is the policy to be applied for future use and application of the Otta surface treatment.

General Maintenance

Overall, general maintenance on the network was very good although the audit team noted some issues with low shoulder and edge break, particularly on pull-off bays, rural higher speed roads and locations with high tourist usage. We commend the council for undertaking a high level of proactive maintenance activity on the network and encourage this to continue.

Recommendations	We recommend that Council: R2.1 Undertake a review of the levels of pavement renewal against the impact on pavement maintenance to determine the appropriate pavement renewal level and provide an optimal balanced level of investment for the council sealed road network. R2.2 Includes the maintenance and asset management teams in the consent application and land development processes to ensure that all new assets are within council specifications and policy. The vesting process should also include for ongoing inspection and hand-over signoff. R2.3 Develop an Unsealed Road “Otta” surface treatment policy and guideline.
Suggestions	We suggest that Council: S2.1 Develop a Footpath and Kerb forward work programme, to gain greater efficiency with the work programmes into the future.
Queenstown Lakes District Council’s comment	R2.1 Ongoing process – renewal quantities through dtims modelling has always shown a deficit in investment, but the resulting investment from NZTA has been below preferred level. QLDC have requested a significant uplift in the 24-27 NLTP, but this will only maintain current renewals levels due to costs escalations. QLDC will continue to monitor levels of investment. 2.2 QLDC have a Planning and Development Directorate which assess these applications in accordance with the QLDC COP. P&I own the COP (our engineering and development team) and we liaise with them on the COP development and P&I approve any deviations. There is a cross Council Engineering Forum that meet regularly to discuss any issues. P&I Ops team are involved in the pre-defect end inspection process. There is a clear Inspection and Testing process that is carried out through the Subdivision inspection process – available on request. R2.3 QLDC have an existing guideline for Otta seal treatments – although it is not an endorsed policy. There is also an unsealed road strategy. Historically seal extensions have not been undertaken on our network even though many of the roads would reach the previous target volumes

	to trigger a seal extension investment, this will be key going forward in managing the land use change and growth we see across our network. QLDC will look to develop a strategy to address these ottas seal which will consider the need to upgrade to seal extensions, revert to gravel, or to retain the OTTA seal. S2.1 QLDC currently have a footpath forward works programme that is based on a regular 100% condition programme over 3 years, but this does not include kerb and channel. This FWP currently sits in a RAMM UDT, but now we have a Juno License we will look to see how we can utilise that to get better programme efficiency.

* * *

3. Activity Management	Effective

The Te Ringa Maimoa Activity Management Plan review completed for the 21-24 AMP noted a "good" AMP. However, the assessment score for the 21-14 AMP was a reduction from the 18-21 AMP review. We expect that the recommendations and suggestions from the review will be incorporated into the development of the 24-27 AMP.

The audit team noted issues with the TIO annual achievement reporting, whereby the forecasted quantities were not updated based on any adjustment to the approved funding. It is recommended that the TIO forecast quantities are updated annually to align with the programme of work to be undertaken for the upcoming financial year. By updating the TIO renewal forecasts annually (for MO&R), the forecast comparison with actual achievement will be more representative of the delivery performance for the network.

Recommendations	We recommend that Council: R3.1 Updates the TIO forecast quantities annually to reflect expected programme delivery for the following year.
Suggestions	We suggest that Council: S3.1 Incorporates feedback from the Te Ringa Maimoa AMP review in the development of the 24-27 AMP.
Queenstown Lakes District Council's comment	R3.1 – In progress, QLDC will endeavour to update these forecasts appropriately. S3.1 – In progress – these actions were embedded in the QLDC Transport AMP Improvement Plan

* * *

4. Data Quality	Effective

Quality data is important for good asset management and most elements of Council's data were observed to be good, likely due to Council having a dedicated data resource which was great to see. It was also good to see the data being used as a basis for decision making.

The Road Efficiency Group (now Te Ringa Maimoa) Data Quality result for Councils is good with an overall score of 94 for the 2022/23 year. Trend wise there has been an increase in this metric from previous years.

At the time of the audit, the council had only just migrated to the latest Asset Management Data Standard (AMDS). We commend the council for doing this and recommend learnings from the process and the implementation are shared with the industry.

Suggestions	We suggest that Council: S4.1 Document and share their experience of the migration to the Asset Management Data Standard (AMDS) with industry.
Queenstown Lakes District Council's comment	S4.1 QLDC took part in a post migration 'Lesson's learned' AMDS workshop which provided documented lessons learned. The QLDC team (particularly Roger Hughes and Alison Tomlinson) have provided a significant amount of feedback to the industry, the AMDS team and other RCAs, on an individual basis and to groups -e.g., to RATA and to South Island groups.

* * *

5. Safety	Some Improvement Needed

Council has made good progress in addressing safety issues on the network and there has been a noticeable downward trend in deaths and serious injuries, and crashes involving death or serious injury, on the network over the last five years, including no fatalities on the network for the 2023 calendar year at the time of the audit.

Council has a clear pipeline of work and targeted safety related programmes that are being well delivered and proving to be effective. This includes a substantial programme of road safety barrier installation and also a large programme of works to improve safety and amenity for cyclists and pedestrians across the district, particularly in the Wanaka area. It was also great to see such a comprehensive speed management plan and we encourage Council to continue with these proposed changes, if possible, as doing so will further contribute to a safer road network for all road users.

Council advised that Safe System Audits (or exemption declarations), including post construction audits, are being undertaken for all projects as required which was great. It was also good to see that the Safe System Assessment component of the SSA had been undertaken for the Capell Ave roundabout project, as doing the assessment aspect of the SSA helps to ensure alignment of a project with a Safe System.

Some issues and concerns that were observed during the audit and require attention include:

Traffic Signs and Delineation

A significant number of signs across the network were rotated to a degree that they were no longer effective in delivering the associated message to road users. This included a number of chevron type

signs but, more worryingly, regulatory Give Way signs which elevates the risk of intersection crashes due to a lack of driver awareness.

While rural road delineation was generally to a good standard and appropriate, in addition to the rotated chevron boards the audit team also observed quite a few chevrons that were not positioned correctly and require relocating in order to be most effective.

Advance warning signage to alert drivers that the road is transitioning from a sealed to an unsealed (gravel) surface was observed to be missing in a number of locations.

Queenstown CBD

Pedestrian amenity and safety in the Queenstown town centre should be reviewed. In an area with very high pedestrian numbers, the audit team observed there to be minimal vertical deflection to control speeds, a lack of crossing facilities generally and, where there were crossing points, an inconsistent provision of Tactile Ground Surface Indicators (TGSI's). The footpath on Shotover Street was also very slippery due to the material that has been used, although Council is aware of this issue and is trying different ways to rectify it.

Road Factors

Road Factors were recorded as causal factors in nearly a quarter of all reported crashes on the QLDC network in the five-year period from 2018-2022 inclusive. 'Loose material on seal' stood out as a particular concern in the crash data, with 54 crashes recording this as a factor. The audit team observed a lot of loose metal migration onto the sealed network which could be contributing to these crashes. As such we would encourage Council to explore opportunities to seal private driveways back to the boundary when reseals and rehabilitations are being undertaken in an area. Similarly, unsealed roads where they intersect with sealed roads should be sealed back if they aren't already to reduce the likelihood of loose metal migration into the intersection and to allow for the applicable TCD pavement markings to be installed if necessary.

Some sections of Moke Lake Road were in a very poor and unsafe condition and should be addressed with urgency.

