

## Land Transport Asset Management Plan 2021-31



# PART A: BUSINESS CASE

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Prepared by: Roading Unit Waitaki District Council



## Quality Assurance Statement

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# Acronyms & Abbreviations

Acronym	Meaning	Additional Notes
AM	Asset Management	
ССО	Council Controlled Organisation	
DIA	Department of Internal Affairs	Sets mandatory performance measures for local government
dTIMS	Deighton Total Infrastructure Management System	Modelling software used to forecast pavement performance
GPS	Government Policy Statement on Transport	
HPMV	High Productivity Motor Vehicle	
IIMM	International Infrastructure Management Manual	Internationally accepted good practice guide for asset management
LGA	Local Government Act	
LoS	Level(s) of Service	
LTP	Long Term Plan	
MCA	Multi Criteria Analysis	
NOIC	North Otago Irrigation Company	
OAG	Office of the Auditor General	
ONF	One Network Framework	Replaces the ONRC for planning from 2024/27 LTP
ONRC	One Network Road Classification	National system for highway classification & setting of levels of service
OSRLTP	Otago Southland Regional Land Transport Plan	
RAMM	Road Assessment and Maintenance Management	asset inventory database with functionality to manage work, perform inspections, assessment, asset valuation, forward works programming
REG	Road Efficiency Group	Industry advisory group established by Waka Kotahi NZTA and Local Government New Zealand
ТАМ	Transportation Asset Management	
TAMP	Transportation Asset Management Plan	
WDC	Waitaki District Council	
WoLC	Whole of Life Cost	





## **Executive Summary**

Our community and economy rely on a great land transport system that keeps us safe and connected, provides access to employment, education and health services, gets goods to market and helps our region prosper. The transport system also impacts on our health and the environment, making it important that we plan for reducing its impact.



This Land Transport Activity Management Plan (LTAMP) acknowledges that we need to shift our thinking when it comes to road safety, responding to climate changes, and keeping the service we provide, affordable for our community.

The LTAMP acts as a route map for the future, by providing the logic, reasoning and context behind how we propose to maintain, operate, renew and improve Waitaki's land transport network.

We want to clearly show the value of investment made in undertaking core business activities and addressing our strategic transport problems. It is also important that we show how we will meet regulatory requirements and environmental protection.

## Our Biggest Challenges and how we Plan to Respond

#### **Climate Impacts**

four

for Waitaki

planning

network

serious injury

#### Gradually increasing storm damage and loss of coastal roads is unaffordable

2 key bridges restricting HPMV access, & limited facilities for new tourist markets are restricting growth

strategic focuses

Preserve our existing assets

Significantly reduce deaths &

& Improve our transport

Support business growth

through better access & improveed resilience

Transform urban mobility & develop a mode neutral

**Meeting Demand** 

An increasing number of people are being seriously injured on our roads each year (12 last yr), especially at rural intersections

Safety

#### number of ing ed on our ar (12 last at rural Urban mobility is difficult for our aging population due to poor footpath condition & pedestrian facilities **five** to drive change

Demographic Change

- + Improve the condition of our footpaths & urban roads
- + Strengthen key bridges for HPMV use
- + Deliver safety improvements
   & Manage speeds
- + Improve our transport planning & asset management
  - + Improve drainage & unsealed road maintenance



Our investment programme will address the problems identified for Waitaki within the context of the strategic directions for transport provided by the Government Policy Statement (GPS) on Land Transport Funding, the Regional Land Transport Plan (RLTP), and the One Network Road Classification (ONRC). Our key strategic response initiatives are outlined below, along with the priority for investment – High, Medium or Low.

#### Table 1: Key Strategic Response Initiatives

Problem Statement	Objectives & Benefits	Trend & Key Findings in The Strategic Case	Strategic Responses	Priority
ROAD SAFETY: Inability to access, plan, fund and adapt to changing environmental and user demands constrains timely investment in a fit for purpose transport system now and in the	<ul> <li>DAD SAFETY: Inability to cess, plan, fund and adapt changing environmental d user demands nstrains timely investmenta a fit for purpose transport stem now and in the ure.</li> <li>Reduced crash harm in the areas of;</li> <li>Intersections</li> <li>Poor driver behaviour</li> <li>Young and old drivers</li> <li>Vulnerable users</li> <li>ABOUT THE SAME</li> <li>Improved focus on Road Safety &amp; prioritisation of safety improvements</li> <li>No clear reduction in fatal &amp; serious crashes</li> </ul>	<ul> <li>ABOUT THE SAME</li> <li>Improved focus on Road Safety &amp; prioritisation of safety improvements</li> <li>No clear reduction in fatal &amp; serious crashes</li> </ul>	• PROGRAMME ADJUSTMENT: NETWORK SAFETY PLANNING & TARGETED IMPROVEMENTS. Implement the response strategy in the current WDC Road Safety Action Plan. Prioritise infrastructure investment on secondary collectors; Specifically, intersection standards, shoulder maintenance/widening, guardrail, signage (route strategies to support isolated improvements), & road marking frequency.	Η
luture.		• <b>FUNDING ADJUSTMENT</b> : Absorb some good network condition on low volume rural pavements and bridges by reducing renewal expenditure in these areas to offset increase in network safety and access improvements. Hazardous tree removal programme on key routes	н	
			<ul> <li>RISK ADJUSTMENT: Review delineation and hazard warning standards on low volume roads, especially sealed roads. Align maintenance contract specification with ONRC &amp; network risk</li> </ul>	L
			• <b>POLICY APPROACH</b> : Review speed limit and roading bylaws to reflect current standards the ONRC. Splitting the bylaw will make it more accessible and easier to manage in a targeted way.	Μ
FREIGHT CONNECTIONS: Parts of the network & service infrastructure lack resilience and are vulnerable to disruption due to adverse events, resulting in	<ul> <li>Asset maintained at sustainable levels</li> <li>Reduced inundation to maintain access to vulnerable communities</li> <li>Adequate funding for</li> </ul>	<ul><li>GETTING BETTER</li><li>Reducing Class 1 and HPMV restrictions</li></ul>	• <b>PROGRAMME ADJUSTMENT: STABILISE KEY ROUTES.</b> Invest to improve resilience of critical assets and remove HPMV access restrictions. Proactive drainage maintenance & renewals; Bridge strengthening; Retaining wall condition assessments & renewals in vulnerable areas; Riverbank stabilisation on key routes; Coastal erosion protection (review 2012 strategy).	Η
economic & social disruption	maintaining the Network at appropriate services levels		• <b>PROGRAMME ADJUSTMENT: IMPROVE UNSEALED ROADS.</b> Invest to improve resilience of unsealed roads. Increased remetalling and strengthening; Performance grading.	Μ





Problem Statement	Objectives & Benefits	Trend & Key Findings in The Strategic Case	Strategic Responses	Priority
			• <b>POLICY APPROACH</b> : Embed proactive management practices by initiating periodic condition rating of culverts and Inspections of active hazard sites (coastal erosion, slips, vulnerable flooding areas). Review of resilience hazards (pre-planning) & early warning criteria as result of changing climate to align inspection and maintenance programmes.	Н
			• <b>RISK ADJUSTMENT</b> : Develop an incident and emergency preparedness & response plan & incorporate within maintenance contracts on re-tendering (2022).	L
TRAVEL OPTIONS: Inability to access, plan, fund and adapt to changing environmental and user	<ul> <li>Improved evidenced based decision making</li> <li>Expectations of rural residents met</li> </ul>	<ul><li>GETTING BETTER</li><li>Increasing staff resources</li></ul>	<ul> <li>PROGRAMME ADJUSTMENT: IMPROVE THE CONDITION OF OUR FOOTPATHS - Footpath renewals will be increasing significantly substantially to reflect a decline drop in acceptable level of service.</li> </ul>	Н
demands constrains timely investment in a fit for purpose transport system now and in the future	Asset maintained at sustainable levels		• PROGRAMME ADJUSTMENT: DEVELOP A DISTRICT TRANSPORTATION PLAN - Direct savings from streetlight LED conversion to support additional investment in transport planning & urban mobility. Integrated network planning is necessary to respond to growth in Waitaki and changing economic base.	Η
			• <b>RISK ADJUSTMENT</b> : Implement ONRC as LOS and prioritisation framework within the road maintenance contract specification.	Н
			DEMAND MANAGEMENT:	
			<ul> <li>Work with hauliers to use suitable roads &amp; routes to confine investment need. Working with relocating traffic generators to optimise use of existing network. Linking Roading Strategy with District Plan review and consenting processes</li> </ul>	L
			<ul> <li>Enhance Customer Service Focus. Improving customer outcomes is not simply an end-result from executing the roading programme.</li> </ul>	L

### Investment Options & Preferred Programme

This plan considers four investment options. Option 3 is the recommended programme. It adopts existing management strategies to maintain the integrity of the existing asset base, adjusted and expanded to include some high priority LoS improvements. The programmes of work proposed largely represent a business-as-usual approach without any significant projects, programme changes or funding increases from the previous plan. The preferred option therefore represents a 'core programme' (rather than an enhanced programme) when assessed against Waka Kotahi's Investment Decision Making Framework for Road Maintenance.

Minor changes to the baseline strategies and work programmes are required to provide better alignment with the GPS and address the specific problems identified through the business case process and as a result of COVID-19.

The programme that has been Council approval at the end of May is just short of option 3 and is mainly affected in the new capital improvements activity. The remainder of the programme will be adjusted to suit and maximum benefit will be made of all the resources available to ensure that level of services do not deteriorate.

Subsequent to Council approval of maintenance, operations and renewals budgets, Waka Kotahi NZTA provided an indicative allocation at the end of May 2021. The allocation was a **7% increase on the 2018-21 allocation ie from \$30.7M to \$32.8M** which covers cost escalation only with no allowance for any improvements in the level of service in the new roading maintenance contract due to commence 1 July 2022. The increase takes the total allocation for 2021-24 to \$45.5M assuming Low Cost Low Risk works are not reduced which is unlikely given the financial austerity of the 2021-24 NLTP. The charts below give an illustration of the severity of the reduced revenue and expenditure for total financially and non-financially assisted programme.





OPTION 4

Accelerated Programme for Change

improve safety and resilience of road asset. Increased investment to address safety deficiencies that are not addressed with the preservation programmme. Additional focus on unsealed roads ] Improve LoS on footpaths ] Increase LoS on secondary collector roads ] Maintain LoS on sealed access roads ] Increase LoS on unsealed roads ] Improve urban and rural road safety ] Strengthen/replace bridges for HPMV ] Maintain Los on primary collector roads

\$57.2m \$209.4m

The charts below give an illustration of the severity of the reduced revenue and expenditure of the 2021-24 NZTA Indicative allocation.

# Revenue & Expenditure Forecast for Council approved expenditure (proposed)

\$402.01m	\$198.2m	\$45.5m	\$26.9m
Total network GCRC (excluding land & formation)	10-year expenditure forecast (18.4% change from 2018-28 forecast)	3-year budget (20% change from 2018-21 NLTP)	Subsidies (NZTA and others) for the 2021-24 NLTP (51% of total budget).

# Revenue & Expenditure Forecast<sup>1</sup> based on NZTA indicative allocation for maintenance, operations and renewals

\$402.01m	\$185.2m	\$41.7m	\$23.8m
Total network GCRC (excluding land & formation)	10-year expenditure forecast (17.8% change from 2018-28 forecast)	3-year budget (7% change from 2018-21 NLTP)	Subsidies (NZTA and others) for the 2021-24 NLTP (47% of total budget).



<sup>&</sup>lt;sup>1</sup> Note: All financial forecasts are adjusted for inflation

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Figure 1: 10-yr Financial Forecast

Investment required at similar level to the approved 2018-21 NLTP value to maintain a safe and fit for purpose transportation network to meet customer expectations and to prevent network deteriorating to unacceptable condition. 2021-24 NLTP requirement is <b>\$21.26M</b> . The increase includes an additional two staff and increases for retendering the roading maintenance contract and for footpath maintenance.
Increased investment is required to maintain a safe and fit for purpose transportation network to meet customer expectations. 2021-24 NLTP requirement is <b>\$21.99M</b> . The increase includes allowance for the progression of the Kakanui Point Bridge project with design in 2023/24.
The aggregate maintenance, operation and renewals requirement is \$43.25M for our maintained road length of 1,800km this translates to \$8,009/km/yr which is broadly in line with the peer group average investment levels.
The total aggregate cost per year for capital improvement is <b>\$2.4m</b> ; an increase of \$0.23M per year
<ul> <li>Low cost/low risk investment of \$9.0m is required to improve rural intersection visibility, expand HPMV access to the network, and improve drainage resilience. \$7.2M has been approved by Council.</li> <li>Approval from Waka Kotahi is unknown as at 30 June 2021 and is only expected to be announced at end of August</li> <li>Additional staff resource to manage delivery of increased capital programme</li> <li>Creation of a District Transportation Plan to support integrated land</li> </ul>





Figure 2: Our Revenue Plan



Figure 3: How we Spend the General Rate on Transportation Services

## Key Risks and Assumptions

Over the next three, 10 and 30 years, our District and community will undoubtedly change.

We don't know exactly what, how, or how fast, but we have identified some key risks and opportunities, and made some assumptions to help us prepare this plan. The level of uncertainty associated with each is stated as low, medium or high.

Table 2: Key Risks and Opportunities





WAKA KOTAHI reviewed the Funding Assistance Rate (FAR) in 2020 and revenue will be increased by 2%.

The roading funding assistance rate is currently 55% and is forecast to increase to 57%. Changes to the Government Policy Statement (GPS) and Investment Decision Making Framework (IDMF) may impact on future funding.

Funds are available for the replacement of significant assets, where these have been forecast in this asset management plans. Failure to invest will result in:

- Levels of service that may need to be reduced and where safety may be compromised.
- Increased structural failure of assets leading to higher whole-of-life asset cost.
- Increased reactive maintenance leading to higher whole-of-life asset cost and increased disruption to the community.
- Increased financial burden for future generations due to under-investment

#### Rates Revenue from large contributors will continue:

Oceania Gold and Meridian Energy contribute 13% of the transportation rate. Oceania Gold land use consent was extended in 2019 and are expected to operate for another 25 years. Failure of either business will significantly impact our ability to deliver target levels of service however it is considered low as gold is a strong commodity and Meridian Energy is a state-owned enterprise with ever increasing demand from electricity providers.

#### Climate change - adaptation and mitigation - will be top of the community's agenda

Climate change will affect Waitaki in a variety of ways. For example, coastal erosion will lead to loss of assets, increased rainfall intensity will stress our drainage and bridge assets, and drought / rising changing groundwater tables will impact the strength of our pavements resulting in increased road maintenance.

We may also experience a range of other effects, including increased biosecurity risks from invasive pests and weeds. Roads are a high-risk vector for spreading weeds so our management of roadworks, drainage, vegetation and spray programmes will be critical for protecting Waitaki's agriculture and tourism economy.

We know change is occurring, but we are still in the process of understanding the full consequences. Using the best available information, climate change will become a core part of our planning. We will consider both how we manage the impacts of climate change, and how we can mitigate our own impacts on the environment (including emission reductions).

#### Council's Costs will increase faster than local wage increases

Inflation rates on our long-term maintenance contracts [Consumer Price Index (CPI) and Local Government Cost Index (LGCI)] have been rising faster than rates increases and will continue to reduce our ability to deliver core maintenance and levels of service.

#### Our Community will get older, but we don't expect rapid growth

Apart from each of us individually growing older, Waitaki's population as a whole will become much older. Multi-modal corridors in the urban area will become more important but we don't know where or when growth will occur. We aim to get better understanding of this through a district transportation planning exercise.

#### Rapid change in the tech landscape - disruptive technologies

Technology will keep changing the way we all do things. Technological change is rapid and unpredictable and may have significant impacts on how our community uses the transport network and services. Changes around drone maintenance, electric vehicles and driverless









cars are on the horizon. Increased connectivity and the availability of 'big data' may allow greater analysis and important insights to be learned.

