



# Roading

## Activity Management Plan 2021-2031



TE KAUNIHERA Ā ROHE O  
**WHAKAAHURANGI**  
**STRATFORD**  
DISTRICT COUNCIL

Long Term Plan 2021-31

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**THE ROADING  
ACTIVITY MANAGEMENT PLAN  
2021-2031(RAMP)**

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## Glossary of Terms and Acronyms

The following is a glossary of terms and acronyms used in the Rooding Asset Management Plan

Abbreviation	Description
AADT	Annual Average Daily Traffic
AM	Asset Management
AMP	Asset Management Plan
AMPol	Asset Management Policy
BAU	Business As Usual
BC	Benefit Cost
BCA	Business Case Approach
BCA	Benefit Cost Analysis
BCR	Benefit Cost Ratio
BERL	Business and Economic Research Limited
CAS	Crash Analysis System
CBD	Central Business District
CCTV	Closed Circuit Television
CDEMA	Civil Defence Emergency Management Act
CDEMG	Civil Defence Emergency Management Group
DIA	Department of Internal Affairs
DSI	Death Serious Injury
ERFD	Emergency Rural Fire District
ETS	Emissions Trading Scheme
FTE	Full Time Equivalent
GDP	Gross Domestic Product
GIS	Geographic Information System
GPS	Government Policy Statement
HCV	Heavy Commercial Vehicles
HPMV	High Performance Motor Vehicles
HPS	High Pressure Sodium
IAF	Investment Assessment Framework
ID	Identification
IAF	Investment Assessment Framework
IS	Infrastructure Strategy
IT	Information Technology
ILM	Investment Logic Mapping
KPI	Key Performance Indicator
LED	Light Emitting Diode
LGA	Local Government Act
LINZ	Land Information New Zealand
LoS	Levels of Service
LTMA	Land Transport Management Act
LTSV	Long Term Strategic View
LTP	Long Term Plan
MBIE	Ministry of Business, Innovation and Employment
MCA	Multi Criteria Analysis
NA	Not Applicable
NAASRA	National Association of Australian State Road Authorities
NLTP	National Land Transport Plan
NPDC	New Plymouth District Council
NPV	Net Present Value
NZ	New Zealand
NZTA	New Zealand Transport Agency
NZUAG	New Zealand Utilities Advisory Group
ODRC	Optimum Depreciation Replacement Cost

Abbreviation	Description
ONF	One Network Framework
ONRC	One Road Network Classification
OPM	Optimum Decision Making
ORC	Optimum Replacement Cost
ORV	Optimum Replacement Value
RAMM	Road Assessment and Maintenance Management
RC	Replacement Cost
RCA	Road Controlling Authority
RED	Regional Economic Development
REG	Road Efficiency Group
RFMC	Roading Facility Maintenance Contract
RGP	Regional Growth Programme
RLTP	Regional Land Transport Plan
RMA	Resource Management Act
SDC	Stratford District Council
SPR	Special Purpose Road
StatsNZ	Statistics New Zealand
STDC	South Taranaki District Council
STE	Smooth Travel Exposure
TA	Territorial Authority
TET	Taranaki Energy Trust
TIO	Transport Investment Online
TRFA	Taranaki Rural Sire Authority
TSB	Taranaki Savings Bank
TSA	Treatment Selection Algorithm
WC	Work Category

# EXECUTIVE SUMMARY

## The Rooding Activity Management Plan

The purpose of the Rooding Activity Management Plan (RAMP) is to describe the financial, engineering and technical strategies and practices that Stratford District Council uses to meet its strategic obligations to provide a level of service for road users in a way that is cost effective for households and businesses.

The AMP is a living document reflecting Council's practice, central and local government requirements, policies and guidance. This AMP is used to inform the Council's Long Term Plan and it is the justification for Council's programme which forms part of the National Land Transport Programme (NLTP). The AMP details Council owned assets and is used for communicating complex asset management information/strategies with stakeholders, elected members, service managers and other interested parties.

## Our Problem Statements

Based on the principals of *Strategic Business Case* development and *Investment Logic Mapping (ILM)*, four problem statements have been developed to reflect the current issues facing Stratford District Council. These are over and above the "Business as Usual (BAU) challenges and problems of managing a safe and effective rooding network for our customers.