Road Safety Barriers

While a substantial programme of new road safety barrier has been delivered recently, there are a lot of old sections across the network, many of which are failing and may no longer be effective. There were also a number of missing sections where there appeared to be a high need. Consideration should be given to replacing the old, ineffective, and failing crash barriers which will typically be located in areas of high risk.

Other comments

Vegetation for the most part is being well managed across the network but there were some instances of signs being obscured.

In the rural areas, three gates were observed to be open towards the road and encroaching on or very close to the edge of seal, posing a potential hazard.

The design of the crossing point for the off-road cycleway where it intersects with Gorge Road, that was being constructed at the time of the audit, needs careful consideration given where is located relative to the bend(s) and the operating speeds on that section of the road.

Ballantyne Road has a posted speed limit of 60 km/hr but 85th percentile operating speeds of 73-74 km/hr, so Council should investigate options to manage risk and reduce speeds on this road.

Ramp markings were missing on the new raised tables on Rata Street. Council commented that this was due to a delay in getting the line marker to site but until the markings are completed the site should be managed with TTM.	
Recommendations	We recommend that Council: R5.1 Review curve advisory and chevron treatments across the network to ensure that they have been installed correctly and are effective.
Suggestions	We suggest that Council: S5.1 Review pedestrian amenity and safety in the Queenstown town centre. S5.2 Explore opportunities to seal private driveways back to the boundary when reseals and rehabilitations are being undertaken in an area. Similarly, unsealed roads where they intersect with sealed roads should be sealed back if they aren't already. S5.3 Investigate options to replace the old, ineffective, and failing road safety barriers across the network before installing new barriers in locations of lower need. S5.4 Investigate options to manage risk and reduce speeds on this Ballantyne Road.
Queenstown Lakes District Council's comment	R5.1 – QLDC has already recently undertaken this exercise on our key risk rural corridors. This resulted in Corridor studies which provided some key inputs into the Safe Network Pipeline Tool which resulted in a number of projects delivered through the LCLR, along with significant curve signage being installed on the network. QLDC intended to follow this approach utilising internal resources for the remainder of the network to review our delineation by year 2 of the 24-27 NLTP e.g., June 26, however QLDC are concerned that the findings will result in a need for a corresponding uplift in budgets going forward – for both the initial install and maintenance and renewals of those assets. These budgets will likely be requested in the 27-31 NLTP funding round. S5.1 QLDC undertaken some assessments of issues in the CBD such as skid resistance of the pavers, however expansion of this could trigger a significant level of investment and QLDC are working through with the Strategy team to understand and coordinate future renewals with any improvement projects that might be planned. The Maintenance contract includes a Town custodian presence in the CBD to address proactive responsive maintenance of safety issues. S5.2 This opportunity is undertaken on projects when carried out e.g., the Ballantyne Road seal extension had a number of these. S5.3 Committee by end year 2, QLDC will undertake a network wide inventory of our road safety barrier stock to inform a strategic renewal programme. Ad hoc maintenance is undertaken as required on any failing

	or damaged barriers. This may result in a significant uplift in future LPT submission. S5.4 QLDC will continue to monitor speed on this road and will investigate further to determine any further follow up actions, which will be prioritised in accordance with safety needs across the district.

3. APPENDICES

APPENDIX A

Council Feedback

QLDC would like to thank the audit team for their time and feedback on our network. It is always great to get an opportunity to discuss and review the network with new eyes. It gave the team a valuable chance to articulate our challenges and concerns on the network and we value the feedback and experience that were provided form around the country.

QLDC feels that all of the recommendations have already been addressed or are in the process of being addressed.

There are some big challenges to address particularly with our development community, however we have seen some improvements over the last year or so and consider that we are building the tools to improve even further.

QLDC acknowledge the comments around level of investment in renewals, but also point out that funding requests have always exceeded allocated funding. The level of investment must balance affordability with the long-term view, and we will continue to build the case for improved levels of investment.

The increasing growth and demand on our network and with that, the urbanisation brings with complexities that we are proactively trying to deal with. Combined with our geographical/environmental and climatic conditions the asset densification, operational complexities with growing number of signalised intersections means our district faces many small city problems. We work closely with Waka Kotahi and our neighbours to provide a safe network with appropriate levels of service that is value for money.

APPENDIX B

WAKA KOTAHI
NZ TRANSPORT AGENCY

INVESTMENT AUDIT REPORT

Procedural Audit of:

Queenstown Lakes District Council

Monitoring Investment Performance

Report of the investment audit carried out under Section 95(1)(e)(ii) of the Land Transport Management Act 2003.

RON WHEELER

30 SEPTEMBER 2020

FINAL

New Zealand Government

Approved Organisation (AO):	Queenstown Lakes District Council
Waka Kotahi NZ Transport Agency Investment (2018 – 2021 NLTP):	$93,772,600 (budgeted programme value)
Date of Investment Audit:	03 – 06 July 2020
Auditors:	Ron Wheeler
Report No:	RARWI-2065

AUTHORITY SIGNATURES

Prepared by:

Ron Wheeler, Senior Investment Auditor

Approved by:

Yuliya Gultekin, Practice Manager Audit & Assurance

30/09/2020

Date

EXECUTIVE SUMMARY

Queenstown Lakes District Council's operating and management procedures have demonstrated progressive and continuous improvement as measured by successive procedural investment audits. Processes are appropriately documented and align well with Waka Kotahi requirements.

The economic impact of COVID-19 on the Queenstown district has been substantial, given the collapse of international tourism. However, the resilience of its Council to improvise and maintain a business as usual approach to delivering on its agreed land transport programmes is a testament to its business continuity plans and procedures.

This audit found one issue requiring a reminder recommendation to ensure road safety audit exemption declarations are completed and filed.

The land transport disbursement account is correctly structured in the general ledger and effective management controls are in place to ensure Waka Kotahi investment in Council's land transport programme is appropriately managed.

Contract procurement procedures met Waka Kotahi procurement requirements. Council's business unit is suitably structured for delivering professional services in-house. Contract management practices and administration procedures are well documented.

AUDIT RATING ASSESSMENT

Subject Areas		Rating Assessment*
1	Previous Audit Issues	N/A
2	Financial Processes	Effective
3	Procurement Procedures	Effective
4	Contract Management	Effective
5	Professional Services	Effective
Overall Rating		Effective

** Please see Introduction for Rating Assessment Classification Definitions*

RECOMMENDATIONS SUMMARY

The table below captures the audit recommendations. Agreed dates are provided for the implementation of recommendations by the approved organisation.

We recommend that Queenstown Lakes District Council:		Implementation Date
R4.1	confirms exemption declarations will be completed when a road safety audit is considered unnecessary.	23 Sept 2020

1.0 INTRODUCTION

1.1. Audit Objective

The objective of this audit is to provide assurance that the Waka Kotahi NZ Transport Agency's (hereafter the Waka Kotahi) investment in Council's land transport programme is being well managed and delivering value for money. We also seek assurance that the Council is appropriately managing risk associated with the Waka Kotahi investment. We recommend improvements where appropriate.

1.2. Rating Assessment Definitions

	Effective	Some Improvement Needed	Significant Improvement Needed	Unsatisfactory
Investment management	Effective systems, processes and management practices used.	Acceptable systems, processes and management practices but opportunities for improvement.	Systems, processes and management practices require improvement.	Inadequate systems, processes and management practices.
Compliance	Transport Agency and legislative requirements met.	Some omissions with Transport Agency requirements. No known breaches of legislative requirements.	Significant breaches of Transport Agency and/or legislative requirements.	Multiple and/or serious breaches of Transport Agency or legislative requirements.
Findings/ deficiencies	Opportunities for improvement may be identified for consideration.	Error and omission issues identified which need to be addressed.	Issues and/or breaches must be addressed, or on-going Transport Agency funding may be at risk.	Systemic and/or serious issues must be urgently addressed, or on-going Transport Agency funding will be at risk.