#### Resourcing Capability / Ability to deliver the Programme

Council will be able to employ and retain staff that have the expertise and skills needed by the organisation. It is questionable whether our suppliers, contractors, consultants and other external agencies will be able to deliver the projects and levels of service included in the LTAMP on time and to the budgeted cost, particularly when there is high demand for these services through the local government and private sector.

#### Performance

The effectiveness of this plan in addressing our problem statements will be monitored against the following performance measures:

WDC Problem	KPI #	KPI Description	Baseline Performance				Target Performance			
Statement			PC	SC	А	LV	PC	SC	А	LV
Inability to assess, plan and fund rapidly changing transport user demands in a timely way results in some poor investment prioritisation and decisions	DIA 1	The percentage of customer service requests relating to roads and footpaths to which the territorial authority responds within the time frame specified in the long-term plan.	87% (2019/20)				90%			
	DIA 2	The average quality of ride on a sealed local road network, measured by smooth travel exposure (average for total sealed roading network)	91% (2019/20)			90%				
	DIA 3	The percentage of the sealed local road network that is resurfaced.	7.9% (2019/20)				5.5%			
	DIA 4	The percentage of footpaths within a territorial authority district that fall within the level of service or service standard for the condition of footpaths that is set out in the territorial authority's relevant document (such as its annual plan, activity management plan, asset management plan, annual works program or long-term plan).	94% (2018/19) No survey in 2019/20 due to Covid 19 – 100% footpath survey completed in 2020/21 and Forward Works programme to be produced				96%			
	ONR C 1	Amenity Customer Outcome 1 - Smooth Travel Exposure (STE)	91 ↓	92 ↑	89 ↓	90 ↓	90	90	100	100
	ONR C 2	Amenity Customer Outcome 2 Peak Roughness (95 <sup>th</sup> %ile)	139 ↓	151 ↓	164 →	168 ↑	120	140	180	180
Attitudes and behaviour together with inconsistent quality of	DIA 5	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.	+2 Decrea (2018/19 to 2019/20)			easing				
routes in the region results in fatal and	ONR C 3	Safety Customer Outcome 1 - Serious Injuries and Fatalities	2 1	6 ↑	41	- ↓	- ↓	- ↓	- ↓	- ↓
serious crashes	ONR C 4	Safety Customer Outcome 2 Collective Risk	.03 0↓	.01 2 →	.00 6 ↑	.00 3 ↑	- ↓	- ↓	- ↓	- ↓

#### Table 3: Performance Measures

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WDC Problem	KPI #	KPI Description Baseline Performance			Tai	rget Pe	rformar	nce		
Statement			PC	SC	А	LV	PC	SC	А	LV
		Safety Customer Outcome 3 Personal Risk	4.4 ↓	6.9 ↓	12. 3 ↑	29. 2 ↑	- ↓	- ↓	- ↓	- ↓
Sections of the network are increasingly vulnerable to closure from	ONR C 5	NR       Resilience Customer Outcome 1 -       No Data         2.5       Unplanned Closures with a Detour       Information to be collected with Input         Provided       Measures		e put	Decreasing					
adverse events resulting in economic and social	ONR C 6	Resilience Customer Outcome 2 - The Number of Instances Where Road Access is Lost	2 - No Data re Information to be collected with Input Measures		e put	Decreasing				
usrupiions	ONT C 7	Accessibility Customer Outcome 1 - Proportion of Network not Available to Heavy Vehicles	No Data Information to be collected with Input Measures				Decre	easing		



## Preface

This Transportation Asset Management Plan (AMP) outlines how we will deliver the local road network and associated management services required by the district's ratepayers and road users for going about everyday life. Its principal aim is to ensure that Waitaki's strategic objectives are achieved through targeted investments consistent with the GPS and national One Network Road Classification.

Within the plan, we define the key problems affecting the district's transport activities and the benefits of investment to address those problems. We outline how proposed works fit with the district's community outcomes, regional transport strategies and the Government Policy Statement on transport. The plan also details the level of investment required and how we will measure the success of our activities.

We have developed this programme by building a strategic case for the investment, and an associated programme that articulates what will be done to address defined Problems. This approach helps us and our co-investor, the New Zealand Transport Agency, determine that we are doing the right work at the right time, for the right reasons.

The AMP is informed by an Investment Logic Mapping (ILM) process completed by the Otago Regional Transport Committee in March 2020, and the strategic responses required over the next 30 years. While the available evidence supports the Problems identified, we recognise that there are gaps in the evidence, particularly in relation to how the network will perform with changing tourist volumes and the potential impact on travel safety.

We have aligned our Operations and Maintenance (O&M) levels of service with the One Network Road Classification as well as outcomes desired by our community, in order to optimise planned expenditure over the next 10 years. Operations, maintenance, renewal and Low-Cost Low Risk Improvement (formerly minor improvement) programmes are essential if the network is to remain in a safe and fit-for purpose condition and meet community expectations.

Considered together, the ILM and O&M level of service review have guided the strategic context and operational detail of this AMP.

The LTAMP has been prepared based on what WDC's engineers believe is required to adequately maintain and renew the network in a 'whole of life' manner. The principal outputs from this process are:

- Discussion on demand and operational changes;
- An optimum long-term strategy for continued investment in and management of the Transport activity, and 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 performance plan.

Council has a governance role in the management of asset infrastructure services, and as such, may need to alter an existing asset expenditure programme to meet changing community expectations outside the agreed Asset Management Plan. We recognise the need for this flexibility in our plans and programmes and any changes in funding levels required by the community through consultation processes, will be captured in the Annual Plan and used to inform subsequent annual revisions of the LTAMP.

#### Asset Management Objectives

Our Long-Term Plan (LTP) has a strong focus on promoting growth to increase the rating base, by attracting people to live and work in the Waitaki District, and to support businesses and encourage sector growth in agriculture and tourism.



Council's management strategy is to provide safe, affordable, sustainable core infrastructural systems to resident and visitors that fully meet the environmental, economic and social needs of the District and wider world. Managing and maintaining these assets to ensure consistent and reliable service delivery to the community requires good asset management practices and strategic thinking.

Our Asset Management Objectives are aligned with Waitaki's vision and Community Outcomes:



- 1. To support local businesses and make Waitaki attractive to new opportunities; undertake placebased transport planning and incorporate mode neutrality within decision processes
- 2. To keep our district affordable for a diverse and resilient economy; make informed decisions by considering full lifecycle revenues and costs (including operation, maintenance, replacement, and decommissioning);
  - i. recognize that that there are constantly changing financial constraints and challenges that surround all services and assets delivered by the District and that asset management practices must be proactive and responsive to changing environments and short-term priorities;
  - ii. identify and adequately plan for required levels of operations, maintenance and replacements associated with new infrastructure, and use available resources effectively to minimize total life cycle costs of assets; and
  - iii. recognize that sustainable service delivery requires long-term financial planning.



- To ensure we have connected, inclusive communities and celebrate our community identity; implement integrated Decision-Making processes.
  - i. integrate the decision-making processes for assets to include corporate, financial, business, landuse, community, environmental, social, technical and budgetary plans and perspectives; and
  - ii. consider assets in a larger service delivery and "place" context using the ONRC framework, not just as an isolated asset.
- 4. To enable safe and healthy communities; ensure that relevant legislation, regulations, engineering standards, consent conditions and bylaws followed, monitored and enforced
  - i. design and manage the land transport network to be to be safe
  - ii. systematically incorporate adaptive methods and technologies to improve infrastructure resilience; and
  - iii. consider future growth and demand requirements to ensure assets are adapted to meet demographic changes and the needs of future generations.
- 5. To ensure we provide robust core infrastructure and services; maintain a Service Delivery Focus:
  - i. Manage and maintain assets sustainably to meet defined Levels of Service that balance customer expectations with risk, affordability and time considerations;
  - ii. consult actively, clearly and meaningfully with stakeholders where appropriate and be responsive to stakeholder inputs.
- 6. To ensure Waitaki's diverse landscapes and water bodies are valued & protected and to meet our climate changes; strive to manage assets to deliver services that are sustainable for the community and local environment, and that meet the anticipated challenges from climate change impacts, and future generations;
  - i. consider climate change impacts and how they may directly affect levels of service;
  - ii. consider future growth and demand requirements to ensure assets are adapted to meet demographic changes and the needs of future generations;
  - iii. embed the precautionary principle in our planning & decision making and deliver a low carbon transport system that minimises harm.

#### Progress Since the Existing AMP was Adopted in 2018

#### Table 4: Progress Since 2018

Consideration	Outcome	Response in this Plan
Major changes that have occurred in the District since the existing AMP was adopted	Growth in residential subdivisions and primary industries, Completion of projects Increase in population and demand	Improvements in customer satisfaction and levels of service. Improved focus on ONRC and service delivery
Are the existing problem statements still relevant?	Yes, but urgency has changed slightly due to COVID-19.	New problem statement included in AMP
Have there been / will there be changes to Council's strategic goals set through the LTP?	None indicated or expected as yet. LTP process will identify any changes	Continue working to deliver existing WDC strategic goals
How effective has the existing strategic case been in guiding decision making?	Effective. Has provided improved focus as well as a prioritisation framework	To strengthen transport planning, asset management and continue with the priorities set



Consideration	Outcomo	Boononce in this Dian
Consideration	Outcome	Response in this Flan
What benefits, KPIs and transport outcomes have been or will be achieved in the 2018-21 programme?	Progress has been made across all outcome areas, especially in areas of customer service, ONRC and accuracy of RAMM	To continue with improvements to AMP, KPI's and information held in RAMM
How is Council performing in their measured levels of service?	Holding or steady in all areas, except for safety measures which show deterioration on rural secondary collector and low volume roads. Decline in levels of service for footpaths to be reversed	<ul> <li>Increased LCLR safety programme and incorporate ONRC within maintenance specification</li> <li>Improvement programme for footpaths</li> </ul>
How is WDC performing relative to rural district peers using PMRT and ONRC performance measures?	<ul> <li>Safety: below peers</li> <li>Amenity: comparable to peers</li> <li>Resilience: no data</li> <li>Accessibility: no data</li> <li>Cost efficiency: above peers</li> </ul>	<ul> <li>Improved planning in programme and service delivery</li> <li>Additional staff resources to collect data for ONRC input measures</li> </ul>
What new national/regional strategic drivers have important relevance to investment on WDC's network	New GPS and adoption of Road to Zero. Consideration of Otago Regional and ECan water quality strategies	<ul> <li>Value for money across all disciplines including road safety</li> <li>Giving effect to stormwater management as required by regional councils</li> </ul>
What changes (if any) need to be considered through adoption of WDC's new procurement strategy?	New procurement strategy adopted March 2020. No significant changes.	<ul> <li>Implementing value for money and efficiency in contractual procurements</li> <li>Improvements in community consultation</li> </ul>
Are there any new risks or uncertainties that impact on the delivery of WDC's transportation programme	lack of suppliers for competitive procurement, complexities with community engagement impacting scope and timeframes, changes in Council staff etc	<ul> <li>Standardising contracts and simplifying tender processes</li> <li>Keeping contactor competition alive and well in Waitaki with 3-4 tenders per contract</li> </ul>
Have you completed your improvement programme?	Partially complete. Working progressively through priorities	Review and reprioritise improvement plan (refer to part 2)
Staff resources	Increased to give effect to improved road safety and road maintenance	Additional staff resources in maintenance to improve programming, value for money and efficiency, to assist the projects team in delivering low cost low risk improvement projects and in transport planning and asset management to lead progressive development in the District



#### Plan Framework

To achieve these purposes, this LTAMP is divided into three key sections:

# PART

## The Business Case

AUDIENCE: Investors (e.g. WAKA KOTAHI, Council, RTC, community)

**FOCUS**: To answer the 'why invest' question. Outlines the strategic context and case for WDC's investment in the Roading activity. It draws on the evidence provided in the Activity Management Plan (AMP) which prioritises and addresses key transportation issues and illustrates how assets are intended to be managed.

**CONTENT:** [1] Strategic context - Describes the assumptions of the future, risks, objectives, and underlying or umbrella strategic documents. Positions the desired objectives against the wider local, regional and national outcomes. Describes WDC's approach to AM and service delivery. [2] Strategic Assessment - Defines the strategic problems, options, benefits & consequences. Confirms the preferred option, costs, and the outcomes that will be achieved.

# PART B

## Activity Management Plan / PBC

AUDIENCE: Community; Council Reporting (Annual Plan, LTP)

**FOCUS**: Service outcomes. Provides detail around the response to the planned/assumed future state scenario. Explains what we are going to do and how we are going to do it. Extracts can be lifted for the Annual Plan and LTP.

**CONTENT:** [1] Outcomes - Identifies levels of service and stakeholder views/needs and the major gaps in service level. [2] Programme - Identifies a programme of work and activites (operations, maintenance, renewals, and new/improvement programmes) and financial forecasts to deliver on the business case. [3] Supporting evidence - Provides robust evidence that the programme represents best value for money. Identifies a list of alternatives, options, and the potential costs/risks associated with the preferred option.

# PART C

## Asset Management Plan

AUDIENCE: Transportation Staff; Contractors, Council's Executive Team

**FOCUS**: A technical document describing detailed management approaches and options for asset portfolios and activity programmes.

**CONTENT:** [1] Lifecycle Management Plans - detailed analysis of each portfolio scope, issues/service gaps, options, costs, risks and benefits. [2] AM Systems - A description of the asset management people, practices, tools and processes used to manage and deliver the activity. [3] Improvement Plan - an assessment of gaps in the AM System and description of the plan to close the gaps.



### Legislative Environment

Council has statutory responsibilities under the Local Government Act 2002 and Land Transport Management Act 2003 to provide the services for this activity. In addressing its statutory responsibilities, Council acknowledges the role of land transport in the social, economic and environmental wellbeing of the District.

A list of the specific statutory influences on land transport is provided in Part B (Activity Management Plan). Council works to ensure decision making complies with all legislative requirements.

Waitaki District Council policy is to meet legislative requirements, or exceed requirements where deemed appropriate and cost effective through Levels of Service consultation.

### Relationships with Other Council Plans

Under the Local Government Act 2002, we (the Council) are required to put together a Long-Term Plan (LTP). The LTP sets out our overall goals (community outcomes), the projects we intend to deliver over a 10-year period and how these will be funded. The Transportation Activity Management Plan (TAMP) is our tactical level plan for how the service will be managed and delivered. Review and updating of the LTP and TAMP are related and integrated within Council's operational and strategic annual and 3-year planning cycles:



Figure 4: LTP/TAMP integration with Council's operational/strategic annual/3-year planning cycles





The overall relationship of different planning documents is shown in the following figure:

Figure 5: Relationship Between Planning Documents

The interpretation of this for the Waitaki Roading service area is as follows:



Figure 6: Interpretation for the Waitaki Roading service area



#### Core and Advanced Asset Management

Within the International Infrastructure Management Manual (IIMM), there is an opportunity for the authority to state the standard to which it will undertake asset and activity management. The standards of the AMP's can be considered on a scale as follows:

- Core
- Core Plus (+)

Often referred to as basic AMP's

Comprehensive/Advanced

Transition between Core and Comprehensive/Advanced Advanced AMP, accounting for all lifecycle elements

Assessing and adopting an appropriate AMP level allows Council to identify what is "Appropriate Best Practice" for Waitaki District, and therefore focus resources accordingly to enhance prudent management of the community infrastructure.

WDC manages and resources the transportation activity at the level of Core Plus with additional emphasis above core practice in the following practice areas:

- Understanding of Assets
- Managing Growth/ Demand
- Lifecycle Decision Making
- Financial Forecasts

#### Waka Kotahi Review and Moderation & Investment Prioritisation

The GPS 2021 notes that Waka Kotahi, the NZ Police and approved organisations will use the framework in the LTMA 2003 to deliver investment across New Zealand that is prioritised and coordinated.