- **Problem Statement 1** (40%) – Increasing Heavy Commercial Vehicles (HCV) and forestry activity along with the current standard of the asset is resulting in an increase in reactive investment and inefficient use of resources.
- **Problem Statement 2** (35%) – The geography and environmental conditions have led to poor drainage controls and the inability of the rooding network to cope with intense weather events. This restricts access to road communities and economic impacts.
- **Problem Statement 3** (15%) - There is misalignment between Council and Community regarding the appropriate level of service to meet the expectations for a safe and resilient rooding networks; and
- **Problem Statement 4** (10%) - Poor driver behaviour, challenging road conditions and unforgiving roads and roadsides is resulting in death and serious injury crashes to our community.

## Our Line of Sight

In addressing the issues identified in the four Problem areas, the Council will ensure that its *Investment Strategy* generates the benefits described in the two *Benefits Statements* below:

- A safe, accessible, resilient, appropriate transport network that supports growth.
- An affordable, sustainable, flexible investment programme that meets the needs of the community.

The Council has shown how the Line of Sight achieves the expected outcomes required by NZTA (ONRC Outcomes) in Table 1 below.

**Table 1 - Line of Sight - Problem and Benefit Statements**

<b>Problem Statement 1 – Increasing Heavy Commercial Vehicles (HCV) and forestry activity along with the current standard of the asset is resulting in an increase in reactive investment and inefficient use of resources. (40%)</b>			
<b>Impacts</b>	<b>Consequences of Non-Investment</b>	<b>Benefits of Investments</b>	<b>Investment Opportunity</b>
<b>Specific Problem 1: Increased activity from the forestry industry</b>			
<ul style="list-style-type: none"> <li>Increased deterioration of the condition of roads affected by forestry.</li> <li>Increases in reactive maintenance and unplanned works.</li> <li>Increases in capital expenditure to remedy faults in routes affected by forestry.</li> </ul>	<ul style="list-style-type: none"> <li>Poor level of service afforded to the community.</li> <li>Excessive damage to the structure of the road.</li> <li>Increased risk of long term damage to old bridges.</li> <li>Increase in the number of customer complaints.</li> <li>Risk to public safety due to the number of HCVs on low volume roads.</li> </ul>	<ul style="list-style-type: none"> <li>Maintain the integrity of the road network.</li> <li>Pro-active/programmed maintenance activities.</li> <li>Reduction of risk for safety and death and serious injuries (DSIs).</li> <li>Ensuring bridges are fit for purpose.</li> <li>Reduce the amount of reactive maintenance.</li> </ul>	<ul style="list-style-type: none"> <li>Regular inspections of the roading network to generate work programmes.</li> <li>Regular liaison with forestry contractors to identify locations of forests and timing of harvest.</li> <li>Use of low cost/low risk improvement fund for minor network improvements on low volume roads.</li> <li>Planned/programmed pavement maintenance and capital works.</li> </ul>
<b>Specific Problem 2: Increased number of High Productivity Motor Vehicles (HPMV) permit vehicles</b>			
<b>Impacts</b>	<b>Consequences of Non-Investment</b>	<b>Benefits of Investments</b>	<b>Investment Opportunities</b>
<ul style="list-style-type: none"> <li>Specified routes will deteriorate at an accelerated rate.</li> <li>Greater expenditure per kilometre on these routes, resulting in a reduced level of service elsewhere on the network.</li> <li>Increased frequency of reactive maintenance on specific routes</li> </ul>	<ul style="list-style-type: none"> <li>Customer complaints regarding the condition of these HMPV approved routes.</li> <li>Significant pavement failure of these road corridors.</li> <li>Disproportionate levels of expenditure for HMPV routes.</li> <li>Lack of funding to adequately keep pace with the damage created.</li> </ul>	<ul style="list-style-type: none"> <li>Timely maintenance of the network to retain the integrity of the road pavement.</li> <li>Ensure bridges are suitably rated for expected loads for current and future growth.</li> <li>Reduced reactive maintenance and major capital projects so the network remains fit for purpose.</li> <li>Reduce customer complaints concerning the condition of the road.</li> </ul>	<ul style="list-style-type: none"> <li>Programmed pavement maintenance and pavement rehabilitation capital projects.</li> <li>Reseals are targeted to key HPMV routes.</li> <li>Surveys to assess the strength of underlying pavements or HPMV routes</li> </ul>