1.3. Council's Comments

Note: Before being finalised this report was referred to Queenstown Lakes District Council for comment. Council's responses are included in the body of the report.

2.0 ASSESSMENT FINDINGS

Our findings relating to each subject area are presented in the tables below. Where necessary, we have included recommendations and/or suggestions.

1. Previous Audit Issues
The report from the previous procedural audit in May 2019 made three recommendations relating to procurement quality assurance, road safety audit exemption declarations, and conditions of funding. Council has put procedures in place to address all three matters, however completion of the exemption declarations remains a challenge. This issue is further discussed in section 4 – Contract Management.

* * *

2. Financial Processes	Effective
Council's claims for financial assistance for both 2018/19 and 2019/20 were successfully reconciled, with sufficient qualifying expenditure confirmed in the general ledger. Sampled expenditure transactions from the 2019/20 financial year were correctly coded and eligible for subsidy. The contract retentions account is monitored, regularly reconciled and is appropriately managed. One contract retention in the amount of $17,048.81 is being withheld from a contractor pending defects being resolved. This is anticipated to occur in Spring of 2020.	
Queenstown Lakes District Council's comment	Agree with comments provided.

* * *

3. Procurement Procedures	Effective
Four physical works and three professional services contracts were reviewed for compliance with Waka Kotahi procurement procedures (refer Appendix B). Council's procurement practises meet Waka Kotahi procurement requirements and are consistent with their Procurement Strategy. Their recently updated strategy was endorsed in May 2020 and remains valid until May 2023. Since the previous audit in May 2019, Council has appointed a dedicated 'Commercial and Procurement Manager', and the procurement quality assurance issues outlined in the previous audit report have been remedied. Council operated a general engineering supplier panel for the delivery of professional services to their infrastructure groups including 3 Waters, Transportation, Property, Strategy and Asset Planning. The panel expired in 2019. A staged procedure to procure and appoint suppliers to a new panel commenced in 2019 to begin delivering a multitude of engineering professional services disciplines by December 2019. Initial subscriptions on the GETS website returned 197 potential suppliers. For the transportation component of the panel 13 tendered responses were received and these were shortlisted to four. One respondent was subsequently failed during evaluation of non-price attributes. The three remaining were all appointed to the supplier panel.	

Queenstown Lakes District Council's comment	Agree with comments provided.

* * *

4. Contract Management	Effective

Council's 'Capital Works and Infrastructure Procedures Manual' documents its contract management and administration procedures and policies. Project activities and performance management reports are being appropriately documented. Effective recordkeeping practices are in place and administration of contract files is appropriately organised.

Management controls are in place for the supervision of contract variations.

Council has policies in place to ensure conflict of interest declarations are completed including documenting management plans for overseeing any declared conflicts.

Road safety audits are being considered and executed where necessary for capital works however follow-through with completing exemption declarations where it has been decided an audit is unnecessary is still a challenge. Council delivered on its action to include a policy in its Capital Works and Infrastructure Procedures Manual after a previous audit recommendation but, the uptake on delivery is still unresolved. Where it has decided a road safety audit is unnecessary, Council must ensure an exemption declaration is completed and kept on file.

There were no contractor claims made to Council for advanced entitlement payments in response to works activity disruption arising from COVID-19. Council has a business continuity plan in place for whole of Council in the event of future interruptions.

The 2019/20 annual achievement report to Waka Kotahi was found to be consistent with Council's operational data and source records, with the exceptions of reported expenditure for sealed pavement maintenance, traffic services renewals, and network and asset management. The exceptions are believed only to stem from the methodology used to collate the data. Council is already reviewing its approach to this.

The status of at least seven conditions of funding dating back as far as 2011, remain outstanding in Transport Investment Online (TIO), despite the conditions being met by Council and the funding released. It remains for Waka Kotahi to action the close-out of these conditions in TIO.

Council has robust procedures for the development and prioritisation of its forward low-cost, low-risk improvements programme, employing a user defined table in RAMM. Projects may be adjusted to coordinate with other Council priorities including additional utility works and/or adjoining developments. We found there is a significant compounded under-spend of allocated funding in this output to date. However, Council has assured Waka Kotahi that a number of larger shovel-ready projects are pending this financial year and Council is confident of achieving its targeted outputs.

There is evidence of clearly separated financial reporting and activity management records for the Crown Range Road, the Glenorchy special purpose road (SPR), and the local road network which is further segregated into separate accountabilities for the Queenstown and Wanaka townships.

Recommendation R4.1	That Queenstown Lakes District Council: confirms exemption declarations will be completed when a road safety audit is considered unnecessary.
Queenstown Lakes District Council's comment	The capital works (manual [*sic*]) has been updated with the following: 7.2.6 TRAFFIC SAFETY AUDITS

	A safety audit must be commissioned either in accordance with Section 6.1.3.1 and the NZTA procedures for every road rehabilitation or reconstruction design and construction phase. Generally they are only carried out for Detailed Design and Construction phases; projects such as roundabouts would also get an earlier safety audit completed in the Concept Phase. NZTA requires a declaration to be prepared and signed off by the Chief Engineer if the TA chooses not to carry out a safety audit at any project phase. It is an NZTA requirement that if the TA chooses not to carry out a safety audit at any project phase that a declaration as to why it isn't being done is prepared and signed off by the Chief Engineer. Should a safety audit be considered unnecessary an exemption declaration will be prepared and signed off by the Chief Engineer.

* * *

5. Professional Services	Effective
Professional services are delivered in-house through the Roading Business Unit. Staff allocate their time to activity outputs within the electronic time-cost system which links directly to the general ledger. These are collated fortnightly. The cost recovery multiplier and overheads are re-calculated annually. Council's methodology for calculating its costs and overheads for in-house activities is appropriately documented and allocations appear reasonable. Calculations for the 2019/20 year had not been concluded at the time of the audit and a request has been made for these to be forwarded post-audit. The average of the multiplier on salaries for the previous three years was 2.34. Professional services expenditure attributed to managing the Queenstown and Wanaka local road network in 2019/20 was split 58% for in-house and 42% outsourced. Council has in place a service level agreement with the business unit which expires on 30 June 2021.	
Queenstown Lakes District Council's comment	Agree with comments provided.

* * *

APPENDIX A

Audit Programme

1. Previous audit May 2019
2. Land Transport Disbursement Account
3. Final Claims for 2018/19 and 2019/20
4. Transactions (accounts payable) – 2019/20
5. Retentions Account
6. Procurement Procedures
7. Contract Variations
8. Contract Management & Administration
9. Professional Services
10. Transport Investment On-line (TIO) Reporting
11. Other issues that may be raised during the audit
12. Close out meeting

APPENDIX B

Contracts Audited

Contract Number	Tenders Received	Date Let	Description	Contractor		
			Physical Works			
C19-108	4	Dec 2019	Cardrona Valley Safety Barriers	Fulton Hogan	Estimate Let Price Final Cost	$423,381 $367,646 $311,595
C19-109	4	Feb 2020	Crown Range Road Safety Barriers	SouthRoads	Estimate Let Price Final Cost	$571,980 $543,064 Ongoing
C20-010	8	Jun 2020	Aspiring Terrace Geotechnical Improvements	Ground Anchor Systems	Estimate Let Price Final Cost	$400,100 $330,606 Ongoing
C20-123	7	Jun 2020	Wakatipu Minor Improvements – Package 1	A.G. Hoffman	Estimate Let Price Final Cost	$205,379 $226,612 Ongoing
			Professional Services			
* C19-047	13 responses 3 appointed	Dec 2019	Engineering & Specialist Support Services Panel	Stantec WSP-Opus Beca	Estimate Let Price Final Cost	N/A N/A Ongoing
C19-115	3	May 2020	Arthurs Point Crossing – Single Stage Business Case	WSP-Opus	Estimate Let Price Final Cost	N/A $275,582 $275,582
C20-116	Direct Appoint	Apr 2020	Park & Ride Transport Services	WSP-Opus	Estimate Let Price Final Cost	N/A $170,332 $170,332

* C19-047 is for a whole of Council supplier panel including 3 Waters, Transportation, Property, Strategy & Asset Planning. Stats above are relevant only to the Transportation output.