Section 19B of the Land Transport Management Act 2003 (LTMA) sets out the following 'Core Requirements' for the NLTP, which are summarised below:

- Giving effect to the GPS: A key consideration for the proposed Investment Prioritisation Method is to ensure that the NLTP gives effect to government priorities and direction as outlined in the GPS.
- Contributing to the purpose of the LTMA. The purpose of the LTMA is "to contribute to an effective, efficient, and safe land transport system in the public interest." To approve funding of an activity or a combination of activities, LTMA stipulates that Waka Kotahi must be satisfied that specified criteria are met, including that the proposal:
  - is included in the NLTP
  - is consistent with the GPS (as outlined above)
  - is efficient and effective
  - has been assessed (to the extent practicable) against other land transport options and alternatives, and
  - has complied with relevant consultation requirements under the LTMA 2003.
- Taking into account any Regional Land Transport Plan (RLTP) as well as any National Energy Efficiency and Conservation Strategy (NEECS), relevant National Policy Statement (NPS), relevant Regional Policy Statement (RPS) or plans in force under the Resource Management Act 1991 (RMA).

The Investment Prioritisation Method for 2021–24 NLTP has three factors, namely:

- GPS Alignment
- Scheduling
- Efficiency



# PART A: STRATEGIC BUSINESS CASE



# 1 Introduction

## 1.1 Why Is Transport Important for Waitaki?

The essential purpose of Waitaki's transport network is to enable access and is a significant and essential physical resource in the District, contributing to the social and economic well-being of residents, visitors and businesses.

The Waitaki District reaches inland from the Waitaki River mouth, up the Waitaki River Valley, through Ohau to the top of the Ahuriri River Valley and across to the Lindis Pass. It extends south down the east coast beyond Palmerston to Flag Swamp, across to Macraes and covers 714,805 hectares (7,148km2).

The main centre is Oamaru located on the east coast 1.5 hours north of Dunedin. Other urban centres in the district include Kurow, Omarama, Otematata and Palmerston. Popular holiday spots include Hampden, Kakanui, Moeraki, Lake Ohau and the Waitaki Valley. As at June 2017, Waitaki District's population was 22,200, of which 13,900 (63%) live in Oamaru. The population has increased to 23,000 after the statistics were made available in the 2018 census. This is significant as the population in the district was forecast to decline.





Figure 7: Waitaki District Location

Traditionally a rural and farming district, Waitaki's tourism market was growing rapidly prior to the onset of Covid-19. There are many attractions and activities, including beautiful lakes ideal for all sorts of water activities, ski fields, tramping, fishing and hunting, and beaches with great surf and brilliant white sand. In 2014 Lonely Planet named Oamaru NZs Coolest Town and it is, offering "*some pretty special things – the historic Victorian precinct (including Victorian Heritage Week), little blue penguins and Steampunk HQ*". Further afield we have award-winning restaurants, wineries, craft breweries and special archaeological sites.

Waitaki is the only district in the South Island that lies within two regions. A major reason for this split was the governance of the Waitaki River, which forms a political boundary between Canterbury and Otago. Therefore, the district has two regional authorities – the Otago Regional Council and the Canterbury Regional Council (ECan). In 2008 WDC aligned itself with Otago for the purposes of land transport planning so sits on the Otago Southland Regional Land Transport Committee. The reasons for this were two-fold; most of the population resides in North Otago and the bulk of the land mass is also in North Otago.

## 1.2 What we do to Deliver the Service

As a community, Waitaki is highly dependent on people and goods being able to get where they need to go using this transport network, and a well-designed and maintained roading network is the primary means of doing this. The Council delivers a fit for purpose roading network by applying life-cycle management practices to create, operate, maintain, renew and improve the existing infrastructure. We consult actively with the community about their needs and preferences:



Do vou want	🐻 Waitaki	An opportuni	ty		The co	st of
Do you want		Growth looks set to co	ntinue in Waitak	i. This will mean	improv	ement
better roads?	TE KAUNIHERA Å RÖHE O WAITAKI	more traffic on our roa tourist vehicles.	ds, especially he	avy trucks and	Every additional \$3 infrastructure equa We're proposing to	800,000 Council spends on services and tes to a 1% increase on rates overall. o spend an additional
We're at a crossroads.	Our roads in	If our investment in roading remains the improvements we can make will be	he same, across all distric xe very fi we present a	ts throughout New Zealand good case (and we think we	<ol> <li>\$2.9 million on our</li> <li>2021 to make the</li> </ol>	roads over the three years from 2018 to a improvements. Taking into account the
Council needs to decide whether to invest more money to impro Waltaki's roading network over the next hirrey ears. We this taw is a case to spandig room more, and there is more noney satisfies from the powerment. But toget this more, management with rest overback. Because the affects you, we want to hear what you this before we finalise our proposed to the government. But the store want to hear what you this before we finalise our proposed to the government.	e a nutshell - Shati Hytmys - re managed Government Nutrik - Wildhi's local modes - are managed and overlaped by the Council	Initials. But there is an opportunity for us to it our roading refunds: through increase mix of both boat rates and overtraig or funding over the coming three years ( 2021 programme). This opportunity has come about from change in now the government (VaN decides what to spend caroos the co	have one), then prove to get come ad the the transmission of the the	be very chance we will be disonal government funding acause it's a co-investment, meet the government about er words, ratepayers will ne ound 45 cents for every dol anal funding proposed, we'll ove our roads and transport ove our roads and transport ove our roads and transport ove our roads and transport over our source our source over our source our source over our source our source over our	bie government's cont to an across-the-b three years (or aro t Roading rates are) ed an indication of ho ar provided some ex f you ourrently j would pay an e for three years	ribution, this investment would equate cord rate increase of acrund 4.3%6 ver und 1.5% for each year), based on capital value. To give you withis might affect your rates, we've amples: applies: 25.1%6 extra on your rates, each year
Why does it matter?	<ul> <li>Council has more than \$827m invested in transport assets and land</li> </ul>	based on new information comparing	roads assets where it	's most needled:	<ul> <li>If you currently p annum for rated</li> </ul>	bay \$2000 per
We tend to take our reads for granted. When we have no un our cars or on our bless, we don't tend to instanty, to touting mane eaucedon - eventils minimum and accounts of the target rais the read under a convex symbol. There are arrows (1000) pool in our 1st billion to take on the armother economy and it growing expectably no re tard on the armother economy and it growing expectably no re tards on the armother economy and it growing expectably no re tards on the armother economy and it growing expectably no re tards on the armother economy and it growing expectably no re tards on the armother economy and it growing expectably no re tards on the armother economy and it growing expectably no re tards on the armother economy and it growing expectably no re tards on the armother economy and it growing expectably no re tards on the armother economy and it growing expectably no re tards on the armother economy and it growing expectably no re tards on the armother economy and it growing expectably no re tards on the armother economy and it growing expectably no re tards on the armother economy and it growing expectably no re tards on the armother economy and it growing expectably no re tards on the armother economy and it growing expectably no re tards on the armother economy and it growing expectably no re tards on the armother economy and it growing expectably no re tards on the armother economy and its growing expectably no re tards on the armother economy and its growing expectably no re tards on the armother economy and its growing expectably no re tards on the armother economy and its growing expectably no re tards on the armother economy and its growing expectably no re tards on the armother economy and the armotheco	and a set of the	Rural notads Attemptogrammenal Weight in case and an order and an order	Urban roads	Results Promand and and any More actioned transl A more condicitable action	atound sco each each year for th f you ourrently 1 \$6000 per annu you would pay a extra on your ra year for three ye	a on jour table pay a total of nm for rates, around \$87 tas each kers
While growth is great, it precents some real Our roading network is also a key player in growing challenges. Wataki's economy.	<ul> <li>We currently spend about \$10.5 million per annum maintaining and developing our roads and transport assets</li> </ul>	The start of a	n ongoins	g conversa	tion: wha	t road
The price of growth	<ul> <li>Weiteki's population is relatively small - we have a lot of roading</li> </ul>	do vou want u	is to take	?		
When Vitable's roads were organity but, no en Ties m's of natienging roads and shanging: out howe imagined how buy they would get and be larger types of visibles that would task of them. Some of these roads now struggle to cope with the nonesse in heavy staffs that to near the now stephing ends agrowing extension. They some the nonesse in the service in the normal service in works of the normal service in service in the normal service in the service in the normal service in service in	to look after, but not many nepuyers 00 - Central government me installing co-trained predicts here yound some hunding assistance for our lood mode 10 - In real terms, the government's funding assistance to waitual has gradually been declining for the	Our proposal to the government is on first step in planning for the future of a nearboard previowing one the next ten year We recently stated work on our teny- plan. As part of this process, over the coming months and into 2018 we will tailing with you not only about how we spend our roading dolling, but also at	ly the all the other facilitie sur provide throughout ars. It's important to co- ear more or less in roa invest in other servi- lobe of keeping rates at 6 So, the conversation could other services does	c and services we Wataki. noider that investing ding may affect what we loss to achieve our goal tordable. In about our roads and s not end here.	For more details or including the full business can sarkowwahaki govin z, or vi You can give feedba Roading Business Cane, WC You can complete You feedback will bu used to / government and to bell them wi	what Council is proposing to the government, is contract to at www.andhittg.gov.nr.or dir or dinase in Council, Namunation or Kurose. <b>Back Delow and return it to:</b> (X). Phante Bag Oxford), CAMARQ 10444 the Form Online: www.watabid.gov.tr.: by a disabit the papenel win make to the bar our community panters.
can also be challenging to maintain.	pasit rive years					*
How much bang are we getting for For the past five years, in real lurms, the level of Indigi assistance we get from the powerment. Unlike your of daip prove your to here of que	This indicates that satisfaction with the district's roads, especially our runal roads, is guilts low compared	My preference	Please circle or fick your want business as usual Business as usual (current investment)	professed investment for each % for seal widewing, but support Co Less than proposed investment	pe of improvement' listed in the sunci's proposed investment of Council's proposed investment	hift-hand column. For example, you may \$5,87,000 for smoothing roads. Higher than proposed investment
hase increased, along with the traffic on our marks.	500 we provide.	Widening high risk sealed	\$2,000,000	Between \$2,000,000	\$2,500,000	More than \$2,500,000
In an effort to keep up, Council has tried to scueeze as much value out of every dollar we weak this is good a support of the second a support of the	there's also an indication we could be getting better results in terms of safety and resilience on	More metal (gravel)	\$1,800,000	Between \$1,800,000	\$2,700,000	More than \$2,700,000
have available. But there is a limit to this. Using new information available from the community have been telling us our roads of	a our rural roads, and smoothness on both rural roads and urban roads.	Smoothing of rural and urban roads	\$4,331,000	Between \$4,331,000 - and \$5,831,000	\$5,831,000	More than \$5,831,000
government, we've been able to compare be better. Our annual residents' survey our roading service levels with other councils		OVERALL RATES INCREASE	NI	Between 0% and 4.35% over 3 years	4.35% over 3 years	More than 4.35% over 3 years
We agree, our roads could be better. Our roading network needs to pro smooth and safe travelling routes for motorists, pedestrians, and cycli. The question is, how much is the community prepared to spend on thi The question is, how much is the community prepared to spend on this and having roads that are fit for purpose.	ide ts alike. setment	Comment	ack by Spm Frid	ay 7 July 2017.		

Consultation undertaken in 207 for the 2018-28 LTP

This LTAMP covers all land-based transportation activities that Council pays for either fully or with assistance from Waka Kotahi. It discusses how Council assets and the functions of an RCA can best be managed and delivered to meet our community outcomes and the five key outcomes being targeted nationally for the transportation network:

RESILIENCE of the route

SAFETY

- AMENITY travel quality and aesthetics
- > ACCESSIBILITY land use access and network connectivity
- ➢ COST EFFICIENCY



Function	Council Assets / Services Provided	Outcomes Achieved by Operations, Maintenance, Renewals
	Development of the transportation and traffic networks Maintenance and renewal of: • Sealed roads • Unsealed roads • Drainage • Bridges & other structures • Traffic services including lighting, signage, road marking, & road furniture Maintenance of the road reserve including: • Mowing, weed spraying • Sweeping and cleaning (e.g. litter & graffiti removal) Safety improvement works Planning and management to ensure the transportation system is integrated with land use and able to cope with future needs Issue access and use permits Maintenance and renewal of: • Car parks • Meters	Resilience – providing drainage and road support structures to reduce risk of interruption to travel during high rainfall events – includes providing resilience for the state highway in the event of closures Accessibility – renewed bridges allow for HPMV, 50MAX and Class 1 heavy vehicle access to productive land Accessibility – road network is easy to navigate through well maintained directional and guidance signage Safety – reduction in crashes due to fit for purpose road surfaces, intersection improvements, guardrails, lighting, road marking, signs Amenity – comfortable journey provided by pavement rehabilitation, reseals & maintenance Amenity – road network kept tidy and functional by keeping vegetation controlled, graffiti removed and roadside furniture maintained Safety – on and off-street parking facilities to ease the safe movement of passenger vehicles within urban transport networks Accessibility – Car parking availability within the CBD is also an important factor to ensure the access to local businesses and viability of the local economy as a whole
ず <b>济</b>	<ul> <li>Maintenance and renewal of:</li> <li>Cycle ways</li> <li>Cycle lanes</li> <li>Footpaths</li> <li>Maintenance of the road reserve including:</li> <li>Sweeping and cleaning (e.g. litter and graffiti removal)</li> <li>Safety improvements</li> </ul>	Safety – vulnerable user accidents reduced by providing paths separated from other traffic Safety – shared footpaths for pedestrians and cyclists to be identified which is aligned with a mode neutral approach to the transport network Amenity – cycling and walking paths kept tidy and functional by keeping vegetation controlled, graffiti removed and roadside furniture maintained

#### Table 5: Land-based Transportation Activities

The network also provides an important "place" function and role in provision of other services to the community:

- + **Streetscape and sense of place**. Road corridors constitute the largest public space in the district and are an important amenity space used for beautification (planting and public art), community interaction, recreation and commerce (al-fresco dining, road-side stalls, etc.)
- + **Stormwater Management**. Road corridors are important for urban and rural stormwater management, providing overland flow paths, detention, and infiltration opportunity.
- + **Utility corridors**: provision of essential services including maintenance and installation of power, telecommunications and water, storm water and wastewater. Also allows for installation of private infrastructure including pipelines and stock underpasses.



+ **Fire breaks:** these are essential to safety and community well-being of smaller rural communities e.g. Shag Point has one road entry and exit, is built above a coal mine and has a comprehensive fire evacuation plan when required.

These assets and services are managed by Council's Roading Department. The team provides professional engineering and management services to all roading asset-based activities, and is supplemented by professional services providers for technical, design and asset management input. The physical works required to deliver the assets and services are completed through various short and long term physical works contracts.

#### 1.3 Organisational Structure

Our organisational structures is shown below. The transportation team report to the Roading Manager who is part of the overall governance group:





#### 1.4 Building on the Progress Made Under the 2018/21 AMP

Otago Regional Council adopted their RLTP 2018-21 in April 2018. Waka Kotahi made its funding National Land Transport Programme decisions that same month, and approved organisations began implementing their approved projects and activities from July 2018.