<b>Specific Problem 3: Bridges and Retaining Walls</b>			
<b>Impacts</b>	<b>Consequences of Non-Investment</b>	<b>Benefits of Investments</b>	<b>Work Activities</b>
<ul style="list-style-type: none"> <li>• Risk of structural failure as bridges or retaining walls</li> <li>• Loss of access to rural communities.</li> <li>• Inability to deliver goods to market,</li> <li>• Increased risks to public health and safety if structures are not sound.</li> </ul>	<ul style="list-style-type: none"> <li>• Failure of bridges or retaining walls resulting in a road closure for prolonged periods of time.</li> <li>• Lifeline access to rural communities on “no exit” roads beyond the collapsed bridge or retaining wall.</li> <li>• Economic loss to district, agriculture, forestry.</li> <li>• Loss of faith in the Council by the community.</li> </ul>	<ul style="list-style-type: none"> <li>• Maintaining the structural integrity of these assets.</li> <li>• Ensuring the safe and continued access for the rural communities.</li> <li>• Ensure connectivity for the community.</li> <li>• Economic growth is fulfilled, supporting a prosperous and vibrant district.</li> </ul>	<ul style="list-style-type: none"> <li>• Regular inspections by structural consultant as part of an “Inspection” contract.</li> <li>• Itemised low cost repairs undertaken in a timely manner.</li> <li>• Detailed maintenance programme developed from the inspection.</li> <li>• Estimates for Remaining Useful Life (RUL) of structures and estimated replacement costs for 30 year Infrastructure Plan Long Term Plan cycles.</li> </ul>
<p><b>Problem Statement 2:</b> The geography and environmental conditions have led to poor damage controls and the inability of the roading network to cope with intense weather events. This restricts access to road communities and economic impacts (35%)</p>			
<b>Impacts</b>	<b>Consequences of Non-Investment</b>	<b>Benefits of Investments</b>	<b>Investment Opportunities</b>
<p><b>Specific Problem 1: Environmental Conditions - Poor drainage facilities.</b></p>			
<ul style="list-style-type: none"> <li>• Climatic change has led to increasing intense weather events.</li> <li>• Poor drainage has resulted in underslips and localised flooding occurring.</li> <li>• Within our network we have 180 culverts which are 225mm in diameter. Our Minimum standard is 375mm.</li> <li>• Backlog of watertables need to be cleared.</li> <li>• Poor or non-existent outlet controls lead to underslips forming.</li> </ul>	<ul style="list-style-type: none"> <li>• Flooding of local roads as existing culverts cannot cope with the volume of water.</li> <li>• Erosion of culvert outlets leading to slips, pipes falling off.</li> <li>• Flooding due to inadequate watertable profiles. These are often blocked with vegetation and slip debris.</li> <li>• Pavement layers remain saturated which can lead to failure.</li> </ul>	<ul style="list-style-type: none"> <li>• Improvements to watertables will ensure pavements will remain dry. This reduces the number of pavement failures that need repairing.</li> <li>• Replacing undersized culverts to combat rainfall intensity.</li> <li>• Constrict outlet controls at culverts to reduce the risk of erosion.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased programme for watertabling and culvert replacements.</li> <li>• Install outlet controls when replacing culverts.</li> <li>• Develop a programme to systematically replace existing 225mm diameter culverts.</li> <li>• Fully understand current condition of drainage facilities,. Undertake a condition assessment.</li> </ul>



<b>Problem Statement 3 - There is misalignment between Council and Community regarding the appropriate level of service to meet the expectations for a safe and resilient roading network (15%);</b>			
<b>Impacts</b>	<b>Consequences of Non-Investment</b>	<b>Benefits of Investments</b>	<b>Investment Opportunities</b>
<b>Specific Problem 1: Roads:</b> Potential increases in visitor numbers			
<ul style="list-style-type: none"> <li>Sealing of State Highway 43 will encourage greater number of tourists to visit Stratford.</li> <li>Investment from the Provincial Growth Fund for Taranaki Crossing will lead to more visitors.</li> <li>Tapuae Roa, Taranaki's Economic Development Strategy will impact on Stratford District Council's roading network</li> </ul>	<ul style="list-style-type: none"> <li>Poorly maintained local road network for visitors at their destination.</li> <li>Increased risk to public health and safety on rural roads.</li> <li>Failure of road pavements due to increased tourism EG: Special Purpose Roads (SPRs).</li> </ul>	<ul style="list-style-type: none"> <li>Well maintained and resilient local road network.</li> <li>Connectivity for tourism to access visitor offerings.</li> <li>Network will meet current and future needs for tourists.</li> </ul>	<ul style="list-style-type: none"> <li>Focus on prioritising well maintained Special Purpose Roads for access to Mount Taranaki.</li> <li>Increased tourist numbers will visit Whangamomona and surrounding area.</li> <li>Maintenance of local roads will play a role in the whole visitor experience.</li> </ul>
<b>Specific Problem 2: Footpaths:</b> Increased number of mobility scooters, development of Walking and Cycling Strategy			
<b>Impacts</b>	<b>Consequences of Non-Investment</b>	<b>Benefits of Investments</b>	<b>Investment Opportunities</b>
<ul style="list-style-type: none"> <li>Narrow footpaths throughout Stratford.</li> <li>Recent installation of ultra-fast broadband has affected the quality of the footpaths.</li> <li>Lack of footpaths on some urban streets reduces connectivity.</li> <li>How can we increase the uptake of active modes of transport if the infrastructure does not meet standards?</li> </ul>	<ul style="list-style-type: none"> <li>Lack of width for multiple users of footpaths &gt;50/cm is less than 1.50m wide.</li> <li>Footpath repair programme halted for 2 years due to utility installation.</li> <li>No provision of footpath to a well-used day care centre, results in parents taking children by car. There are no active modes available.</li> <li>Footpaths width will remain unaltered.</li> <li>Personal injury to frail and elderly users of the network.</li> </ul>	<ul style="list-style-type: none"> <li>Provision of 1.50 meter width footpaths as a minimum standard will provide ease of access and use for multiple user groups.</li> <li>Improves level of service for the condition of the footpaths and reduces risk of injury to the users.</li> <li>Encouraging more active modes of transport with good quality footpaths provided by Stratford District Council.</li> </ul>	<ul style="list-style-type: none"> <li>Increased programme for footpath replacement and upgrades.</li> <li>Provision of new footpath to service day care centre.</li> <li>Development of a five year programme for footpaths.</li> </ul>