TRANSPORTATION ACTIVITY STRATEGIC FRAMEWORK (TASF)

Transportation Activity Strategic Framework (TASF)

Central Government

Local Government Act
- LGA 101 – Efficient & Effective

National Infrastructure Plan
- The New Zealand Infrastructure Strategy - 2022

Government Policy Statement 2024
- There are 6 strategic priorities which will guide land transport investments for the next 10 years
- Maintaining and operating the sytsem
- Sustainable urban and regional development
- Increasing Resilience
- Reducing Emissions
- Safety
- Sustainable urban and regional development
- Integrated freight sytsem

Freshwater National Policy Statement 2020
The NPS directs regional councils, in consultation with their communities, to set objectives for the state of fresh water bodies in their regions and to set limits on resource use to meet these objectives.

Some of the key requirements of the Freshwater NPS are to:

- Freshwater is managed in a way that gives effect to Te Mana o te Wai.
- Tangata whenua are actively involved in freshwater management (including decisionmaking processes), and Māori freshwater values are identified and provided for.
- Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.
- Freshwater is managed as part of New Zealand's integrated response to climate change.
- Freshwater is managed through a National Objectives Framework to ensure that the health and well-being of degraded water bodies and freshwater ecosystems is improved, and the health and well-being of all other water bodies and freshwater ecosystems is maintained and (if communities choose) improved.
- There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted.
- The loss of river extent and values is avoided to the extent practicable.
- The significant values of outstanding water bodies are protected.
- The habitats of indigenous freshwater species are protected.
- The habitat of trout and salmon is protected, insofar as this is consistent with the above.
- Freshwater is allocated and used efficiently, all existing over-allocation is phased out, and future over-allocation is avoided.
- The national target (as set out in Appendix 3) for water quality improvement is achieved.
- The condition of water bodies and freshwater ecosystems is systematically monitored over time, and action is taken where freshwater is degraded, and to reverse deteriorating trends.
- Information (including monitoring data) about the state of water bodies and freshwater ecosystems, and the challenges to their health and well-being, is regularly reported on and published.
- Communities are enabled to provide for their social, economic, and cultural wellbeing in a way that is consistent with

this National Policy Statement.

National Policy Statement on Urban Development 2020 Objectives
- New Zealand has well-functioning urban environments that enable all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future.
- Planning decisions improve housing affordability by supporting competitive land and development markets.
- Regional policy statements and district plans enable more people to live in, and more businesses and community services to be located in, areas of an urban environment in which one or more of the following apply: the area is in or near a centre zone or other area with many employment opportunities the area is well-serviced by existing or planned public transport there is high demand for housing or for business land in the area, relative to other areas within the urban environment.
- New Zealand's urban environments, including their amenity values, develop and change over time in response to the diverse and changing needs of people, communities, and future generations
- Planning decisions relating to urban environments, and FDSs, take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).
- Local authority decisions on urban development that affect urban environments are: integrated with infrastructure planning and funding decisions; and strategic over the medium term and long term; and responsive, particularly in relation to proposals that would supply significant development capacity
- Local authorities have robust and frequently updated information about their urban environments and use it to inform planning decisions.
- New Zealand's urban environments: support reductions in greenhouse gas emissions; and are resilient to the current and future effects of climate change.

National

MOT Transport Outcomes Framework
- Inclusive Access - Enabling all people to participate in society through access to social and economic opportunities, such as work, education, and healthcare
- Healthy and Safe People - Protecting people from transport - related injuries and harmful pollution, and making active travel an attractive option
- Environmental Sustainability - Transitioning to net zero carbon emissions, and maintaining or improving biodiversity, water quality, and air quality
- Resilience and Security - Minimising and managing the risks from natural and human-made hazards, anticipating and adapting to emerging threats, and recovering effectively from disruptive events
- Economic Prosperity - Supporting economic activity via local, regional, and international connections, with efficient movements of people and products

Arataki 2023
- Understand the challenge "The Why"
- Apply and outcomes-led strategic approach 'The How"
- Provide clear direction 'The What'

One Network Framework
- Resilience: The availability and restoration of each road when there is a weather or emergency event, whether there is an alternative route available and the road user information provided.
- Safety: How road users experience the safety of the road. **Optimal Speeds:** Indicates the optimal speed for each road. The optimal speed is the speed that is appropriate for road function (classification), design (including safety) and use. Optimal speeds support both safety and economic productivity.
- Amenity: The level of travel comfort experienced by the road user and the aesthetic aspects of the road environment (e.g. cleanliness, comfort /convenience, security) that impact on the travel experience of road users in the road corridor.
- Travel Time Reliability: The consistency of travel times that road users can expect.
- Accessibility: The ease with which people are able to reach key destinations and the transport networks available to them, including land use access and network connectivity.
- Cost efficiency: Value for money and whole of life cost will be optimised in the delivery of affordable customer levels of service.

Regional (Otago Southland)

Otago Regional Council - Regional Policy Statement 2021
- Aging and insufficient infrastructure, combined with poor user choices, contributes to unacceptable levels of death and serious injuries
- Network design and land-use conflicts contribute to low uptake of walking, cycling, and PT use
- Our transportation network is increasingly vulnerable to adverse events, resulting in economic and social disruption
- Our transportation network is increasingly vulnerable to adverse events, resulting in economic and social disruption
- Plan to fund a fit for purpose transport system that adapts to changing user and environmental demand

Otago Regional Council - Wellbeing 2023
- Equity
- Mātauraka Kāi Tahu
- Resilience
- Sustainability

Regional Land Transport Strategic Objectives
- Road Safety
- Asset Condition
- Connectivity & Choice
- Environmental Sustainability
- Future Focused

Queenstown Lakes District

Vision 2050
- Thriving People
- Embracing the Maori World
- Opportunities for All
- Breathtaking Creativity
- Deafening Dawn Chorus
- Zero Carbon Communities
- Disaster-Defying Resilience
- Pride in sharing Our Places

Long Term Plan 2024-2034 Key Issues
- Climate change mitigation and biodiversity
- Growth
- Resource constraints
- Reslience and adaption
- Government settings

Long Term Plan 2024-2034 Community Outcomes
- Connected communities
- Belonging and identity
- Participation and governance
- A healthy natural environment
- An enabling built environment
- Healthy and fulfilled people
- A good standard of living

Spatial Plan
- Consolidated growth and more housing choice
- Public transport, walking and cycling are everyone's first travel choice
- A sustainable tourism system
- Well-designed neighbourhoods that provide for everyday needs
- A diverse economy where everyone can thrive

30 Year Strategy Outcomes
- All people can live healthy lives
- The economy is stable and our people are prosperous
- Communities are resilient to sudden natural events
- The natural environments Mauri is respected and enhanced