In the three years since then, the following outcomes have been achieved:

: Very successful ]



[ Key:

- 1 There has been considerable focus on undertaking good planning
  - ONRC has been embedded into decision making and prioritisation of both short and longterm programmes
  - RAMM data quality and completeness has improved considerably and is now managed in house with assistance from external providers
- 2 Planned strategic initiatives have been completed, with mostly positive outcomes: The Land Transport Strategy has been reviewed and updated to reflect the current and future needs of the Waitaki District

: Successful

Table 6: Summary of 2018-21 Strategic Activity Outcomes

: Mixed success

	<u> </u>		
	Activity / Programme	Outcome	Status / 2021-24 Proposal
Safety	Improvements		
1.	Community Road Safety Activities	<b>.</b>	Continue (modified)
2.	Targeted Seal Widening	$\odot$	Continue (review priorities)
3.	Targeted Intersection Treatments	$\bigcirc$	Continue (review priorities)
Resilie	nce Improvements		
1.	Rural drainage improvements	$\bigcirc$	Continue
2.	River Training		Complete
3.	Small Timber Bridge Replacements	$\bigcirc$	Continue
4.	Unsealed Road Strengthening	$\odot$	Continue (modified)
5.	Aggregate Source Acquisitions	$\bigcirc$	Continue
6.	Kakanui Point Bridge Replacement	-	Deferred to 2021-24 Program
7.	Springfield Road Raising (above flood level)	$\bigcirc$	Complete
8.	Waianakarua Road Re-alignment		Deferred with drainage improvements.
9.	Coastal Roads Protection Strategy	$\odot$	Continue
Efficier	cy Improvements		
1.	Streetlighting LED & CMS Upgrade		Complete
2.	Unsealed Road Intersection Sealing	$\bigcirc$	Continue
3.	Moeraki Boulders Access Improvements	$\odot$	Complete
4.	Walking & Cycling Improvements		Revisit. Focus on urban footpaths & mobility improvements
5.	Customer Connections App	$\bigcirc$	Continue (as BAU)
Networ	k & Asset Management		
1.	Roading Network Plan		Expand into a Land Transport Strategy





[Key:	: Mixed success : Success	ıful 💽	: Very successful ]
	Activity / Programme	Outcome	Status / 2021-24 Proposal
2.	Collaboration in Asset Management Delivery	$\odot$	Continue (as BAU)
3.	In-house RAMM maintenance and updates	$\bigcirc$	Continue (as BAU)
4.	Enhanced Traffic Counting Programme	$\bigcirc$	Continue (as BAU)
5.	dTims Modelling	$\odot$	Continue (3-yearly as BAU) and commence for unsealed roads as well
Routine	e Maintenance Strategies		
1.	Unsealed metalling Prioritisation Framework	$\bigcirc$	Continue (as BAU)
2.	Use of Cold-Mix Asphalt in Repairs	$\odot$	Continue (as BAU)
3.	Unsealed Road Dust Mitigation Treatments		Continue selected trials
4.	Roadmarking LOS Alignment with ONRC	$\overline{\mathbf{C}}$	Continue (as BAU)
5.	Bridge Timber Component Recycling		Continue (as BAU)

## 1.5 Our Key Partners and Stakeholders

Delivering transportation outcomes have far reaching results in terms of social, economic and environmental factors. This is supported by the overlaps the transportation activity has with other Council activities, for example, district planning, economic development and community services.

Our key partners are those groups or organisations that we are aligned with as owners of the transportation issues in our region and district. Engagement with external partners is achieved through joint planning and programmes at the national, regional, sub-regional and local level.

Our key stakeholders are those groups or individuals who can help us to focus our strategic planning on the right things. They have information and knowledge to help us make better decisions.

In terms of setting the strategic context and direction for the LTAMP our key partners and stakeholders and their reason for involvement are shown in the tables below.

Partners	Knowledge/Involvement
Waka Kotahi New Zealand Transport Agency (WK Waka Kotahi)	Funding partner – FAR subsidy rate 55% and increasing to 57% for 2021-24
	Sets out the activities that can receive funding from the National Land Transport Fund under the Land Transport Management Act.
	Provides a vital link between government policy making and the operation of the transport sector.
	Highways and Network Operations (HNO) division manages the maintenance, operations and renewals of State Highways that run through Waitaki, providing connectivity to other parts of the Otago and Canterbury regions and beyond. WK Waka Kotahi and WDC operate a maintenance boundary agreement and hold regular operational liaison meetings.

#### Table 7: Key partners



Partners	Knowledge/Involvement
Road Efficiency Group (REG)	Providing support and tools for implementing One Network Road Classification (ONRC) and Business Case Approach (BCA) Activity Management Plans (AMPs).
Road Controlling Authorities Forum New Zealand (RCAF)	RCAF is a closed, non-political group with representatives from the 73 territorial local authorities, the Department of Conservation, Local Government New Zealand and Waka Kotahi. Its purpose is to assist Road Controlling Authorities (RCAs) to make informed decisions, through information exchange, working groups, legislation, standards and guidelines, highway and procurement strategies etc.
Otago & Southland Regional Councils	Sets the direction for the region's land transport system for the next 30 years through the Regional Land Transport Strategy.
Regional Land Transport Committee (RLTC)	Committee includes regional councillors and appointees from transport interests and other councils in the region. The aim is to prepare both the Regional Land Transport Strategy and the Regional Land Transport Plan for approval by the Regional Council, and consider other issues related to land transport which have a regional impact.
Dunedin CC Central Otago DC, Queenstown Lakes DC	Neighbouring RCA's with whom we have a strong strategic alignment.
Westland DC Mackenzie DC, Waimate DC	Westland, Mackenzie, Waimate are not part of the Otago Southland RTC so contact is minimal.

#### Table 8: Key Stakeholders

Stakeholders	Knowledge/Involvement
Single end users	Extent of Network Policy applies for road use and maintenance where they are the only end user, primarily farmers and forestry companies.
	Oceania Gold (gold extraction and processing at Macraes in the Waihemo area) maintain roads as required by their land-use resource consent.
	Meridian Energy (energy generation in the Waitaki Valley) require WDC to maintain their roads by road deed as agreed by CEO and the SOE.
Forestry companies:	Council notification for harvesting activity.
Maraeweka Forests Ltd	Individual stakeholder meetings with transport team as and when appropriate. There is currently no fixed meeting schedule for this.
Blakely Pacific	
Invercargill Forests	
<b>Māori stakeholders</b> : Nga Tahu	Contribution to the cultural processes – site blessings for significant work. Environmental impacts. Liaison with ORC regarding river metal extraction. Te Rūnanga o Moeraki is local contact with which Council has a Memorandum of Understanding.



Stakeholders	Knowledge/Involvement
<b>Road User Groups</b> Heavy Haulage Assn. AA	Council has regular meeting with road safety partners and other stakeholders as appropriate. There is currently no fixed meeting schedule for this.
Utility Companies	Annual or at least Bi-Annual meetings including awareness and requirements of Oamaru's archaeological authority.



## 2 The Strategic Context

The local road network is the largest value social asset in Waitaki. All journeys in Waitaki use some elements of the local road network and is therefore critical to our community and economy. We rely on the network of roads to keep people safe, connected, provide access to employment, education and health services, and getting our goods to market. How the roads are maintained and renewed are a crucial foundational element to enable our district to prosper.

This business case considers the Governments Policy Statement on Land Transport, the Waka Kotahi's Arataki plan for the land transport system 2021-31, and the regional land transport plan.

This TAMP has been prepared to align with the national and regional strategic context that it sits within. The diagram below shows how national and regional strategic documents provide strategic context feeding into Council's planning and activity management approach. The following section describes this strategic context in more detail.



Figure 9: National and Regional Strategic Context in relation to Local Context

We seek investment to give effect to the objectives and priorities of the new government's draft Government Policy Statement (GPS) on Land Transport 2021.



### 2.1 National Context

The purpose of the national land transport system is to improve people's wellbeing, and the liveability of places. It does this by contributing to five key outcomes: healthy and safe people; environmental sustainability; resilience and security; economic prosperity; and inclusive access. The maintenance and renewals programme has linkages to the GPS primarily through contributing to the underlying delivery of healthy and safe people and resilience and security, but investment in maintenance and renewals also supports economic prosperity and environmental sustainability.



Because a good deal of the investment is provided by central government (from petrol excise duties and road user charges) the government wants to see that its strategic priorities are reflected in local

plans. Nationally and regionally there is a focus on the role of land transport in supporting and growing the economy; this is balanced with a constrained economic environment and goal of moving towards a low carbon transport system.

The strategic priorities in GPS 2020 are:

- Safety
- Better Travel Options
- Improving Freight Connections
- Climate Change (Low Carbon Transport System)

The Ministry of Transport expects that technological change and managing the impacts of climate change are the most significant drivers that will shape the future land transport system.





The Government provides further direction for investment in Land Transport through a combination of legislation, strategies and statements:

#### Table 9: Further Government Legislation, Strategies and Statements

Reference	Objective
Land Transport Management Act 2003 Land Transport Amendment Act 2008 Land Transport Amendment Act 2013	<ul> <li>Objectives stated include:</li> <li>Ensuring environmental sustainability</li> <li>Assisting economic development</li> <li>Assisting safety and personal security</li> <li>Improving access and mobility</li> <li>Protecting and promoting public health</li> <li>Simplifies the planning and funding framework of the Land Transport Management Act 2003.</li> </ul>
ARATAKI TO TĂTOU MAHERE MÕ TE PŮNAHA WAKA WHENUA WHENUA	Arataki presents Waka Kotahi NZ Transport Agency's 10-year view of what is needed to deliver on the government's current priorities and long-term outcomes for the land transport system. Gaps identified for investment in Otago are shown in the figure adjacent, illustrating the level of emphasis that Waka Kotahi is placing on each. Otago's safety record is poor with issues on high-risk rural roads, at high-risk urban intersections, and in urban areas with high numbers of vulnerable users. Coastal erosion along SH1, north of Dunedin along the Kaitiki Straight, and potential seismic events on the Alpine Fault are key challenges for maintaining system resilience and managing the impacts of climate change.
ROAD TO ZERCJ	Road Safety Strategy: "A New Zealand where no one is killed or seriously injured in road crashes. This means that no death or serious injury while travelling on our roads is acceptable". Road to Zero: New Zealand's road safety strategy for 2020-2030 and advocates for a Safe System approach to road safety. It contains 15 initial actions within each of Road to Zero's five focus areas. The initial action plan will last for three years (1 January 2020 to 31 December 2022), although delivery of some of the initial actions will continue over the term of the strategy. Progress on each of the 15 actions will be key to laying the foundations for Road to Zero's 10-year change programme
NEW ZEALAND INFRASTRUCTURE COMMISSION Te Waihanga	<ul> <li>National Infrastructure Plan: The purpose of the Thirty-Year New Zealand Infrastructure Plan 2015 is to help navigate our way through these challenges and grasp the opportunities they present.</li> <li>To achieve this purpose, the Plan sets out a vision that: By 2045 New Zealand's infrastructure will be resilient and co-ordinated and contribute to a strong economy and high living standards.</li> </ul>
Ť	The One Network Road Classification (ONRC) has been adopted by the roading sector for national consistency of the level of service delivered by a network. It is a minimum requirement that the ONRC is embedded in investment decision making for the 2021-24 NLTP. The One Network Framework (ONF) will replace the ONRC in the future, but is currently voluntary. Waitaki has not implemented it due to the lack of time in this planning period to properly assess its impacts.


Reference		Objecti	ve				
	The ONRC classifications are based on a number of different factors. A short						
	description for each classification is included in the table below.						
	CLASSIFICATION	DESCRIPTION	ANNUAL AVERAGE DAILY TRAFFIC (AADT)		HEAVY COMMERCIAL		
			URBAN	RURAL	VEHICLES		
	NATIONAL (HIGH VOLUME)	As below but higher traffic volumes	> 35,000	> 20,000	> 1,200		
	NATIONAL	Link major population centres and transport hubs	> 25,000	> 15,000	> 800		
	REGIONAL	Major connectors between regions; often PT routes	> 15,000	> 10,000	> 400		
	ARTERIAL	Link regionally significant places and industries	> 5,000	> 3,000	> 300		
	PRIMARY COLLECTOR	Link significant local populations and industries	> 3,000	> 1,000	> 150		
	COLLECTOR	Provide secondary routes, can be only route in some places	> 1,000	> 200	> 25		
	ACCESS	Small roads facilitating daily activities	> 1,000	> 200	< 25		
	ACCESS (LOW VOLUME)	As above but low traffic volumes	> 200	> 50	< 25		
	<ul> <li>have been developed. CLoS will vary based on the road classification, and are defined as follows:</li> <li>TRAVEL TIME RELIABILITY – The consistency of travel times that road users approach.</li> </ul>						
	<ul> <li>RESILIENCE – The availability and restoration of each road when there is a weather or emergency event (unplanned), whether there is an alternative route available and the road user information provided</li> </ul>						
	<ul> <li>SAFETY – How road users experience the safety of the road</li> <li>AMENITY</li> </ul>						
	+ Travel Quality - The level of comfort experienced by the road user						
	<ul> <li><i>Travel Aesthetics</i> - The aesthetic aspects of the road environment (e.g. cleanliness, comfort, convenience, security) that impact on the travel experience of the road users in the road corridor</li> </ul>						
	ACCESSIE	BILITY – The ease with which	people can	reach key de	stination		
Investment Decision Making Framework (IDMF).	This includes the	benefits framework for invest	ment.				

#### 2.1.1 COVID-19

Waka Kotahi have published likely COVID-19 implications for New Zealand's communities and economy in ARATAKI V2. Waka Kotahi recommends planning for Treasury Budget Forecast Scenario 5 (slower recovery):

- A deep V-shaped global recession is expected over the next 12-18 months, but there is a significant downside risk that it will be a deeper 'U' shape recession
- World trade estimated to decline 10-20% over 2020/21 and trade growth may not return to its previous rate over long-term due to protectionist policies, reduced airline capacity and supply chain restructuring
- Significant short-term negative impact of COVID on key service industries, such as tourism, retail, rental services and transport, while other industries such as agriculture and health are reasonably insulated
- International tourism is not likely to recover for at least 18 months beyond what is possible through a Trans-Tasman-Pacific bubble
- Considerable uncertainty about the medium and long-term impacts.

Otago employment estimates for 2021 and 2031 are shown below:





#### Employment relative to BAU, 2031, major industries, Slower Recovery Scenario

-2.5% -2.0% -1.5% -1.0% -0.5% 0.0% 0.5% 1.0% 1.5% 2.0% 2.5%



Figure 10: Otago Employment Estimates for 2021 and 2031



# 2.2 Otago Southland Regional Context

#### 2.2.1 Otago's Regional Transport Network at a Glance

Otago and Southland are the southernmost regions in New Zealand, together comprising nearly half of the South Island's land area and are similar in size. They are among the largest regions in New Zealand. Southland's land area is 34,000 km2 and Otago's is 32,000 km2.

Stretching from the Waitaki River in the north to the Brother's Point / Waiparau Head in the Catlins, Otago is bounded by the Southland, Canterbury and West Coast regions, and to the east by the Pacific Ocean.

The economy of the Otago/Southland region relies largely on agriculture and other primary industry, and on downstream manufacturing industries. These industries are heavily dependent on land transport infrastructure for their continued economic growth.

Both Otago and Southland also have a strong tourism industry, with the coastal, lake and mountain areas and scenery being major attractions. Tourism is one of the three fastest growing sectors of the combined regions' economies and depends on the road network. Tourism growth (particularly from international visitors accessing southern New Zealand through Queenstown) is projected to continue to increase.

Land transport in Otago and Southland is mainly road-based and focused on the use of private cars and trucks. In Otago, there are:



KILOMETRES OF NETWORK IN REGION 2016/17<sup>29+30</sup>

STATE HWYS

ROADS

**PERCENTAGE OF KILOMETRES** 

**TRAVELLED** 2016/17<sup>39</sup>

1,301 km of state highway (12%) (managed by Waka Kotahi)

- 9,207 km of local roads (88%) (managed by TAs), 39.5 per cent of which is sealed
  - 284 km of main trunk rail line and 10 km of branch line
- Three urban bus networks (Dunedin, Queenstown & Invercargill) and long-distance buses between Otago towns and to other regions.

It is likely that road transport will continue to be the primary mode of transport in the years to come. The extensive local network across the region is therefore vital for travel across the large land area, and for carrying freight link between farm gate and the state highway network.

The key inter-regional journeys in Otago are the north and south road and rail connections to Canterbury and Southland respectively, and the road corridors that link Queenstown to Milford Sound and other key tourist destinations across the South Island. High-quality access to the port and airport in Dunedin is important to the success of the wider Otago, and Southland, economies.