<b>Specific Problem 3: Cycleways:</b> Lack of cycling network to encourage active modes of transport.			
<b>Impacts</b>	<b>Consequences of Non-Investment</b>	<b>Benefits of Investments</b>	<b>Investment Opportunities</b>
<ul style="list-style-type: none"> <li>Inhibits our ability to support sustainable forms of transport for school children, parents, recreational users and (including tourism) and others.</li> <li>Inhibits the transformation from traditional modes of travel to more sustainable modes, especially for school children.</li> <li>Does not encourage a healthier lifestyle through active transport systems.</li> </ul>	<ul style="list-style-type: none"> <li>No uptake in the cycling strategy.</li> <li>No multi-model transport options for residents and visitors.</li> <li>Potential impact on the local economy due to cycling tourists not visiting the area.</li> <li>Road safety implications around encouraging school children to cycle to school and for recreation.</li> </ul>	<ul style="list-style-type: none"> <li>Amenity will be improved.</li> <li>Greater use and uptake on active modes of transport.</li> <li>Increase in cycling tourists staying within Stratford.</li> <li>Provision of urban and rural cycle routes for commuting and recreational use.</li> </ul>	<ul style="list-style-type: none"> <li>Development of the Walking and Cycling Strategy to provide:</li> <li>Educational programmes to encourage greater uptake of walking and cycling.</li> <li>Provision of key cycle routes throughout Stratford to service key facilities within the town.</li> <li>Development of recreational routes for the community and tourists visiting Stratford.</li> </ul>

<b>Problem Statement 4 -</b> Poor driver behaviour, challenging road conditions and unforgiving roads and roadsides is resulting in death and serious injury crashes to our community. (10%)			
<b>Impacts</b>	<b>Consequences of Non-Investment</b>	<b>Benefits of Investments</b>	<b>Investment Opportunities</b>
<b>Specific Problem 1:</b> Increase in the number of fatal and serious injury crashes.			
<ul style="list-style-type: none"> <li>The number of death and serious injury crashes will not reduce to achieve the “Road to Zero” national target.</li> </ul>	<ul style="list-style-type: none"> <li>The number of reported deaths and serious injuries will not reduce.</li> <li>No opportunities to undertake low cost/low risk safety improvements throughout the district.</li> <li>Collective Risk and Personal Risk KPIs will not improve.</li> <li>Less opportunity to encourage active modes of transport if the community feels unsafe.</li> </ul>	<ul style="list-style-type: none"> <li>Reducing the number of death and serious injury crashes,</li> <li>Greater uptake of active modes as the community will feel safer.</li> <li>Funds targeted to low cost/low risk improvements to provide a safe and resilient network.</li> </ul>	<ul style="list-style-type: none"> <li>Continual investment to address crash sites to achieve and assist in the Government Policy Statement (GPS) “Road to Zero” vision.</li> <li>Develop a programme for low cost and low risk safety improvements using Megamaps, Crash Analysis System (CAS) as a guide.</li> <li>Investigate speed limit changes. The new Speed Limit Bylaw took effect from 1 February 2020 giving Stratford District Council the ability to change speed limits where justified.</li> </ul>