QLDC Climate and Biodiversity Plan 2022-2025
- DC demonstrates ambitious climate leadership
- nsport system is low-emission and better connect
- Our built environment is low-emission and resilient
- Our communities are low-emission and climate resilient
- Low-emission businesses thrive
- A flourishing natural environment

QLDC Mode Shift Plan 2022
- Collaboration across the Way To Go partners, local communities, business and stakeholders
- Enabling and ensuring sustainable land use development
- Investing in new and improved infrastructure and services
- Proactively influencing people's travel choices

QLDC Economic Diversification Plan 2023
- Creating conditions to enable economic diversification
- Diversification in travel-reliant industries and growth of adjacent businesses
- Growing niche industries for a diversified and resilient economy

Strategic Cases / Strategies
- BCA AMP
- BCA AMP
- Queenstown Integrated Transport Strategy (QITS)
  - Queenstown Town Centre Transport Strategy
  - Frankton Flats Strategic Case
  - Travel Demand Management BC
- ORC Public Transport BC
- Wanaka Transport Strategic Case (Network Optimisation SSBC)

Investment Programmes
- Continuous Programme - Maintenance, Operations and Renewals
- Improvement Programme - Capital / Low Cost Low Risk
- Way 2 Go, (Waka Kotahi ,Otago Regional Council, QLDC)

Waka Kotahi (NZTA) Activity Class
- Local Road Maintenance
- Road Improvements
- Investment Management
- Road to Zero
- Walking & Cycling
- Public Transport

Waka Kotahi (NZTA_ Work Category
- WC 111: Sealed pavement maintenance; WC 112: Unsealed pavement maintenance; WC 113: Routine drainage maintenance; WC 114: Structures maintenance; WC 121: Environmental maintenance; WC 122: Traffic services maintenance; WC 123: Operational traffic management; WC 124: Cycle path maintenance; WC 125: Footpath maintenance; WC 131: Level crossing warning devices; WC 140: Minor events; WC 141: Emergency works; WC 151: Network and asset management 2018–21; WC 161: Property management (state highways only); WC 171: Financial grants; WC 211: Unsealed road metalling; WC 212: Sealed road resurfacing; WC 213: Drainage renewals; WC 214: Sealed road pavement rehabilitation; WC 215: Structures component replacement; WC 221: Environmental renewals; WC 222: Traffic services renewals.
- WC 321: New traffic management facilities; WC 322: Replacement of bridges and structures; WC 323: New roads; WC 324: Road improvements; WC 325: Seal extension; WC 331: Property purchase – state highways; WC 332: Property purchase – local roads; WC 333: Advance property purchase; WC 341: Low cost, low risk roading improvements; WC 357: Resilience improvements.
- New Traffic Management Facilities (321); Replacement of Bridges and Other Structures (322); New Roads (323); Road Improvements (324); Minor Improvements (341); Resilience Improvements (357)
- Transport Model Development (002); Activity Management Planning Improvement (003); Programme Business Case Development (004)
- Road Safety Promotion (432); Low Cost Low Risk
- Walking Facilities (451); Cycling Facilities (452); Low Cost Low Risk
- PT Infrastructure & Services; Low Cost Low Risk

Maintenance, Operations and Renewals Problem Statements
- Our growing and changing network is increasing demand past the capacity of our current assets and adding to its complexity 30%
- The escalating cost of doing business is reducing the affordability of our programme of works 30%
- Conflicting demands from external factors: climate change (resilience, adaption, emissions reduction, reform) is creating extra complexity
- Moving from a holiday town to an international city means network use is changing as well as increasing

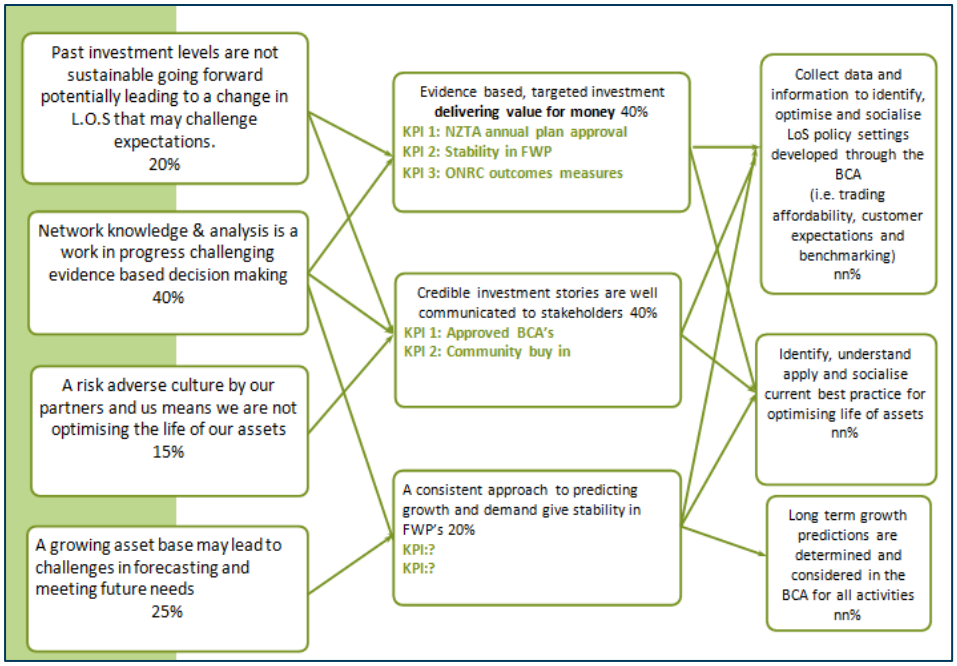
ACTIVE CONSENTS RELATING TO TRANSPORT

Roading				
Consent No	**Consent Type**	**Expiration Date**	**Location**	**Description**
RM12.474.01	Discharge - To Land	15/02/2033	Various roads throughout the QLDC region	TO DISCHARGE CALCIUM MAGNESIUM ACETATE (CMA) TO LAND IN A MANNER THAT MAY RESULT IN CMA ENTERING WATER FOR THE PURPOSE OF DE-ICING ROADS DURING WINTER CONDITIONS.
RM12.242	Roading	1/02/2048	MATUKITUKI RIVER FROM RASPBERRY CREEK CONFLUENCE TO LAKE WANAKA, MIDPOINT APPROXIMATELY 13 KILOMETRES NORTH WEST OF INTERSECTION OF TREBLE CONE SKIFIELD ACCESS ROAD AND WANAKA MOUTH ASPIRING ROAD, WANAKA.VON RIVER FROM ITS NORTH BRANCH CONFLUENCE TO THE STOCK BRIDGE, MIDPOINT APPROXIMATELY 6 KILOMETRES SOUTH WEST OF THE INTERSECTION OF MOUNT NICHOLAS BEACH BAY ROAD AND VON ROAD, KINLOCHREES RIVER FROM MCDOUGALLS CREEK CONFLUENCE (NZTM2000 1240150E 5037200N) TO LAKE WAKATIPU (NZTM2000 1234600E 5023800N), GLENORCHYDART RIVER FROM SCOTT CREEK CONFLUENCE (NZTM2000 1229700E 5033200N) TO LAKE WAKATIPU (NZTM2000 1233800E 5024300N), KINLOCH	To erect structures and disturb the bed of rivers for the purpose of undertaking bank protection works To discharge contaminants to water for the purpose of constructing bank protection works To divert water within the bed of rivers for the purpose of constructing bank protection works
RM12.162	Extraction	4/10/2047	AN UNNAMED TRIBUTARY OF THE VON RIVER, APPROXIMATELY 9 KILOMETRES SOUTHWEST OF THE INTERSECTION OF VON ROAD AND MT NICHOLAS-BEACH BAY ROAD, QUEENSTOWN	.01 TO DISTURB THE BED OF AN UNNAMED TRIBUTARY OF THE VON RIVER FOR THE PURPOSE OF MAINTAINING THE STREAM IN A CHANNEL .02 TO DISCHARGE CONTAMINANTS, BEING SILT AND SEDIMENT, TO AN UNNAMED TRIBUTARY OF THE VON RIVER FOR THE PURPOSE OF MAINTAINING THE STREAM IN A CHANNEL .03 TO DIVERT AN UNNAMED TRIBUTARY OF THE VON RIVER FOR THE PURPOSE OF MAINTAINING THE STREAM IN A CHANNEL
54742	Mining permit	5/12/2047		
RM120352	QLDC land use	31/10/2047	Mount Nicholas – Beach Bay Road, Mount Nicholas	Undertake mining activities to source gravel from an alluvial fan over a 35 year term.
81472-OTH	DOC Concession -gravel extraction	31/12/2029	Shotover River, Skippers	
RM19.409.01	Gravel extraction	12/08/2031	Shotover River, Skippers	To disturb the bed of the Shotover River for the purpose of gravel extraction
RM191277	Gravel extraction	8/10/2031	Shotover River, Skippers	To extract up to 5,000m3 of gravel from the dry bed of the Shotover River every three years for a period of 11 years for the purpose of maintaining the surrounding road network, and to erect and use a temporary culvert/bridge to enable access across a river braid.
	LINZ permit	12/08/2031	Shotover River, Skippers	
	LINZ permit	1/07/2032	Matukituki River (4 extraction points)	
81483-OTH	DOC Concession/Easement - gravel extraction	31/01/2045	Matukituki River (4 extraction points)	
RM19.411.01	Gravel extraction	1/07/2032	Matukituki River (4 extraction points)	To disturb the bed of the Matukituki River for the purpose of extracting gravel