Figure 11: South Island Strategic Connections

#### 2.2.2 Main Generators of Transport Demand

Otago's economy is dominated by the accommodation, food service and education sectors, reflecting the importance of tourism and Dunedin's educational assets (the University of Otago alone has been estimated to contribute to around 15% of the city's GDP). In rural areas, primary production and processing continue to be the key economic drivers.



Figure 12: Otago Travel Demand Generators (Source: 2020 ARATAKI)

Tourism and freight are major sources of traffic on the transport network, although their travel needs are different. Freight trips are time dependant, while tourists can take their time, have multiple stops and drive at slower speeds.



The region is a large producer of high-volume and value dairy products, vegetables, grains, fruits, logs, processed wood products, minerals, aggregates, seafood, livestock and meat, wine and general freight. These supply local and export markets.

#### 2.2.3 Otago Regional Transport Performance and Pressures

Challenges throughout Otago include a very large land area and road network but comparatively low rating population in many areas. For the majority of the region, the major emphasis in Activity Management Plans is on maintaining and operating the roading networks, in most cases to existing levels of service. Providing funds to keep the network at similar levels of service to those that exist today is a major challenge. Council is looking to improve levels of service within a restricted investment environment.

The Otago transport system is largely fit for purpose, with much of the system providing good capacity and reliable travel times on a day-to-day basis. While some parts of the system are subject to resilience issues and disruption, particularly during winter storms, there are appropriate alternate routes in most locations.



Figure 13: Otago Regional Statistics

#### 2.2.4 Regional Transport Priorities and Objectives

Arataki and the Otago Southland Regional Land Transport Plan (OSRLTP) set out the region's land transport objectives, policies, and measures for the next 10 financial years. The direction set by these documents are an essential part of the strategic context for this land transport investment proposal.

#### Arataki:

At a glance, Waka Kotahi's focus in Otago will be on supporting urban development in Dunedin and Queenstown to enable thriving communities and encourage increased use of public transport, walking and cycling. Across the region (WK Waka Kotahi) will work to create a safer, more resilient land transport system, that supports economic and regional growth, maintains critical connections and provides appropriate levels of service across all transport networks:



# TRANSFORM URBAN MOBILITY (Medium Priority)

Projected population growth in the region will increase travel demand on the regions networks and provides opportunities to support increased use of public transport, walking and cycling.

(WK Waka Kotahi) will support improvements to walking and cycling networks, with a focus on providing safe and efficient access to, and within, activity centres and schools, and connecting and expanding existing infrastructure to provide better connected networks





(WK Waka Kotahi) will support a well-integrated and well-designed land-use and transport system to make ... great cities to live, work and play... and will continue to strengthen the partnership between the Transport Agency and councils through planning work with central Government and other local bodies.

(WK Waka Kotahi) recognise the potential for growth in and around Otago to support safe and thriving cities, with increased access to public transport, walking and cycling options and reduced carbon emissions. (WK Waka Kotahi) will engage in planning processes to support a well-integrated and well-designed land-use and transport system that:

- enhances existing communities, making them a better place to work, live and play
- supports an increase in active modes, including trips by foot, bike and e-scooter etc
- reduces the need to travel long distances to access employment and services
- results in lower emissions per capita
- maintains or improves the safety and efficiency of the transport system.





(WK Waka Kotahi) will continue to work to understand the opportunities to support climate change adaptation and mitigation.

ADAPTATION will focus on:

- engaging in area and climate change planning to discourage infrastructure and development happening in high-risk locations.
- · Investigating options for alternate routes that are less likely to be impacted by sea level rise
- seeking continuous improvement in network resilience through maintenance and renewals
- engaging in long-term strategic planning to respond to the vulnerability of existing assets
- enabling quick recovery following disruption to the land transport system.

MITIGATION will focus on:

- ensuring climate change and carbon emission targets are embedded in the Regional Land Transport Plan
- supporting walking, cycling and lower emission modes.

# SIGNIFICANTLY REDUCE HARMS (Medium Priority)

Otago's safety record is poor with issues on high-risk rural roads and intersections, at high-risk urban intersections, and in urban areas with high numbers of vulnerable users. (WK Waka Kotahi) will support implementation of the Road to Zero Safety Strategy for New Zealand and regional strategies, with an emphasis on:



- safety treatments targeting high-risk rural and urban intersections, and run-off road and head-on crashes on high-risk rural roads
- infrastructure improvements to provide safe walking and cycle trips
- speed management to provide safe and appropriate speeds on high-risk rural roads, at high-risk urban intersections, and in urban areas with high numbers of vulnerable users.

(WK Waka Kotahi's) approach to delivering better health outcomes, particularly the reduction of harmful emissions, will primarily be through initiatives that target other step changes, including improved urban form, increasing access to and use of walking and cycling, and efforts to reduce carbon emissions. (WK Waka Kotahi) will also continue to work to ensure that the noise impacts of transport are appropriately managed through a mix of land-use planning and mitigation works.



Figure 14: State Highway Investment Priorities

#### Current Otago Southland Regional Land Transport Outcomes Framework

The goal of providing the regional land transport network is to support the prosperity and health of the regional community and economy.



#### The purpose of Otago's land transport system is to improve people's wellbeing, and the liveability of places

Inclusive access

Healthy and safe people

Environmental sustainability Resilience and security

Economic prosperity

#### Regional Land Transport Plan – 30-year vision

provide accessible transport connections, giving users an appropriate choice of modes, and to gain improved performance from the land transport system

Strategic objectives – What the region will do to deliver the 30-year vision and Outcomes

#### SAFETY

The social cost of crashes and accidents is substantially reduced

#### ENVIRONMENT

FIT FOR PURPOSE

community resilience

Negative effects of the transport system on the environment are minimised

Transport services and infrastructure are delivered to

the right level using the ONRC framework at best cost

The network is reliable and resilient, helping

# EFFICIENT

Transport services and infrastructure support economic productivity and growth

### RESPONSIVE

Being able to access the network, no matter what their mode, in a manner that is convenient and affordable for funders and users

#### Headline targets

<ol> <li>Maintain current network(s)         <ul> <li>a. Effective activity management planning</li> <li>b. implement ONRC requirements</li> <li>c. undertake ONRC monitoring</li> </ul> </li> </ol>	<ul> <li>2. Enhance network performance and reduce cost <ul> <li>a. Ensure travel time reliability</li> <li>b. Improve network resilience</li> <li>c. Improve mode neutrality in urban areas</li> </ul> </li> </ul>	<ol> <li>Increase economic growth and productivity         <ul> <li>a. Improve accessibility and connectivity</li> <li>b. Increase walking and cycling tourism trails and rides.</li> </ul> </li> </ol>
<ul> <li>4. Improve safety <ul> <li>a. Change driver attitudes and behaviours</li> <li>b. reduce social and economic costs of crashes</li> <li>c. Reduce the number of deaths and serious injuries on the network</li> </ul> </li> </ul>	<ul> <li>5. Increase communication and technology solutions <ul> <li>a. Promote mobility as a service &amp; digital integration of transport services</li> <li>b. increased and timely use of data in decision-making</li> <li>c. Effectively communicate network disruption to users</li> </ul> </li> </ul>	<ol> <li>Improve support of certain customer groups</li> <li>a. Improve road safety for and of visiting drivers on main tourist routes in Otago</li> <li>b. Meet the internal freight task &amp; support efficient freight movement despite resilience issues.</li> </ol>
<ul> <li>7. Increase partnership and adaptive management         <ul> <li>a. making submissions and representations</li> </ul> </li> </ul>	<ul> <li>8. Increase wellbeing, health and environmental management</li> <li>a. support use of active travel modes</li> <li>b. preserve biodiversity</li> </ul>	<ul><li>9. Enhance community resilience and cohesion</li><li>a. Invest in network improvements</li></ul>

- b. collaborative effort.
- c. reduce pollution & GHGs
- d. reduce resource consumption.

Figure 15: Otago Southland Regional Land Transport Outcomes Framework

The enabling regional strategies and transport Policies of the Otago Regional Council are included in Appendix 1.



## 2.3 Waitaki Local Context





#### 2.3.1 Community Context

Waitaki District Council was established in 1989 when it replaced the Oamaru Borough, Waitaki County and Waihemo County Councils. The Council's vision for success is:

COMMUNITY OUTCOME		WHAT SUCCESS LOOKS LIKE
	Business opportunities "We enable opportunities for new and existing business"	<ul> <li>We plan ahead to ensure there is sufficient land available to meet development demands;</li> <li>We provide key infrastructure that meets business and industry requirements;</li> <li>We make Council processes easy for business;</li> <li>There is a consistent and fair regulatory environment – barriers, costs, risks and uncertainties are minimised where practical;</li> <li>We advocate in areas that maximise economic opportunity and benefits for the district;</li> <li>We show leadership – partnership and facilitation;</li> <li>We celebrate and promote business innovation and success.</li> </ul>
SOCIAL AND Cultural	Affordability "We keep our district affordable"	<ul> <li>We carefully balance the needs and wants of our community responsively (prudent);</li> <li>We recognise the large geographical area and small rating base of our district;</li> <li>We seek alternative funding sources where possible to complement the provision and delivery of our services.</li> </ul>
	Access to services and facilities "We provide and enable services and facilities so people want to stay and move here"	<ul> <li>There is a higher proportion of the resident population under 50 years old;</li> <li>We manage public infrastructure to ensure it is sustainable, and to standard to meet the present and future needs of our residents and visitors;</li> <li>We promote quality urban design in our district's communities;</li> <li>We have attractive and liveable townships and communities;</li> <li>We value our culture, arts and heritage;</li> <li>Our public places and civic facilities are accessible, welcoming and vibrant;</li> <li>Our rubic placies and attractions are welcoming, attractive and meet demand of a growing tourism base;</li> <li>There are increasing visitor numbers;</li> <li>We celebrate and sell our story.</li> </ul>
	Diverse community "We understand the diverse needs of our community"	<ul> <li>We have a range and choice of housing options;</li> <li>There are strong community connections and participation rates;</li> <li>We understand the needs of our communities – changing age structure and a multicultural society;</li> <li>There are increased joint projects and initiatives with partners and organisations.</li> </ul>
<u> </u>	Safe community "We maintain the safest community we can"	<ul> <li>We manage Council infrastructure and community facilities to ensure the safety of ratepayers and visitors;</li> <li>Individuals and families feel safe;</li> <li>We are responsive and prepared for natural hazard events;</li> <li>We are responsive to climate change implications on the district's public infrastructure;</li> <li>We are aware of and responsive to central and regional government obligations.</li> </ul>
	Environmental protection and value "Waitaki's distinctive environment is valued and protected"	<ul> <li>Our community respects our natural resources and how they interact with these (e.g. water, waste, energy, climate change, natural hazards);</li> <li>We are aware of and responsive to central and regional government obligations;</li> <li>Our District Plan provisions ensure the sustainable management of our land use, and subdivision of land;</li> <li>Significant areas, features and landscapes are recognised and protected through the District Plan;</li> <li>Land area with native vegetation under protection and those with significant native plants and animals is not declining.</li> </ul>

#### 2.3.2 Infrastructural Context

<u>TOPOGRAPHY</u>: The terrain in the Waitaki District varies from flat on the Waitaki Plains through to rolling in Corriedale and steep in the Kakanui Mountains. The roading conditions are varied with the use of asphalt on a few of the busier streets in Oamaru and the remainder of the 778km of the sealed network surfaced with chip seal. The 1,022km of unsealed network is generally narrow and presents some challenges to the wide agricultural equipment used. Council has a good supply of aggregate as it has its own quarries and is not reliant on the supply of expensive crushed aggregate. Of the 181 bridges and large culverts, Council has 15 posted bridges and has an upgrade programme in place for their renewal, strengthening or upgrade.

<u>CLIMATE</u>: In the 1990's, North Otago had a dry climate with an average rainfall of 550mm per year. Since then, with the advent of climate change, the climate in North Otago has changed. Rainfall is higher and is more erratic with severe weather events experienced every few years. This has impacted on the maintenance programme; approximately \$7.6M since 2007.

<u>NATURAL HAZARDS and RESILIENCE</u>: Waitaki faces a range of effects from climate change. Sea level rise, flooding, and storms are predicted to intensify over the next 30 years along with increased slips and erosion, increasing risk to communities and the road networks that support them. The main affected areas are Corriedale and Waihemo Wards. Council has developed low cost solutions to reduce the impacts.

<u>COMMUNITIES and INDUSTRY</u>: are sparsely distributed and diverse. The Waitaki District reaches inland from the Waitaki River mouth, up the Waitaki River Valley, through Ohau to the top of the Ahuriri River Valley to Lindis Pass. It extends south down the east coast beyond Palmerston to Flag Swamp, across to Macraes and covers 714,805 hectares (7,148km2).



The main centre is Oamaru located on the east coast 1 hour north of Dunedin. Other urban centres in the district include Kurow, Omarama, Otematata and Palmerston. Popular holiday spots include Hampden, Kakanui, Moeraki, Lake Ohau and the Waitaki Valley. As at June 2017, Waitaki District's population is 22,200, of which 13,900 (63%) live in Oamaru.



Figure 16: Waitaki Economic Activity and Financials

In the last few years Waitaki district's population and building activity has grown at faster rate than assumed in strategic planning. In the case of the resident population, this increase comes after periods of much lower growth.

Variable	2013 (SNZ)	Projections (2018)	Actual (2018)	Comment on growth between 2013 and 2018
Resident population	21,400 (21,280)	21,450	23,000	The actual population growth (1,600) was much higher than estimated (170) – this is due to the change in migration trends. The population growth between 2013 & 2018 was very close to the increase projected under the SNZ High series (1,400).
Dwellings	10,850	11,170	11,440	The increase in total houses (590) was higher than projected
Resident houses	9,240	9,490	10,330	(320) due to higher than projected population growth. The number of holiday houses decreased due to a higher proportion of the bousing stock being used by the resident population
Holiday houses	1,620	1,690	1,110	instead of as holiday houses.

Table 10: Population and Building Activity

Waitaki's economy is driven by primary production and tourism. Output from these base layer sectors have all increased considerably since 2000, most noticeably the mining, tourism and agriculture sectors. The mining sector is the largest portion of the base layer making up over a quarter of the district's GDP, however, the jobs into the sector are much lower at less than 5%. The growth in this base layer can be linked in some way to enabling projects that Council have been involved in; the NOIC irrigation scheme, Steampunk and Alps to Ocean tourism initiatives, and supporting Oceania Gold and other business in these key sectors.

The remaining sectors have also grown in GDP and/or jobs with the most significant growth in the construction and health sectors. The remaining sectors make up less than half the district's



GDP, again highlighting the importance of the base layer of the economic pyramid shown below.









- **TOURISM**: is Waitaki's fastest growing industry, pre Covid-19, and is an emerging issue for WDC & there is demand from the community for increased input into road safety, and for more associated infrastructure such as car parks, rest areas and public facilities. International tourism will continue to strengthen Waitaki's economy although future growth may be impacted by the impact of COVID-19 and climate conscious consumers' reluctance to travel long distance by air.
- AGRICULTURE: is Waitaki's largest contributor to GDP and a significant driver of ongoing growth is new irrigation. The NORTH OTAGO IRRIGATION COMPANY (NOIC) presently has consent for the supply of water to 31,000ha and has double this to 68,000ha. This expansion will enable increasingly intensive land use needing the support of a resilient network and expanded HPMV capability. Sheep and beef farming, along with fruit growing are likely to remain important contributors to the regional economy.
- HYDRO ELECTICITY: Meridian Energy provides surety and income for WDC roading as they pay 8% of the roading rate. Employment in the electricity industry is increasing and manufacturing and health will continue to be important. There are no major investment liabilities expected in relation to this contribution during this NLTP period.
- MINING: Extension of a land use consent of 25 years for Oceana Gold provides surety and income for WDC roading as they pay 5% of roading rate. There are no major investment liabilities expected in relation to this contribution during this NLTP period. Oceana Gold is a significant contributor and provides 31.5% to the Waitaki District GDP.