### Our Programme Business Case

The Council has developed a programme to address the four strategic priorities outlined in the draft Government Policy Statement 2021/22 – 2030/31:

- **Safety** - Stratford District Council will work collaboratively with neighbouring authorities as well as national agencies to “do our bit” in assisting to reduce the unacceptable road toll in New Zealand. We have recently reviewed and renewed our Speed Limit Bylaw that took effect on 1 February 2020. Stratford District Council took this opportunity to change several speed limits throughout the district. The most notable was the reduction of the speed limit for the local roads in Midhirst from 70km/h to 50km/h. Other settlements of Toko and Whangamomona had similar reductions in speed limits. This has been well received by the local community. Using “Megamaps” and CAS, as well as local knowledge, Stratford District Council will develop a Roadsafes improvement programme to address known “crash blackspots” where they exist, The current issue for Stratford District Council is rural crashes that occur randomly across the district, so there is no cluster of crashes at a particular location. Being a founder of Roadsafes Taranaki we take an active role to improve road safety.
- **Better Travel Options** – This strategic priority is primarily focussed at metropolitan New Zealand. However Stratford District Council can use this priority to provide better connections for residents living in Stratford. As well as rural residents who travel the rural network on a daily basis. Development of our walking and Cycling Strategy will provide the opportunity for the community to use other more active modes of transport as an alternative choice.
- **Improving Freight Connections** – Stratford’s primary economy is agriculture, tourism and forestry. Whilst oil and gas still play a part in our economy, following the Government change in stance over oil exploration, this has had an impact on the local economy for Taranaki as a whole. Forestry is one industry that is taking its toll on the rural roading network of Stratford. Due to insufficient forestry resources (logging contractors) many of the forestry blocks are taking two to three years to harvest. Our plan is to attempt to be ahead of the game, to undertake planned, programmed maintenance on roads affected by the forestry industry. This will provide more efficient use of funds and resources to keep these roads maintained to a reasonable level of service.
- **Climate Change** – The transport industry is a contributor to climate pollution. In order to address this, Stratford District Council is developing a Walking And Cycling Strategy to encourage our community to be more active not only travelling to and from work and/or school, but also at weekends. We are identifying recreation routes within Stratford and the surrounding countryside, As part of this Activity Management Plan we have signalled our intent and allocated some funds to developing our strategy and infrastructure. Shown in [Appendix 1](#) is an extract from our Walking and Cycling Implementation Plan. This provides the breakdown of projects, the year and approximate funds. At this stage this is very rudimentary. There is initially a large funding requirement to kick start this project, thereafter from year 2, we are suggesting in the order of \$300,000 per annum.

### Our Programme Delivery

The District maintains ownership and responsibility for managing the land transport activity, the associated infrastructure and delivery of the total works programme. The Council has an in-house professional services team to provide service in the following areas:

- Developing, managing and administering physical works contracts;
- Preparing feasibility reports, strategies, policies and studies;
- Information collation and RAMM data entry;
- Review resource and building consents;
- Managing Corridor Access requests through “Submitica”; and
- Preparing physical works contracts.

The Council also engages the services of external consultants for specific projects that we cannot undertake internally.

At the time of preparing this Activity Management Plan, Stratford District Council is currently preparing a contract to inspect all of our structural assets. This contract will be a 2+2+2 year duration to ensure all structural assets will have two general inspections and one detailed inspection.

### **Operations and Maintenance**

These activities are required for the day to day operation of the network to maintain the agreed level of service incorporating the ONRC customer outcomes. These works include: ‘

- Pavement repairs
- Grading and unsealed roads
- Drainage maintenance
- Vegetation control
- Street cleaning
- Maintaining footpaths
- Structure maintenance
- Repainting roadmarkings and repairs to road signs

### **Renewal/replacement**

This activity includes the replacement and rehabilitation of assets to restore them to their original condition or capacity. For the term of this AMP our focus will be on restoring the assets that are priority affected by the heavy haulage industry. With an increase in the number of HPMV permit holders, pre-determined routes are being adversely affected. Forestry is having a large impact on many rural roads so again, our focus will be on maintaining and strengthening these roads.

### **Low Cost Low Risk Improvements**

For this work activity we intend to address our death and serious injury crash statistics. Over the duration of the previous AMP (2018/19 and 2019/20) we had 19 number of DSI crashes. The work category will provide the means to carry out safety improvements across the network.

With an ageing bridge and retaining wall state the low cost low risk improvement work activity will be used to fund the replacement of 12 retaining walls over the next 3 years.