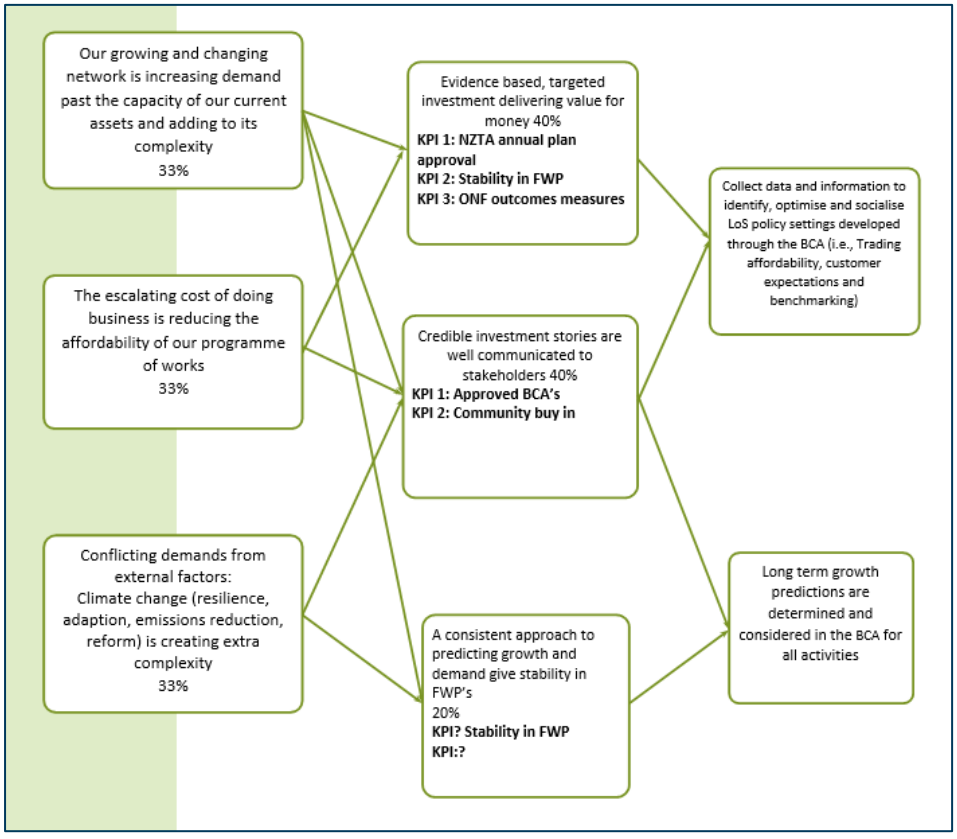
Roading				
Consent No	**Consent Type**	**Expiration Date**	**Location**	**Description**
RM210245	Gravel extraction	2/05/1933	Matukituki River (4 extraction points)	To extract gravel from the bed of the Matukituki River
RM11.163.04	Diversion - River/Stream	1/07/2046		TO DIVERT FLOOD WATER WITHIN THE MATUKITUKI RIVER FOR THE PURPOSE OF PROTECTING AN EXISTING ROAD
RM11.005.02	Discharge - Other	28/02/2036	VON RIVER AND STATION BURN, MT NICHOLAS STATION, VON ROAD APPROXIMATELY 6.5KM SOUTH WEST FROM INTERSECTION WITH MT NICHOLAS-BEACH BAY ROAD, MT NICHOLAS	TO DISCHARGE SEDIMENT TO THE VON RIVER AND STATION BURN FOR THE PURPOSE OF INSTREAM WORKS ASSOCIATED WITH FLOOD PROTECTION WORKS
RM11.005.01	Diversion - River/Stream	28/02/2036	VON RIVER, MT NICHOLAS STATION, VON ROAD APPROXIMATELY 6.5KM SOUTH WEST FROM INTERSECTION WITH MT NICHOLAS-BEACH BAY ROAD, MT NICHOLAS	TO TEMPORARILY DIVERT THE VON RIVER FOR THE PURPOSE OF FLOOD PROTECTION WORKS.
RM11.005.03	Diversion - River/Stream	28/02/2036	VON RIVER, MT NICHOLAS STATION, VON ROAD APPROXIMATELY 6.5KM SOUTH WEST FROM INTERSECTION WITH MT NICHOLAS-BEACH BAY ROAD, MT NICHOLAS	TO TEMPORARILY DIVERT THE VON RIVER FOR THE PURPOSE OF FLOOD PROTECTION WORKS.
RM19.412.01	Gravel extraction	30/04/2030	Sawyer Burn, approximately 6 kilometres east of the intersection of Meads Road and Makarora - Lake Hawea Road (State Highway 6), Wanaka	To disturb the bed of the Sawyer Burn for the purpose of extracting gravel
RM191241	Gravel extraction	4/08/2030	Dry riverbed of Sawyer Burn, Meads Road, Hunter Valley Station, Lake Hawea	To extract up to 2,500m3 of gravel from the dry bed of the Sawyer Burn every five years for a period of 10 years for the purpose of maintaining Meads Road, and to erect and use a temporary culvert/bridge to enable access across a river braid.
LINZ permit	Gravel extraction	30/04/2030	Sawyer Burn, approximately 6 kilometres east of the intersection of Meads Road and Makarora - Lake Hawea Road (State Highway 6), Wanaka	
87778-OTH	Structure maintenance	28/02/2031	Rees River bridge and Glacier Burn culvert	
RM20.205.01	Structure maintenance	13/05/2046	Rees River bridge	To disturb the bed of the Rees River including the remobilisation (discharge) and redeposition (deposit) of bed material for the purpose of removing alluvium and debris around the Rees River Bridge.
RM20.204.01	Structure maintenance	13/05/2046	Glacier Burn culvert	To disturb the bed of the Glacier Burn including the remobilisation (discharge) and redeposition (deposit) of bed material and reinstatement of the banks and flood protection for the purpose of clearing alluvium and debris within the vicinity of the culvert.
RM21.495.01	Extraction	18/01/2032	Scotts Creek- Dart River Road	To extract gravel and rock from Scott's Creek, Glenorchy for the purpose of roading and armouring the Dart River

INVESTMENT LOGIC MAPS

ILMS for 21-24



ILMS for 24-27



ASSET MANAGEMENT IMPROVEMENT PLAN

A number of asset management improvement items have been highlighted across all council activities. Transport has good maturity across many of these areas, but items below include corporate consistency. The table below is a high-level capture of improvements coming out of the development of this BCA AMP:

SECTION 1 – EXECUTIVE SUMMARY

Most actions for exec summary sit in the relevant Section below.