Figure 17: Waitaki's Economic Pyramid – 2000, 2008 & 2028



#### 2.3.3 Transport in Waitaki

The Waitaki District covers 7,152 km2 and is sparsely populated. Our network is characterised as a rural, low volume network comprised predominantly of unsealed roads that provide effective access to properties and people.

- Council maintains 1,800km of road, of which 1,022km (57%) is unsealed
- 90% of roads are rural, and 70% of all vehicle km travelled is on rural roads
- Over 94% of roads have traffic volumes of less than 500 vehicles per day
- Over 85% of the roads within the District are owned and operated by Council, with the NZ Transport Agency operating the remaining 15% as state highways.
- Walking and cycling is a comparatively small mode of transport but is an increasingly important part of the urban transport network, especially as our population ages.

<u>Transport in Waitaki</u> is dominated by personal vehicle travel, and freight transport servicing the agricultural and mining sectors:



Figure 18: Transport Network in Waitaki

#### Table 11: Transportation Modes

The South Island Freight Study anticipates a significant increase in freight by 2043 with the strongest growth between 2012 and 2027. Changing how freight moves region-wide is an issue that presents an opportunity to shift from the road network to rail or sea. The transportation of freight is currently dominated by road at 91.4%.
 Most of the region's population is concentrated in a few urban centres, and public transport networks provide some mode choice in these areas with commercial operators providing varied types of road transport. Public transport is not provided in Waitaki however may be considered for future RLTP submission.
 Private vehicle trips are the dominant form of transport in the region. Much of the region is sparsely populated and either used for rural production or in the conservation estate. These rural communities rely on private vehicle travel for access to essential services.

The growing tourism industry, pre Covid-19, brings a significant number of campervans to our district and they are a key mode of transport for our visitors. Scenic look-outs, beaches and other naturally beautiful places are often remote and transport challenges associated with access roads need to be considered to ensure the safety of visitors.



	The only rail line in the region is a freight only coastal route between Christchurch and Invercargill. Rail faces constraints because of the small number of trains. On some parts of the network there are also constraints because of single tracking and poor signal systems.
¥	The airport in Oamaru is utilised mainly for agricultural activities, a flying club and a flying academy. It has in the past operated as an air link in the regions however has proved to be uneconomical. The intent is that it now be made available for space missions. The Omarama Airfield provides the best conditions for gliders in the South Island and is renowned for the spectacular scenery of the Southern Alps.
	Because the movement of freight is so important to the regional economies, the future role of ports and key freight hubs will shape demand and trip patterns across the transport system. The Lyttelton Port in Christchurch and Port of Otago are the largest ports with PrimePort in Timaru experiencing growth following a commercial alliance with Port of Tauranga (New Zealand's largest port).
₫ <i>\$</i> 0	The objectives of the Recreation Strategy are to encourage and support residents to choose walking and cycling for an active and healthy lifestyle, and to develop a safe, convenient and attractive travel network for walking and cycling. Walking and Cycling in Waitaki is currently very low with only 5.1 km of financially assisted commuter tracks in the Waitaki District most of which are in Oamaru.
٢	The ageing population within the area requires better mobility in and around the urban centres. Significant improvements in level of service are required to support inclusive access in Waitaki's townships. Councils mode neutral approach to transport will result in the increase of walking and cycling in the Waitaki District. The Alps to Ocean provides a scenic track for cyclists through the Waitaki District separated from the state highway and local roads.

Council manages the road network using the ONRC classification system to prioritise investment and provide a consistent and appropriate level of service.

Length of road in each classification, and the proportion of total travel showing where most customer journeys are made is shown below:



Figure 19: Length of road in each classification, and the proportion of total travel

For Waitaki, primary and secondary collector routes make up less than 25% of the network by length but carries more than 65% of the distance travelled in the district due to the higher traffic volumes. Low volume roads on the other hand make up 50% of the network but only carries 10% of the total distance travelled.



# 3 Strategic Assessment

### 3.1 The Case for Investment

#### 3.1.1 Existing problem statements

The 2018-21 problem statements were adopted without modification from the OSRLTP:

Table 12: Problem Statements





## 3.2 Progress and Achievement

Council has access to wide range of data to inform an assessment of progress towards resolving these problem statements during the 2018/21 investment period. Key findings for WDC in the evidence base related to the Regional Problem Statements and GPS priorities are as follows:

#### 3.2.1 Overall Progress and Achievement

Waitaki has made good progress overall during the last 3 years and has delivered over 95% of funded programmes during the period.



Figure 20: Overall Progress and Achievement



#### Customer Satisfaction

Overall customer satisfaction is low. Monitoring customer satisfaction is important to WDC because it not only informs the Council of how the roading level of service is experienced from the customers' perspective, but it also acts as a surrogate measure for economic growth opportunities.

The 10-year trend for customer satisfaction is shown in the adjacent figure. There has been consistent decrease а in satisfied customers since 2009, yet the trend has been relatively stable since 2016 (last funding block). Dissatisfied customers increased between 2015 to 2018, but there was a slight reduction for this group in 2019. There has been constant growth of the middle group of customers that is indifferent to their perception of roading



services. The growth of this group makes it increasingly difficult to achieve a high proportion of satisfied / very satisfied customers.

However, the Customer Satisfaction Survey does highlight the following items that are difficult to explain by considering the satisfaction in isolation:

- There is currently some variation in the outcome for sealed and unsealed roads, currently, the specific concerns on neither of these networks are known;
- It would be good to have a more detailed understanding of specific issues experienced in 2018 -There is no indication in the data that suggests the condition was poor during 07/17 to 06/18 year. However, Waitaki experienced a significant storm event in July 2017 that caused two bridge collapses and 35 road closures. Even if the increased dissatisfaction may not have been directly related to this storm event, for some time after the storm event, there were significantly more localised road failures.
- Not capturing specific issues related to the feedback, specific issues are unknown and there is
  no opportunity to target these issues through specific maintenance strategies.

#### Levels of Service & ONRC Performance Measures

Levels of service measured against the ONRC performance measures show that WDC is maintaining a reasonable level of performance overall, with a small decline across most indicators. Road safety trends show more defined performance below our peers and ongoing deterioration.

WDC does not currently collect sufficient information or input measures for reporting against ONRC resilience and accessibility indicators. This is an improvement action for the 2021/24 period.

Recent modelling works shows that the network pavements and surfaces are generally sound. The deterioration across the network is typically slow due to the low traffic volumes and the current condition of the network is able to absorb some deterioration.



Cus	tomer Outcome	Primary Collector Secondary	Collector	Low Vol.	Comments
SAFETY	1: Number of serious injuries and fatalities (DSI) 2: Collective risk				<ul> <li>10-year data shows a reducing trend in crashes</li> <li>Secondary Collectors carry 57% of vehicle kilometres travelled (vkt) on 21% of road network and trend is improving in reducing crashes</li> <li>Access roads carry 23% vkt on 27% of the network and show a reducing trend in crashes</li> <li>Low Volume roads carry 10% vkt on 50% of network and reflects a trend in increased crashes which needs to be addressed.</li> <li>Low Volume could be attributed to high speed on narrow roads.</li> <li>Road safety and low-cost low risk improvement programmes will need to address these issues</li> <li>WDC crash data shows consistently worse performance than the national average and peer group, especially on secondary collector and low volume roads</li> <li>The new Communities at Risk Register has shown a spike in rural intersection crashes which will need to be addressed</li> </ul>
	3: Personal risk				As above
	1 - Smooth Travel Exposure (STE)				<ul> <li>Primary collector is not as good as peer group or Otago region with a slight lag on national average.</li> <li>Secondary collector not as good as peer group but better than Otago and similar to national average</li> <li>Access worse than peer group but better than Otago and national average</li> <li>Low volume is slight lag on peer group, has a positive gap above Otago region and is slightly better than the national average</li> <li>Historically this is likely to be the result of more rural than urban road renewal</li> </ul>
AMENITY	2 - Peak Roughness – <b>urban</b> sealed roads				<ul> <li>Primary collector higher than peer group and Otago but better than national average</li> <li>Secondary collector higher than peer group and Otago but better than national average</li> <li>Access higher than peer group, better than Otago and national</li> <li>Low volume better than peer group, Otago and national average</li> <li>historically more rural than urban road renewal</li> </ul>
	2 - Peak Roughness – rural sealed roads				<ul> <li>Primary collector higher than peer group, Otago region and national</li> <li>Secondary collector higher than peer group, Otago and national average; road pavement renewal concentrated in this area</li> <li>Access higher than peer group, Otago and national</li> <li>Low volume lag on peer group and national but similar to Otago region</li> </ul>
	Percentage of network renewed annually	Surface	e Pav	ement	<ul> <li>Surface is marginally higher than the peer group and national but similar to Otago region</li> <li>Pavement lower than peer group averages; more analysis is required in road renewal before increasing size of the programme</li> </ul>
FICIENCY	Sealed road maintenance: 5- year average annual costs per kilometre	Maint.	Resurf.	Rehab	<ul> <li>Sealed pavement maintenance, resurfacing and rehabilitation is lower than the peer group, Otago region and national average which seems to indicate life of assets is longer than default</li> <li>Escalation in the road maintenance contract is increasing costs</li> </ul>
COST EF	Unsealed road maintenance: 5- year average annual costs per kilometre	Maint.	Met		<ul> <li>Maintenance and metalling renewals is considerably lower than all comparative group averages; Council is efficient due to management of own quarries.</li> <li>Increases in remetalling has reduced grading programmes.</li> </ul>
	Overall Network Cost (Excluding Emergency Works)				<ul> <li>Lower than the peer group, and considerably lower than the Otago region and national averages.</li> <li>Escalation in the road maintenance contract is increasing costs</li> </ul>

#### Table 13: Levels and Service and ONRC Performance Measures



#### 3.2.2 Problem Statement 1

Inability to assess, plan and fund rapidly changing transport user demands in a timely way results in some poor investment prioritisation and decisions.

GPS 2021 Alignment					
Safety	Better Travel Options		Improving Freight Connections		Low Carbon Transport System
Μ	н		Μ		L
Growth in tourism I traffic & urban a walking from retirees is changing user profile & increasing risk	ntegration of and land use will support neutrality an choice, esp. i centre	transport planning mode d travel in urban s	Understanding de from the primary will allow targeted improvements, may network capaci utilisation	emand sector bridge kimising ty &	A more proactive approach to transport planning will allow better landuse integration and evaluation of options for low carbon solutions
Key Responses in the E	xisting Progra	amme			
Responses planned for th	ie 2018/21 NI	TP have b	een partially implem	ented:	
[ Key: 🤨 : Mixe	ed success	0	: Successful	$\overline{\mathbf{\cdot}}$	: Very successful ]
Key Response in Existing Programme	Outcome	Assessm	ent Findings		
Efficiency Improvements	3				
1. Streetlighting LED & CMS Upgrade	$\bigcirc$	Complete.	Savings realised and r	eflected in	budget forecasts.
2. Moeraki Boulders Access Improvements	( <b>•</b> ••)	Lonely Planet naming Moeraki Boulders & lighthouse as one of New Zealand's top tourist attractions caused a demand surge. The widening of Tenby Street to provide a safe tourist route as well as improved accessibility to the Moeraki Township. Retaining Haven Street as the main entrance to Moeraki is proving to be very challenging.			
3. Walking & Cycling and footpath Improvements	( <b>1</b> )	Urban footpath condition rating has been delayed due to survey and condition information in late 2020 as a result of Covid-19. Most cycling projects are likely to be deferred due to funding other than Humber Street.			
4. Customer Connections App	<b>:</b>	App to improve communications with customers during extreme weather events & other disruptions is very popular. Snap Send Solve less popular.			
Network & Asset Manag	ement				
1. Develop Roading Network Plan & Strategy	<u>:</u>	Collaborat Councils s effectively	ive project with Central talled and is not yet cor contribute to land use p	Otago Dis nplete imp planning.	trict and Dunedin City acting the ability to
2. Collaboration in Asset Management Delivery	$\odot$	A business case was developed to evaluate the opportunity to collaborate with Dunedin City in aspects of our asset management functions with the intention of delivering services more efficiently and reducing our reliance and expenditure on consultants. Councillors rejected the proposal in preference of strengthening the Roading Team to take care of succession and vulnerabilities etc. Capacity and building of the team is continuing.			
3. In-house RAMM maintenance and updates	$\bigcirc$	WDC are now successfully maintaining RAMM in-house with external provider assistance. Quality assurance manual is in progress to ensure QA protocols are in place.			/IM in-house with nce manual is in e.
4. Enhanced Traffic Counting Programme	$\bigcirc$	Improved network use data to support robust planning. Expansion to pedestrian & cycle use not yet underway.			st planning. Expansion to
5. dTims Modelling	$\odot$	Renewals successfu	optimisation using dTin Ily implemented and val	ns incorpo lidated.	rating ONRC



#### Investment Outcomes & Effectiveness of the Existing Programme

The primary KPI for this performance measure is overall customer satisfaction

Year-on-year change in overall customer satisfaction for sealed and unsealed roads over the last 3 years shows that both networks have a stable trend overall, despite a significant blip in sealed road satisfaction in 2018. This is a good result and halts a gradual downward trend from previous periods.

Categories	2017	2018	2019
Sealed Roads	1%	-12%	6%
Unsealed Roads	3%	2%	-1%

Additional indicators are overall cost efficiency and mode share. Maintenance and renewal cost efficiency within the rural districts peer group is good:



Figure 21: Rural Districts Peer Group Cost Efficiency

Waitaki is well below the 3-year national average of \$/km at approximately 60% and below the 3-year national average of \$/lane km also at approximately 60%

There is no updated mode share information following 2018 census.

#### 3.2.3 Problem Statement 2

Attitudes and behaviour together with inconsistent quality of routes in the region results in fatal and serious crashes:





#### seriously injured while

travelling.

#### Key Responses in the Existing Programme

Responses planned for the 2018/21 NLTP have been partially implemented:

Key Response in Existing	Outcome	Comments	
Programme			
Safety Improvements			
1. Community Road Safety Activities		Limited engagement with stakeholders to date which is improving with the development of the new Road Safety Strategy and Action Plan. An important activity for the engagement of multiple user groups. Targets issues & trends from WDC's communities at risk register report show a decline in some areas which will need to be reversed.	
2. Targeted Seal Widening	$\odot$	Targeted seal widening at locations prioritised by ONRC, narrow surface and high HCV volume.	
3. Unsealed Road Intersection Sealing	÷	Targeting high HCV use intersections problematic with corrugations. Have had success reducing programme cost by blending clay into rotten rock instead of sealing some sites.	
4. Targeted Intersection Treatments	$\odot$	Targets our primary fatal and serious crash factor. Prioritised on secondary collector roads to target high risk sites.	
Investment Outcomes & Effectiveness of the Existing Programme			

Crash trends on WDC roads have increased over the period of the current plan, so the problem remains a priority focus.

The Communities at Risk register identifies specific areas of concern and high strategic fit.

- much worse than average for fatigue
- much worse than average for rural intersections
- worse than average for urban Intersections, pedestrians and restraint use
- about average regarding young drivers, rural road loss of control/head-on, motorcyclists, cyclists and older road users

Areas of emerging concern include:

- Increasing the levels of restraint use; and
- Increasing the safety of older users (particularly important given Waitaki's aging demographic.





Figure 22: Safety Outcomes and Outputs



#### 3.2.4 Problem Statement 3

Sections of the network are increasingly vulnerable to closure from adverse events resulting in economic and social disruptions.

GPS Alignment			
Safety	Better Travel Options	Improving Freight Connections	Low Carbon Transport System
Н	Μ	Н	L
Condition and management of the network during disruption is key to ensuring safe communities	A mode neutral network is more resilient because users have greater choice and disruption to a single mode is less disruptive	Resilience and redundancy in the network will make events less disruptive and allow quicker return to normal operating conditions	A network that is less susceptible to damage will require less intense response to events, reducing the maintenance required.