## **Our Lifecycle Management Strategy**

Right time, right treatment, right place is our philosophy for the life of this AMP and the assets that we are the custodians of. Given the size of the authority and the corresponding funding constraints, we have to be very prudent how we go about our business. This will inevitably result in Stratford District Council taking on more risk in order to push the boundaries and life expectancy for our assets. EG: reseals have traditionally been undertaken every 13 years. We are seriously looking to extend this to 15 or 18 years where possible. This strategy will “free up” funds for other work activities that at the present time are more pressing, such as pavement rehabilitation and drainage renewals.

## **Our Investment Funding Strategy**

The Council’s Investment Strategy covers how Stratford District Council plans to plan, operate, maintain and improve the Roding network to deliver its vital role in enabling journeys safely and efficiently whilst achieving value for money. It sets out overall operations to meet its objectives now and in the future, with a key objective of the future-proofing Council’s assets.

The Council’s maintenance programme aims to sustain current levels of service and incrementally provide opportunity to carry out improvements of increasing the widths of our footpaths from 1.0 to 1.50 meters.

The maintenance programme for this AMP will increase by 27%, from \$16,301,060 to \$20,641,700 for three years for local roads and \$542,100 to \$711,000 for 3 years for Special Purpose Roads.

The Council’s Low Cost/Low Risk Improvements funding will increase to \$3,080,000 For the three years and for this AMP, this comprises of:

- Safety improvements = \$1,480,000;
- Walking and Cycling = \$1,100,000; and
- Whangamomona Road upgrade = \$500,000

Beyond 2024 the funding for Walking and Cycling and low cost/low risk improvements varies from year to year to take into account our 30 year programme.