- AMP at a Glacne numbers due to be updated mid-2025

SECTION 2 – INTRODUCTION TO THE TRANSPORT AMP

- Better align budgeting/financial planning with activity/asset management planning.
- Establish a performance framework for the strategic asset management objectives.
- Establish common asset management objectives – portfolio level.
- Confirm activity asset management planning requirements and revise and align the AMP structure and content across all activities.
- Execute an asset portfolio condition assessment plan.
- Review asset life cycle responsibilities and align O&M responsibilities.
- Improve performance monitoring of the asset management system, processes and asset management through internal and external audits, asset portfolio performance monitoring, and management review.
- Establish processes and procedures for continually improving the AM system and asset management, including appropriate programme management, monitoring, reporting and management review.

SECTION 3 – STRATEGIC CONTEXT

- AMP demand figures are based on adopted 2022 figures, which is 2021 data. Figures have been updated in 2023, however, these are yet to be adopted and were not used in the LTP 2024-34. Further work required to utilise more recent data.

SECTION 4 – STRATEGIC DIRECTION

- Ensure review of updated GPS on Transport and other strategies are carried out when they are released.
- Continuously monitor RMA and Three Waters Reform legislation for changes and review internal systems/documentation where required.
- ORC's Draft PT BC is due late December for review- Update AMP with details.

SECTION 5 – STRATEGIC ASSESSMENT

- Work with corporate strategy team to align with changes to strategic framework.
- Utilise monitoring programme to quantify assessments where possible.

SECTION 6 – ASSETS & ACTIVITIES

SAFETY

- Continuously monitor and respond to Land Transport Rule: Setting of Speed Limits 2022 change.
- Collective risk - As this is still a relatively new method of analysing and comparing network-wide safety performance, further work to understand higher - or above-average - risk ratings is included within the Improvement Plan for the 2024-27 AMP period.

ROADS

- Develop dTIMS modelling in house, starting with the sealed road modelling.
- Develop the unsealed road model, explore the footpath model

OPERATIONAL TRAFFIC MANAGEMENT

- Support the Ops team with development of contracts to look after increasing number traffic signals
- Develop the relationship with Wellington Traffic Operations Centre

STRUCTURES

- Continue to improve risk monitoring of structures (scour and seismic)

SECTION 7 – OUR TRANSPORT PROGRAMME

- Review any released GPS and associated IPM and re-assess programme
- Update AMP following completion of Business cases (E.g. TDM, Wānaka Network Optimisation

SECTION 8 – LEVELS OF SERVICE

- Capacity model - 2024 project to build a new transport model and improve how we manage and run the model.
- Quality of Life Survey to be updated upon release of 2023 survey.
- Implement improved future 2024 LTP Transport KPIs and align with monitoring plan.
- Review the LTP level of service statements in time for next LTP.
- Ensure 2024 RLTP Transport KPIs are in place and align with the improved monitoring plan.
- Implement Transport monitoring plan
- Understand the move to ONF performance framework from ONRC and update where accordingly in systems/documentation.

SECTION 9 – MANAGING RISK

- Develop the Risk Framework Tier 2 Risks
- Update the Network Risk Plan with the Ops team and Roading Contractor

SECTION 10 – EFFICIENTLY & EFFECTIVELY PROCURE & MANAGE

- Continue to embed QLDC Procurement strategy and policy into BAU and upskill P&I staff
- Prepare for next Road Maintenance contract.
- Update NZTA Waka Kotahi procurement strategy and undertake Section 17a Review prior to next maintenance contract renewal
- Work with NZTA Waka Kotahi Aspiring Highways to get a joint contractual solution to manage the district's traffic signals.

SECTION 11 – FINANCIAL MANAGEMENT

- Ensure the AMP is updated with the Council agreed Capital Investment Programme being presented in the 2024 LTP.
- All numbers and charts to be updated once QLDC LTP and 30 Year Infrastructure Strategy Finalised
- Update the AMP following the December 2023 Technical Audit from NZTA Waka Kotahi
- Align with update to the new SAMP

FOLLOW UP ACTIONS FROM THE AAMA AND EMBED IN THE SAMP IMPROVEMENT PLAN:

- Key areas of focus for transport to further development of multi-mode transport modelling and the Network Operating Framework to support a robust road investment programme with a better understanding of alternative transport responses.
- Complete the implementation of a number of key initiatives aimed at improved optimisation of transport asset maintenance and renewal, including the Maintenance Intervention Strategy, formalised condition and performance assessment programme and ongoing data improvements to support asset deterioration modelling and renewal analysis.

PRIORITISE AM IMPROVEMENT EFFORTS:

- Review the AM Improvement Plans with consideration of these review findings, and with a reduced number of tasks. Focus on good project management and delivery of these tasks.
- Establish AM Improvement Plan progress reporting to responsible Director, so that programme slippages are transparently managed.
- Strengthen critical AM processes to ensure continuity through staff changes and reforms: Identify critical AM processes and complete process documentation and backups for key roles. (e.g. maintaining the asset register, undertaking asset assessments, renewal forecasting, managing investment programmes).
- Develop a Council-wide portfolio management process. Including process mapping, role definition across teams, use of common software (or Excel templates).

ESTABLISH CHANGE MANAGEMENT PROCESSES:

- Major change management – process for reviewing existing programmes when new funding or direction is given from Council, govt, or other shocks and disruptors.
- AM Project change management – process for completion of AM (or any type of) Improvement project, sign off required for documentation, training.

STRENGTHEN CONNECTIONS FROM STRATEGY DEVELOPMENT TO DELIVERY:

- Work with Strategy to identify timely inputs required from I&P staff and ability to support Strategy work.
- Incorporate actions from Strategies into AM Improvement Plans (process improvements) or CAPEX programmes (asset improvements). Ongoing process as Strategies are developed and updated.
- Review Council Planning cycle: work with Strategy team to map out the interactions between AMPs and other key documents and processes, appropriate timings, Council engagement with AMPs.
- This should include consideration of when and how the Council and community are engaged in debating level of service / cost options and selecting preferred approach. (3Waters are currently developing a levels of service document for this purpose).

BCA AMP & IMM

AMP Structure – showing integration between IIMM and the BCA Approach.