#### Key Responses in the Existing Programme

Responses planned for the 2018/21 NLTP have been partially implemented:

Key Response in	Outcome	Comments
Existing Programme		
Resilience Improvemen	its	
1. Rural drainage		Completed programme of rural drainage improvements. Very
improvements	$\mathbf{:}$	successful in reducing expected level of damage from storm
	)	events.
2. River Training		River training has had mixed success with further works having
		been completed in the Kauru River following the July 2017 storm
	(••)	event. It is an important programme however prioritisation and
	Ŭ	approach needs to be reviewed. A low-cost solution has been
		implemented with good success.
3. Small Timber		Council has replaced small wooden bridges that are posted or
Bridge		feeding single landowner access with concrete culverts or
Replacements		concrete wash over pads that provide more affordable options and
		reduce whole of life costs without reducing level of service other
	$\smile$	than where access might be affected during a weather event. Very
		successful in allowing end of network landowners retain class 1
		access for heavy vehicles.
4. Unsealed Road		Council has increased the unsealed metalling budget significantly
Strengthening		in recent LTPs to reduce damage from increasing Class 1, 50Max
	$\bigcirc$	and HPMV traffic. Council has had success strengthening
		pavements, although there are locations still prone to failure,
		particularly in wet weather so we are now concentrating on
		wearing course and drainage.
5. Aggregate Source		To reduce cost of the aggregate programme above, WDC has
Acquisitions		acquired land and developed quarries for resourcing of
	$\bigcirc$	aggregates. Affordable metalling aggregates for the unsealed road
		network are becoming scarce and Council now uses this
		aggregate for a wide range of renewal and capital projects. We are
		continuing to expand the portfolio as required.
<ol><li>Kakanui Point</li></ol>		Not completed - delayed: A key link to the resilience of the state
Bridge		highway network is ensuring alternate access through Maheno.
Replacement		Currently 50MAX and HPMV vehicles cannot go north or south
		through Maheno if the SH bridge is flooded or closed due to a
		crash. The alternatives are via Kakanui Valley Road or Maheno-
		Kakanui Road but both have posted bridges. The SH detour
		through Central Otago adds 6hrs to the journey. Council is looking
		at renewing the bridge at Maheno in the 2021-24 RLTP and the



		Kakanui Point bridge in the 2024-27RLTP. Both bridges will provide resilience to the state highway network.
7. Springfield Road Raising	$\odot$	Completed
8. Waianakarua Road Re-alignment	$\bigcirc$	Closed down to one lane due to slips. Need has been deferred due to implementation of effective low-cost drainage improvements.
9. Coastal Roads Protection Strategy	$\odot$	Annual programme of unsubsidised preventive protection works to give effect to their Coastal Roads Strategy. Successful in providing coastal protection to high priority areas.
Investment Outcomes & Effectiveness of the Existing Programme		

ONRC Resilience and Accessibility performance measures are not currently reported and are included as an improvement item for 2021-24



# 3.3 Waitaki Future State Planning Scenario and Assumptions

This plan is based on the following future state planning Scenario and assumptions:

Population	Climate	Economy	Funding		
Small growth in numbers (5-7%) over the next 30yrs, and slowly aging	Accelerating change over next 10-years. Biggest impact from rainfall & sea level rise	Slow growth and change expected over the next 30- years	Available funding will not exceed current base funding level + escalation		
Population	<ul> <li>Transport change will be closely linked to population change</li> <li>Growth of 1,000-2,000 residents &amp; houses over the next 30 years</li> <li>Population aged over 65 is projected to be more than 35% by 2043</li> <li>Proportion of Pacific Island &amp; other migrant groups will continue to rise slowly</li> <li>Domestic tourists will increase the number of temporary residents in some centres at times of the year, placing additional peak demand and pressure on the transport system.</li> <li>COVID-19 will significantly reduce numbers of international visitors likely in the short to medium term</li> </ul>				
Climate	<ul> <li>Changing weather patterns with extreme weather, rainfall intensity and sea level rise will impact the transport network's infrastructure. Rate of change will accelerate over the next 10 years</li> <li>Sea level is expected to rise by 30cm by 2040.</li> <li>Severe weather will increasingly impact our environment, communities and infrastructure. Rainfall intensity will be the biggest factor.</li> <li>Emissions budgets arising from the Climate Change Response (Zero Carbon) Amendment Act will require significant change in land-use patterns, the supporting land transport system, vehicle fleet &amp; travel choice</li> <li>Our planning will not allow for catastrophic events during the period of the plan</li> </ul>				
Funding & Finances	<ul> <li>Affordability of vehicle-based infrastructure will gradually decrease. We must prioritise ou investment to deliver the most effective, long-term solutions</li> <li>Increase in capital costs, due to managing the effects of climate change, will impact the amount of funding available for the transport system.</li> <li>We will face additional funding pressures because of an aging population on fixed incomes, meaning our community will be less able to cope with significant rates increases. Rates for transport will also be constrained as we face significant investment in three waters. This will be exacerbated as the economy contracts after COVID-19.</li> <li>Escalation on our contracts will continue to exceed the community's tolerance for rat increases</li> </ul>				



Economic Structure	<ul> <li>Change and growth will be slow but trend towards a service industry-based economy with more intense urban development.</li> <li>Moderate growth in domestic and international Tourism will continue</li> <li>The North Otago Irrigation Scheme doubles the area of intensive agriculture in Corriedale Ward and increase demand for HPMV capable routes</li> <li>The mining sector is the largest primary sector activity making up over a quarter of the district's GDP. but will have a limited remaining life (25vrs)</li> </ul>
COVID-19	<ul> <li>A slow Recovery Scenario is forecast: The Otago region's forecast fall in employment to 2021 (relative to BAU) is -10.2%, significantly higher than the national average of -6.7%, reflecting the region's reliance on the tourism sector. This is likely to result in a severe loss of capacity across the tourism sector that will not be quickly recovered, although rural areas in Waitaki are expected to avoid the worst effects of the economic slowdown.</li> <li>In Waitaki, employment levels are forecast to be near BAU levels by 2025.</li> <li>Population growth is expected to slow, at least in the short to medium term, given the region's reliance on net migration.</li> <li>Māori and Pasifika, and youth, are likely to experience the greatest impacts</li> </ul>

#### 3.3.1 Key Transportation Issues and Challenges Related to the Future State Planning Scenario & Assumptions

Through a process of evaluating the implications of this future state scenario and associated assumptions, WDC has identified 7 key issues facing the wellbeing of our community and our ability to deliver effective infrastructure services.

Supporting evidence behind these priority issues has been validated through data analysis, community consultation and engagement and is included in our 30-year Infrastructure Strategy.

While the impacts of these trends and changes are experienced to varying degrees by all of Councils infrastructure services, the most visible impacts for many residents relate to the transportation network. This assessment is summarised in the following table:

NOTE: Impacts of Covid-19 on the land transport system in Otago over the coming decade are forecast in ARATAKI V2 (Treasury's Scenario 5 – slower recovery).

- Outside the Queenstown Lakes & Central Otago Districts, no significant changes are expected in the nature, scale and location of transport demand over the medium to long term. Therefore, there will be limited opportunity to re-evaluate what is required and where, and the scale and sequencing of growth and investment
- Transport needs to play its part in supporting the recovery of the tourism industry.
- There will be an on-going need for transport services to support Covid-19 recovery by improving access to employment and essential services for vulnerable communities.
- Maintaining safe and reliable road and rail freight connections to Port Otago remain important to supporting the recovery.
- There will be on-going pressure on transport revenue due to the Covid-19 lockdown.



#### Table 14: Key Transportation Issues

Strategic Issue	Climate Changes	Roading Resilience	Demographic Changes	Tourism Growth	Community Growth	New Technologies	Affordability
Description	Ensuring long and short- term infrastructure planning anticipates the scale and speed of climate changes.	Managing the costs of increased traffic volumes and service level and safety expectations on rural roads and changing uses on urban streets and footpaths.	Delivering infrastructure that responds to the changing needs of an ageing population and accounts for social affordability issues.	Ensuring infrastructure meets growing tourism numbers and higher service expectations.	Developing infrastructure, particularly community assets, to support community and economic development goals.	Responding to rapidly changing technology when making long-term infrastructure investment decisions.	Maximising alternative funding sources, while ensuring that services and service levels match the community's ability to pay. Providing funds to keep the network at similar levels of service to those that exist today is a major challenge.
Future State Scenario / Assumptions	<ul> <li>Current long-term plan assumes no catastrophic natural or weather events over the next 10 years.</li> <li>Poor assumption as WDC has experienced multiple weather events over the last 11 years costing \$7.6m with largest event costing \$2.3m in 2013/14</li> <li>LTP does mention monitoring and repair costs within existing budgets.</li> <li>Local share of repair costs of weather events covered by Council's disaster fund only if application is made to Waka Kotahi for emergency works</li> </ul>	<ul> <li>Changes in the rate and impacts of climate change will impact Council decisions around land use, regulation, and investments in infrastructure.</li> <li>Council assumes that the key service requirement relates to protection of Council owned assets e.g. vulnerable to coastal erosion and storm events</li> <li>Rural Resilience Project completed to upgrade storm water culverts and wash over structures</li> </ul>	<ul> <li>This will increase gradually over the life of this Plan.</li> <li>It is projected that the population will continue to age.</li> <li>It is also likely that the proportion of Pacific Islanders and other migrant groups will continue to rise slowly</li> </ul>	<ul> <li>Domestic and overseas visitor numbers are projected to increase. Council assumes this growth will continue and slowly influence the demand for, and type of services required</li> <li>Generally, the capacity of the road network in Waitaki is adequate.</li> <li>Passenger transport, in the form of coach tours, shuttle buses and courtesy coaches, plays only a minimal part in managing demand and congestion.</li> </ul>	<ul> <li>Population is projected to be static, which is in keeping with recent historical trends.</li> <li>The Long-Term Plan is assuming no significant growth and provides organisational capacity and infrastructure to advance this scenario.</li> <li>The North Otago Irrigation Scheme is expected to double the area of intensive agriculture in the District which will increase freight demand on sections of the rural transport network.</li> </ul>	<ul> <li>Land transport in Waitaki is mainly road- based and focused on the use of private cars and trucks. It is likely that road transport will continue to be the primary mode of transport in the years to come.</li> <li>Less than 6km of financially assisted cycle ways and no public bus service</li> </ul>	<ul> <li>There is no significant level of debt at the start of the plan.</li> <li>Council does not expect to borrow external money over the life of the LTP and will 'cash-fund' depreciation on assets.</li> </ul>



Strategic	Climate	Roading	Demographic	Tourism	Community	New	Affordability
Issue	Changes	Resilience	Changes	Growth	Growth	Technologies	
Key Transport Issues & Emerging Trends	<ul> <li>Increasingly severe weather events</li> <li>Emergency reinstatement works are generally as a result of events greater than the normal 1:10 year design and are often up to 1:100 year events</li> </ul>	<ul> <li>Coastal erosion affecting parts of the district through the loss of roads. approx. 15km</li> <li>There is no agreement with the community or New Zealand Transport Agency (Waka Kotahi) regarding the choices (including large scale protection works) to keep vulnerable routes in service. WSP completed a coastal erosion strategy but this has been rejected multiple times and current strategy allows for \$50k per year of preventative works</li> <li>Kakanui River river training to realign river through and under Fuschia Creek bridge</li> </ul>	<ul> <li>Aging population &amp; increasing LOS expectations for good footpaths, cycleways and car parking in urban and peri-urban areas</li> <li>22% of the population is retirement age (national average is 14%)</li> </ul>	<ul> <li>Increasing demand for tourist amenities (photo stops etc.)</li> <li>Driver behaviour &amp; safety. The trend in fatal injuries is increasing</li> <li>50% of 2018/19 Survey respondents stated that WDC roads are not safe to travel on</li> <li>This question is no longer in the resident's survey. Anecdotal evidence suggests that it is improving with road safety improvements made by Council</li> </ul>	<ul> <li>Commercial land use change (pastoral farming changing to increased irrigation and intensified dairy) altering the rural traffic composition, with heavier and wider vehicles, greater wear and tear on existing assets and road user safety concerns.</li> <li>Increasing Forestry and logging activities</li> <li>Road safety in the Waitaki District is ranked 17 out of 71 councils in the Communities at Risk Register.</li> <li>There is a trend of increasing serious crashes and fatalities in secondary collectors and low volume roads.</li> <li>Slower growth due to COVID may create space to 'catch-up' in main urban centres, targeting mode shift and transition to a low-carbon economy</li> </ul>	EV chargers located in limited locations in the district	<ul> <li>The extensive road network in Waitaki, combined with a sparse population and the rising costs of road maintenance, places a relatively high burden of road maintenance on the population</li> <li>Prospect of withdrawal of mining activities in the Waihemo ward and potential reduction in rates contribution from energy generation in the Waitaki Valley- will significantly impact Council's rates component revenue</li> <li>The impact of contract cost escalations being greater than inflation indices allowed for the long-term plan is having a big impact in the current funding block and needs to be considered in the AMP update</li> <li>Waka Kotahi is continually reducing financial investment and forcing WDC to consider alternative sources of funding through optioneering</li> </ul>

# 4 Strategic Response

## 4.1 Updated Problem Statements

These issues are reflected in delivery of the land transport system by the following updated problem statements:

Regional problem statements were considered by the Regional Transport Committee (RTC) on 15 March 2020. The 2018-21 problem statements were retained with modifications capturing the consensus reached by the committee at the workshop. WDC has elected to adopt these problem statements.

In prioritising the problem statements, we analysed data such as that presented in the ONRC reporting tool; and also took on board the strategic direction and funding signals given to us by Waka Kotahi (via 'Arataki) and the Government in its draft Government Policy Statement.



<u>Transport Priority</u>: Improve transport planning capability and capacity

<u>Priority Investment Areas</u>: develop a network strategy and management plans for key areas; Advocate for land use policies that encourage elderly residents to live close to community facilities; build in-house skills & capacity

<u>Other Priority Implementation Areas</u>: Advocate for opportunities to improve mode neutrality; engage with key developers and industry sectors to influence demand & behaviours;

<u>Benefits of Investing</u>: Better health outcomes; Improved liveability; Reduced Environmental Impact; Improved Connectivity – local and regional; Social inclusion; Economic Growth

Performance Measures: private car mode share is trending downwards; overall customer satisfaction is increasing; critical freigt routes are identified and provide full HPMV access; number of Class 1 load posted structures is not increasing.

#### Updated Problem Statement & Supporting Detail

- 1. Inability to access, plan, fund and adapt to changing environmental and user demands constrains timely investment in a fit for purpose transport system now and in the future
  - WDC transport model or integrated transport / network plan. No CMPs or masterplans with triggers to underpin investment proposals making WDC reactive to change rather than planned, especially around mode neutral and low carbon network planning, and tourism enablers.
  - Financial & staff resources impact time to deliver key projects.
  - Changing land use in the district from pastoral farming to increased irrigation and intensified dairy with bigger and wider agricultural vehicles using the network, resulting in increased concerns around safety, and the use of heavy vehicles affecting the pavement strength and durability of the roading network.
  - Consequence of not addressing the land use problems; weak and wet pavements and roads resulting in poor resilience, accessibility and ultimately less economic development.
  - An aged population in the Waitaki District (22%, compared to the national average of 14%), requiring safe footpaths for pedestrians and mobility scooters, to ensure equal accessibility for the elderly.
  - Consequence of not addressing the ageing population is that accessibility to infrastructure will break down below the acceptable level of service, particularly as the ageing population is expected to grow even further.



#### **Investment Objectives**



<u>Transport Priority</u>: Improve safety standards on all roads to ensure that they have at least a 3star KiwiRAP rating under the ONRC. Making mobility focussed urban communities

<u>Priority Investment Areas</u>: Rural intersection upgrades; improved visibility envelope and road marking maintenance; curve alignment and road widths on secondary collectors; Rural bridge guardrails and strengthen for HPMV capacity

Other Priority Implementation Areas: ONRC implementation within road maintenance contract; speed management on low volume and secondary collector roads; behaviour change campaigns to bring businesses and locals on board to change travel habits and reduce travel.