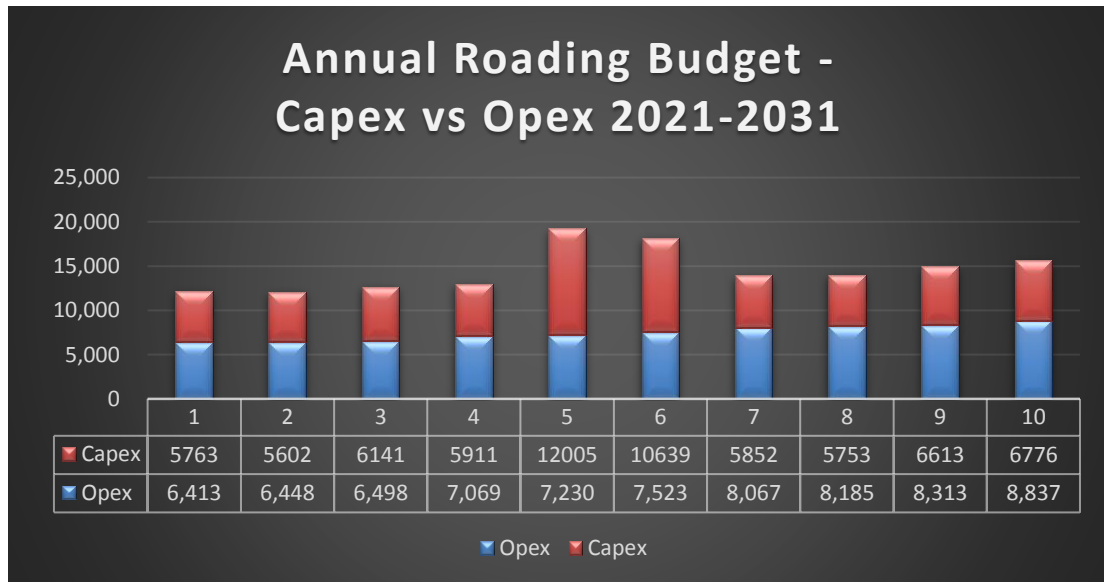
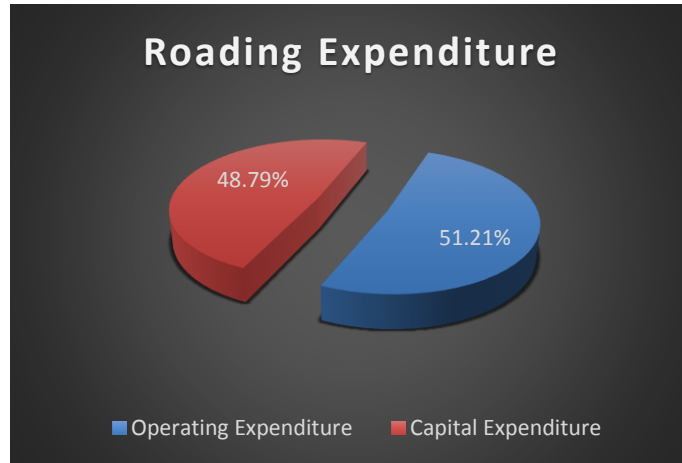
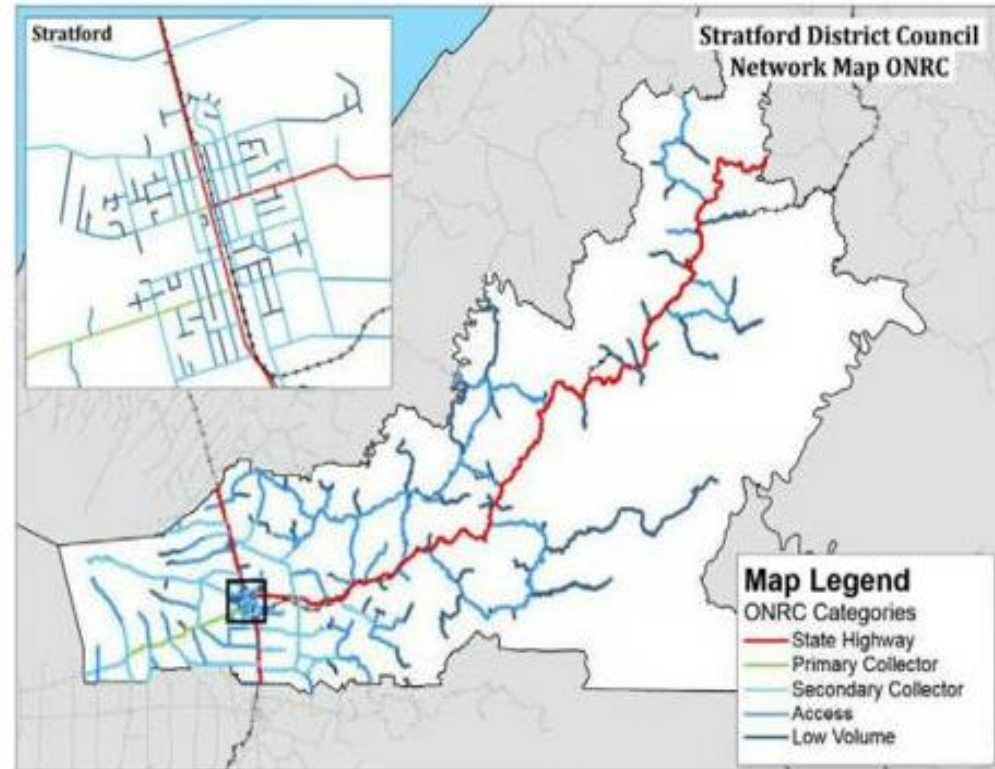
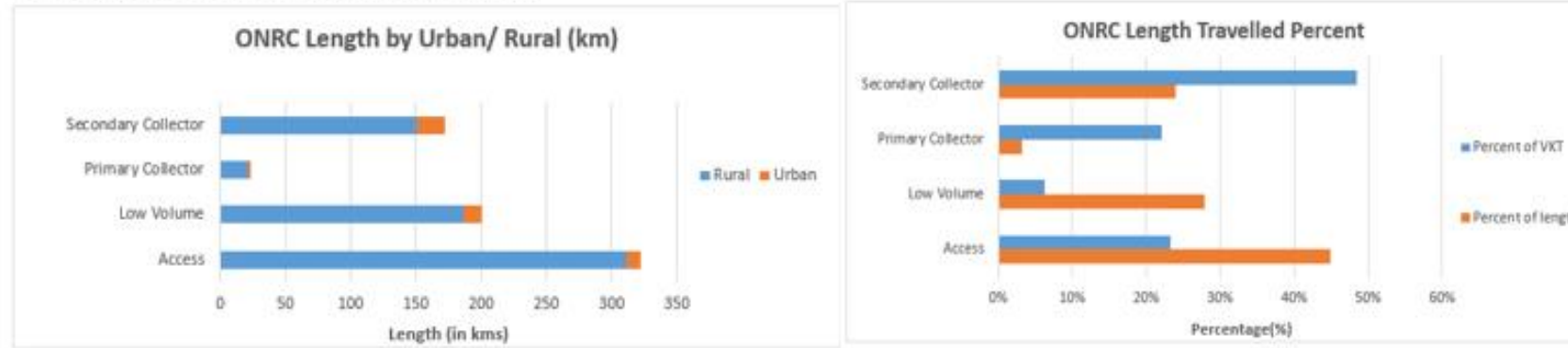