AMP	IIMM	Business Case Steps
Appendix		**POINT OF ENTRY** An AMP 'Point of Entry' (PoE) was held with NZTA Waka Kotahi to build the MOR.
2	**2**	**Introduction (why we need a plan)**
STRATEGIC CASE		
4	5	STRATEGIC CONTEXT - The underlying assumptions and future objectives. Links our outcomes with National, Regional and Local strategic and planning processes
5		STRATEGIC ASSESSMENT - Defines the problems and opportunities that face our transport system and discusses the balance of demand, levels of service, risk and cost
PROGRAMME BUSINESS CASE		
6	3,5	ASSET & ACTIVITY PORTFOLIO - An overview of the land transportation assets, activities and intended outcomes
7		LIFE CYCLE MANAGEMENT – How the service/asset/activity is provided
8		PROGRAMME - The proposed investment programme for the next 10 years
NA		**POINT OF ENTRY** Business Case approach for individual improvement projects is separate to the AMP and have their own POE.
NA		**INDICATIVE BUSINESS CASE** The investment story on long list options and the risk vs benefits. Individual activities are singled out and progressed for investigation through the detailed business case
NA		**DETAILED BUSINESS CASE** Evidence and detailed analysis of costs, risks, and benefits on the preferred option Addresses the problems and delivers the outcomes identified in the strategic case, and is affordable
IMPLEMENTATION & POST IMPLEMENTATION		
		Managing Risk -Risk framework, critical assets (Resilience is an activity covered in lifecycle management)
11	8	EFFICENTLY & EFFECTIVLEY PROCURE AND MANAGE Delivery of Capital projects and activities. Delivery of Maintenance and operations
13	9	Review of performance and delivery, benefits realisation Continuous improvement and Asset Management Maturity Assessments

GLOSSARY OF TERMS

30YIS	Infrastructure Asset Management Strategy
3Waters	Wastewater, Stormwater & Water Supply
A	
AA	Automobile Association
AADT	Average Annual Daily Traffic
ACC	Accident Compensation Corporation
AI	Artificial Intelligence
AMP	Asset/Activity Management Plans
AM	Asset Management
AMDS	Asset Management Data Standards
AT	Active Travel
ATN	Arrowtown
AVs	Autonomous Vehicles
B	
BAU	Business As Usual
BBC	Better Business Case
BCA AMP	Business Case Approach AMP
BERL	Business and Economic Research
C	
CAP	Climate Action Plan
CAPEX	Capital Expenditure
CAR	Corridor Access Request
CAS	Crash Analysis System
CCC	Climate Change Commisson
CCTV	Closed Circuit Television
CEO	Chief Executive Officer
CMA	Calcium Magnesium Acetate
CIP	Crown Infrastructure Projects
CODC	Central Otago District Council
CPI	Consumer Price Index
D	
DCC	Dunedin City Council
DCM	Dwelling Capacity Model
DIA	Department of Internal Affairs
DoC	Department of Conservation
dTIMs	Deighton Total Infrastructure Management System
E	
El Capo	QLDC Capital Works Database
ENP	Economic Network Plan
EV	Electric Vehicles
F	
FA	Fixed Assets
FAR	Funding Assistance Rates
FENZ	Fire Emergency New Zealand
FWP	Forward Works Programme
G	
GDP	Gross Domestic Product
GFC	Global Financial Crisis

GIS	Geographic Information Systems
GPR	Ground Penterating Radar
GPS	Government Policy Statement
GY	Glenorchy
H	
H&S	Health and Safety
HIF	Housing Infrastructure Fund
HPMV	High Productivity Motor Vehicles
HSD	High Speed Data
HSNO	Hazardous Substances and New Organisms
I	
IAF	Investment Assessment Framework
IANZ	International Accreditation New Zealand
ICC	Invercargill City Council
ICR	Investor Confidence Rating
IIMM	International Infrastructure Management Manual
ILM	Investment Logic Mapping
IMMS	Information Management Maintenance System
IPCC	Intergovernmental Panel on Climate Change
IPM	Investment Prioritisation Method
IPWEA	Institute of Public Works Engineering Australiasia
ISO	International Organisation for Strategy
ITS	Intelligent Transport System
K	
KM	Kilometre
KPI	Key Performance Indicator
L	
LCLW	Low Cost Low Risk
LDS CoP	Land Development and Subdivision Code of Practice
LED	Light Emitting Diode
LGA	Local Government Act 2002
LGNZ	Local Government New Zealand
LINZ	Land Information New Zealand
LoS	Level of Service
LTP	Long Term Plan
LTSV	Long Term Strategic View
M	
M	Meters
M&O	Maintenance and Operations (QLDC)
M,O & R	Maintenance, Operations & Renewals
MAAS	Mobility as a Service
MBIE	Ministry of Business, Innovation & Employment
MMP	Maintenance Management Plan
MOE	Ministry for Education
MOU	Memorandum of Understanding
MoT	Ministry of Transport
MPI	Ministry of Primary Industries
MSD	Multi Speed Deflectometer
MSQA	Management Surveillance & Quality Assurance
M VKT	Million Vehicle Kilometres Travelled

N	
NAC	Sodium Acetate
NAM	Network and Asset Management
NAMS	New Zealand Asset Management Support
NBEA	Natural and Built Environments Act
NIP	National Infrastructure Plan
NIWA	National Institute of Water & Atmospheric Research
NLTP	National Land Transport Program
NMP	Network Management Plans
No	Number
NPS	National Policy Statement
NZ	New Zealand
NZS	New Zealand Standards
NZTA WAKA KOTAHI	New Zealand Transport Agency
NZUP	New Zealand Upgrade Programme
NZUAG	New Zealand Utility Advisory Group Inc
O	
ODP	Operative District Plan
ONL	Outstanding Natural Landscape
ONF	One Network Framework
ONRC	One Network Road Classification
OPEX	Operational Expenditure
ORC	Otago Regional Council
ORTC	Otago Regional Transport Committee
P	
P&D	Planning and Development (QLDC)
P&I	Property and Infrastructure Team (QLDC)
PBC	Programme Business Case
PBE IPSAS 17	Public Benefit Entity International Public Sector Accounting Standard 17
PDP	Proposed District Plan
PESTLE	Political, Economic, Social, Technical, Legal and Environmental
PMO	Project Management Office
PMRT	Performance Measure Reporting Tool
PoE	Point of Entry
PT	Public Transport
Q	
QAC	Queenstown Airport Corporation
QITS	Queenstown Integrated Transport Strategy
QLDC	Queenstown Lakes District Council
QToC	Queenstown Traffic Operations Centre
QTN	Queenstown
QUELL	Queenstown Lakes Utilities and Lifelines
R	
RAMM	Road Assessment & Maintenance Management
RAPT	Road Assessment and Prioritisation Tour
RCA	Road Controlling Authorities
REAP	Rural Education Activities Programme
REG	Road Efficiency Group
RFP	Request for Proposal

RFS	Request For Service
RLTP	Regional Land Transport Program
RMA	Resource Management Act 1991
RMF	Risk Management Framework
RTC	Regional Transport Committee
S	
SADD	Students Against Dangerous Driving
SAMP	Strategic Asset Management Plan
SCRIM	Sideway-Force Coefficient Routine Investigation Machine
SD&D	System Design & Delivery Team (NZTA Waka Kotahi)
SDHB	Southland District Health Board
SH	State Highways (NZTA Waka Kotahi)
SHA	Special Housing Areas
SI	South Island
SME	Subject Matter Expert
SNP	Safety Infrastructure Improvements
SOAP	Service and Outcomes Performance
SPR	Special Purpose Roads
SR	Special Report
T	
TA	Territorial Authorities
TIF	Tourism Infrastructure Fund
TIO	Transport Investment Online
TL	Treatment Length
TLA	Territorial Local Authority
TM	Traffic Management
TSD	Traffic Speed Deflectometer
TTM	Temporary Traffic Management
TTR	Travel Time Reliability
U	
UV	Ultra Violet
V	
VKT	Vehicle Kilometres Travelled
VMS	Variable Message Sign
W	
WDM	WDM Limited
WK	Wānaka
WToC	Wellington Traffic Operations Centre