Benefits of Investing: Safer Travel; Better health outcomes

<u>Performance Measure(s)</u>: number of fatal and serious crashes is trending downwards; number of residents who feel that roads are safe is increasing.

#### Updated Problem Statement & Supporting Detail

 Inconsistent attitudes and behaviours, and variable network design and quality results in deaths & serious injuries, congestion and low confidence to use alternative transport modes

- Road safety in the Waitaki District is ranked 17 out of 71 councils in the Communities at Risk Register. There is also a trend of increasing serious crashes and fatalities in secondary collectors and low volume roads.
- An aging population, increased tourism, and growth in dairy and forestry are resulting in the road network being used for different purposes. Variable conditions around the network (road width, visibility, traffic mix) are major contributor to rural road safety performance and congestion around attractions and viewpoints on key routes. This has led to changing community expectations and satisfaction feedback is low.
- Real difficulties exist for vulnerable road users making their way safely around town. Constant traffic streams of fast-moving vehicles on urban arterial roads, a sparsity of safe and convenient crossing facilities, missing connections in the pedestrian and cyclist network compromise safety and limit transport choices. Crash analysis revealed that Oamaru has an urban cycle safety issue compared with other areas of New Zealand.
- Intensive heavy vehicle movements associated with agriculture, quarrying and other operations are causing damage to under-strength pavements and structures - critical assets are deteriorating meaning that safety and access is at risk
- Parts of the secondary collector network do not meet desired levels of service, affecting safety and ease of movement
- Consequence of not addressing the problem; poor safety record in the district affecting personal and collective risk and increased social cost to the community and country.
- Better Freight Connections

<u>Transport Priority</u>: Build capacity and resilience into the freight network

<u>Priority Investment Areas</u>: Rural drainage improvements; Bridge HPMV improvements;

<u>Other Priority Implementation Areas</u>: Build resilience/ capacity into our emergency response

- 3. Parts of the network & service infrastructure lack resilience and are vulnerable to disruption due to adverse events, resulting in economic & social disruption
  - Increasingly severe weather events from climate change resulting in torrential rainstorms & increased coastal erosion from big seas is impacting on our vulnerable local road network (Waihemo & Corriedale wards), resulting in more frequent emergency events, network deterioration and disruption. Old bridges are renewed appropriately to provide network accessibility for heavy vehicles.
  - HPMV impact on weak rural pavements. Growth in primary sectors means that HPMV has enabled greater production.



#### **Investment Objectives**

solutions and asset replacement programmes. Condition rating of culverts and Inspections of active hazard sites (coastal erosion, slips, vulnerable flooding areas).

Benefits of Investing: Improved liveability; Reduced Environmental Impact; Improved Connectivity – local and regional; Social inclusion; Economic Growth.

<u>Performance Measures</u>: Number of incidences where road access is lost; proportion of network not available to HPMVs Updated Problem Statement & Supporting Detail

- The compliance costs and resources required to mitigate harmful effects of transport on the environment are increasing, resulting in increased complexity and cost of transport activities.
- Consequence of not addressing the problem; resilience and accessibility of the network will be reduced and an increase in travel time resulting in lost economic productivity and growth in the district. Assets not maintained at sustainable levels; inundation restricting access to vulnerable communities.



### 4.2 Strategic Responses

A wide range of strategic responses were considered. Decision criteria used to prioritise strategic responses were as follows:

#### **Decision Hierarchy**



1. Safety - address dangerous situations as a priority

- 2. Resilience address immediate network availability issues/threats
- 3. Look after existing assets provided they are still needed
- 4. Make better use of existing assets, esp. through promoting mode neutrality & encouraging smarter travel choices
- 5. Build new assets



Figure 23: Decision criteria used to prioritise strategic responses

Table 15:	Strategic	Responses
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Problem Statement	Strategic Responses	Priority
ROAD SAFETY: Inability to access, plan, fund and adapt to changing environmental and user demands constrains timely investment in a fit for purpose transport system now and in the future.	• PROGRAMME ADJUSTMENT: NETWORK SAFETY PLANNING & TARGETED IMPROVEMENTS. Implement the response strategy in the current WDC Road Safety Action Plan. Prioritise infrastructure investment on secondary collectors; Specifically, intersection standards, shoulder maintenance/widening, guardrail, signage (route strategies to support isolated improvements), & road marking frequency.	Н
	• <b>FUNDING ADJUSTMENT</b> : Absorb some good network condition on low volume rural pavements and bridges by reducing renewal expenditure in these areas to offset increase in network safety and access improvements. Hazardous tree removal programme on key routes	Η
	RISK ADJUSTMENT: Review delineation and hazard warning standards on low volume roads, especially sealed roads. Align maintenance contract specification with ONRC & network risk	L



Problem Statement	Strategic Responses	Priority
	• <b>POLICY APPROACH</b> : Review speed limit and roading bylaws to reflect current standards the ONRC. Splitting the bylaw will make it more accessible and easier to manage in a targeted way.	Μ
FREIGHT CONNECTIONS: Parts of the network & service infrastructure lack resilience and are vulnerable to disruption due to adverse events, resulting in economic	• <b>PROGRAMME ADJUSTMENT: STABILISE KEY ROUTES.</b> Invest to improve resilience of critical assets and remove HPMV access restrictions. Proactive drainage maintenance & renewals; Bridge strengthening; Retaining wall condition assessments & renewals in vulnerable areas; Riverbank stabilisation on key routes; Coastal erosion protection.	Η
	• PROGRAMME ADJUSTMENT: IMPROVE UNSEALED ROADS. Invest to improve resilience of unsealed roads. Increased remetalling and strengthening; Performance grading.	Μ
	• <b>POLICY APPROACH</b> : Embed proactive management practices by initiating periodic condition rating of culverts and Inspections of active hazard sites (coastal erosion, slips, vulnerable flooding areas). Review of resilience hazards (pre-planning) & early warning criteria as result of changing climate to align inspection and maintenance programmes.	Η
	• <b>RISK ADJUSTMENT</b> : Develop an incident and emergency preparedness & response plan & incorporate within maintenance contracts on re-tendering (2022).	L
TRAVEL OPTIONS: Inability to access, plan, fund and adapt to changing environmental and user demands constrains timely investment in a fit for purpose	• <b>PROGRAMME ADJUSTMENT</b> : Improve the condition of our footpaths. Direct savings from streetlight LED conversion to support additional investment in transport planning & urban mobility. Integrated network planning is necessary to respond to growth in Waitaki and changing economic base.	Η
transport system now and in the future	• <b>RISK ADJUSTMENT</b> : Implement ONRC as LOS and prioritisation framework within the road maintenance contract specification.	Η
	DEMAND MANAGEMENT:	
	<ul> <li>Work with hauliers to use suitable roads &amp; routes to confine investment need. Working with relocating traffic generators to optimise use of existing network. Linking Roading Strategy with District Plan review and consenting processes</li> </ul>	L
	<ul> <li>Enhance Customer Service Focus. Improving customer outcomes is not simply an end-result from executing the roading programme.</li> </ul>	L



# 4.3 Benefits of Investing

Key performance measures help WDC to measure investment performance. The table below identifies the investment benefits and performance measures using Waka Kotahi's Investment Benefits Framework. There are twelve Benefit Clusters contributing to the five national Transport Outcomes.

Table 16: I	Investment Benefits and Performance Measures
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Problem Statement	Our Investment Objectives	Benefits of Investing	Performance Measures
Parts of the network & service infrastructure lack resilience and are vulnerable to disruption due to adverse events, resulting in economic & social disruption	Better Freight Connections	Benefit 4.1: Reduced impact on system vulnerabilities and redundancies Reducing the risk of communities not being able to access social and economic opportunities due to unexpected outages.	<ul> <li>BF 4.1.1: Availability of a viable alternative to high-risk and high-impact route</li> <li>ONRC Resilience CO1: No. of journeys impacted by closure</li> <li>ONRC Resilience CO2: The number of instances where road access is lost</li> </ul>
		<b>Benefit 5.2: Improved network productivity and utilisation</b> Network productivity and utilisation is about efficient use of the land transport network. Optimising our part of the broader economic/social system to allow broader benefits to be gained.	BF 5.2.1 (ONRC Accessibility CO1): Spatial coverage - freight
Inability to access, plan, fund and adapt to changing environmental and user demands constrains timely investment in a fit for purpose transport system now and in the future.	Safer Communities	Benefit 1.1: Reduced social cost of deaths and serious injuries The impact of reducing the number of deaths and serious injuries (DSIs) on all land transport modes and their social costs.	<ul> <li>BF 1.1.1 (ONRC Safety CO2): Collective Risk</li> <li>BF 1.1.2: Crashes by severity</li> <li>BF 1.1.3: Deaths and serious injuries</li> <li>1.1.4 (ONRC Safety CO3): Personal risk</li> </ul>
		<b>Benefit 5.2: Improved network productivity and utilisation</b> Network productivity and utilisation is about efficient use of the land transport network. Optimising our part of the broader economic / social system to allow broader benefits to be gained.	<ul> <li>BF 10.1.5 (ONRC Amenity CO1): Smooth Travel Exposure (STE)</li> <li>ONRC Amenity CO2: Peak Roughness</li> <li>ONRC Amenity TO1: Roughness of the road (median and average)</li> </ul>
Inability to access, plan, fund and adapt to changing environmental and user demands constrains timely investment in a fit for purpose transport system now and in the future	Improved Travel Options	Benefit 10.1: Improved user experience of the transport system How all people experience the transport system, including people with disabilities, school children, and the elderly, and how different modes are experienced	<ul> <li>BF 10.1.5 (ONRC Amenity CO1): Smooth Travel Exposure (STE)</li> <li>ONRC Amenity CO2: Peak Roughness</li> <li>ONRC Amenity TO1: Roughness of the road (median and average)</li> <li>DIA PM4: Network condition - footpaths</li> </ul>
		Benefit 3.2: Reduced impact of air emissions on health Land transport air emissions that impact on human health	• BF 3.2.2: Ambient air quality – PM10



## 4.4 Uncertainty and Risk

Over the next three, 10 and 30 years, our District and community will undoubtedly change.

We don't know exactly what, how, or how fast, but we have identified some key risks and opportunities, and made some assumptions to help us prepare this plan. The level of uncertainty associated with each is stated as low, medium or high.

#### Table 17: Uncertainty and Risk

WAKA KOTAHI reviewed the Funding Assistance Rate (FAR) in 2020 and revenue will be increased by 2%.

The roading funding assistance rate is currently 55% and is forecast to increase to 57%. Changes to the Government Policy Statement (GPS) and Investment Decision Making Framework (IDMF) may impact on future funding.

Funds are available for the replacement of significant assets, where these have been forecast in this asset management plans. Failure to invest will result in:

- Levels of service may need to be reduced and safety may be compromised.
- Increased structural failure of assets leading to higher whole-of-life asset cost.
- Increased reactive maintenance leading to higher whole-of-life asset cost and increased disruption to the community.
- Increased financial burden for future generations due to under-investment

#### Rates Revenue from large contributors will continue:

Oceania Gold and Meridian Energy contribute 13% of the transportation rate. Oceania Gold land use consent was extended in 2019 and are expected to operate for another 25 years. Failure of either business will significantly impact our ability to deliver target levels of service however it is considered low as gold is a strong commodity and Meridian Energy is a state-owned enterprise with ever increasing demand from electricity providers.

#### Climate change - adaptation and mitigation - will be top of the community's agenda

Climate change will affect Waitaki in a variety of ways. For example, coastal erosion will lead to loss of assets, increased rainfall intensity will stress our drainage and bridge assets, and drought / rising changing groundwater tables will impact the strength of our pavements resulting in increased road maintenance.

We may also experience a range of other effects, including increased biosecurity risks from invasive pests and weeds. Roads are a high-risk vector for spreading weeds so our management of roadworks, drainage, vegetation and spray programmes will be critical for protecting Waitaki's agriculture and tourism economy.

We know change is occurring, but we are still in the process of understanding the full consequences. Using the best available information, climate change will become a core part of our planning. We will consider both how we manage the impacts of climate change, and how we can mitigate our own impacts on the environment (including emission reductions).

#### Council's Costs will increase faster than local wage increases

Inflation rates on our long-term maintenance contracts [Consumer Price Index (CPI) and Local Government Cost Index (LGCI)] have been rising faster than rates increases and will continue to reduce our ability to deliver core maintenance and levels of service.






## Our Community will get older, but we don't expect rapid growth

Apart from each of us individually growing older, Waitaki's population as a whole will become much older. Multi-modal corridors in the urban area will become more important but we don't know where or when growth will occur. We aim to get better understanding of this through a district transportation planning exercise.

## Rapid change in the tech landscape - disruptive technologies

Technology will keep changing the way we all do things. Technological change is rapid and unpredictable and may have significant impacts on how our community uses the transport network and services. Changes around drone maintenance, electric vehicles and driverless cars are on the horizon. Increased connectivity and the availability of 'big data' may allow greater analysis and important insights to be learned.

## Resourcing Capability / Ability to deliver the Programme

Council will be able to employ and retain staff that have the expertise and skills needed by the organisation. It is questionable whether our suppliers, contractors, consultants and other external agencies will be able to deliver the projects and levels of service included in the LTAMP on time and to the budgeted cost, particularly when there is high demand for these services through the local government and private sector.

## Appendix 1 – Otago Regional Strategies and Plans

Regional Strategy / Plan	Impact on Transportation in Waitaki
Regional Plan	Waitaki District Council is a key player in terms of providing services to its customers in the district and the co-investment from the NZ Transport Agency through the Regional Land Transport Plan making it possible to achieve a reduction in fatal and serious injuries, maintain and improve road network for all types of vehicles and modes; from walking and cycling through to agricultural or heavy vehicles.
	Waitaki District Council has an obligation and responsibility to maintain and uphold the policies and rules of the Regional Plans to ensure that a sustainable and well maintained roading network is in place to support the customers and communities of the Waitaki.
Transport Policies	<ul> <li>In planning and providing land transport services and functions, RCAs must:</li> <li>a. Support the carriage of freight to facilitate the exporting of produce</li> <li>b. Support and enable tourism and visitor travel</li> <li>c. Minimise road trauma</li> <li>d. Ensure community resilience</li> </ul>
	<ul> <li>e. Provide for mode choice including walking, cycling and public transport</li> <li>f. Foster integrated transport and landuse planning</li> <li>g. Continuously reduce the environmental externalities arising from transport</li> </ul>
Urban Water Quality Strategy	Discharge consents for urban road run-off must comply with the Urban Water Quality Strategy. The Strategy seeks a stormwater neutral outcome meaning that use of road corridors for stormwater retention, detention and treatment is increasingly necessary. This is driving the need for innovative solutions and LoS adjustments.
Rural Water Quality Strategy	Waitaki District Council has an important support role to play in rural much the same as for urban however resource consents for storm water off rural roads in ECan area are now mandatory making stormwater discharge more complex and expensive. The Otago Regional Council hasn't yet implemented this in their region however it is expected and will impact on our transport network.
Otago Biodiversity Strategy	Biodiversity is now impacting on the Waitaki District Council particularly and this is apparent particularly around existing bridge locations; the long jaw galaxid is now a rare form of whitebait and in-stream works are difficult to undertake on the Kauru River. A bridge widening and renewal on Lake Ohau Road was put on hold due to a population of lizards living in proximity and a wildlife authority is required before construction can proceed. Incorporating and maintaining fish passage in culverts in conjunction with any renewal work is now a mandatory requirement.
Otago Air Quality Strategy	Waitaki District Council's mode neutral approach to the 2021-24 RLTP will encompass a wider range of alternative modes to vehicle travel with a corresponding reduction in vehicle emissions. Council will also be implementing a Central Management System for LED streetlighting which will reduce light spill and reduce vehicle trips in maintenance.
Otago Biosecurity Strategy	Waitaki District Council actively participates in pest management on our roadsides to ensure that noxious plants and wildings are maintained to a minimum; to ensure road safety is not compromised but also that Council is giving effect to the provisions of the Strategy



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