Figure 1 - Total Roothing Expenditure

Table 2 – 2021-2024 National Land Transport Plan Funding at a Glance – Local Roads

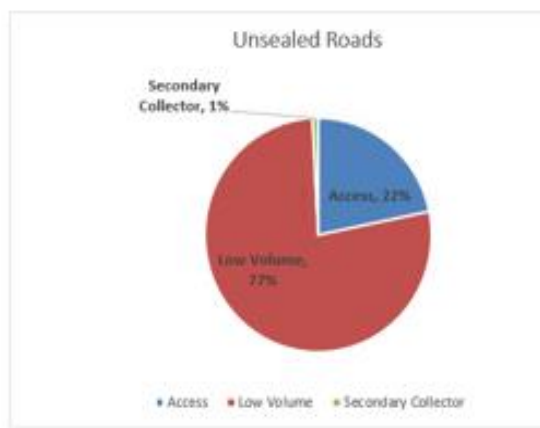
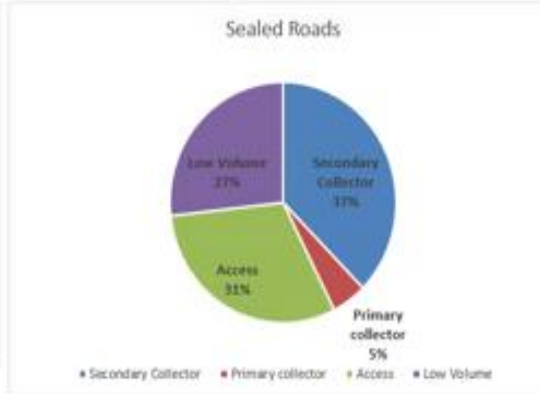
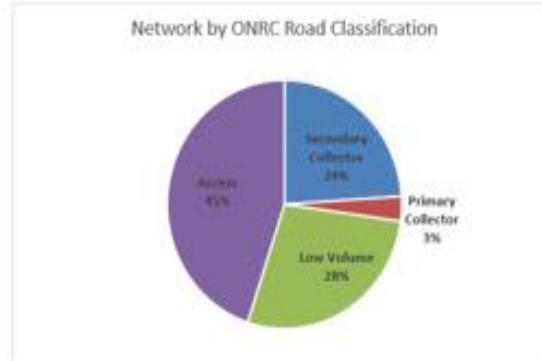
Roothing Activity	2021/2022	2022/2023	2023/2024	2024-2027	2027-2031	2031	TOTAL
Maintenance	1,624,000	1,624,000	1,624,000	5,270,000	5,790,000	2,140,000	18,072,000
Operations	897,000	897,000	897,000	3,240,000	3,560,000	1,585,000	11,076,000
Renewals	4,508,000	4,320,000	4,248,000	13,480,000	14,125,000	5,135,000	45,816,000
Low Cost/Low Risk Improvements	1,180,000	925,000	975,000	2,750,000	16,790,000	760,000	23,380,000
<b>TOTAL</b>	<b>8,209,000</b>	<b>7,766,000</b>	<b>7,744,000</b>	<b>24,740,000</b>	<b>40,265,000</b>	<b>9,620,000</b>	<b>98,344,000</b>

**NETWORK LEVEL OVERVIEW**

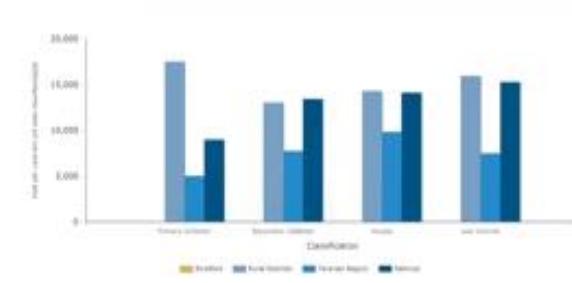
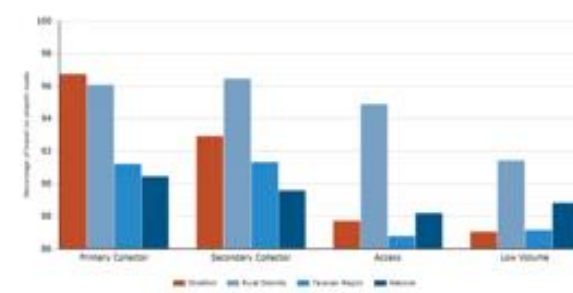
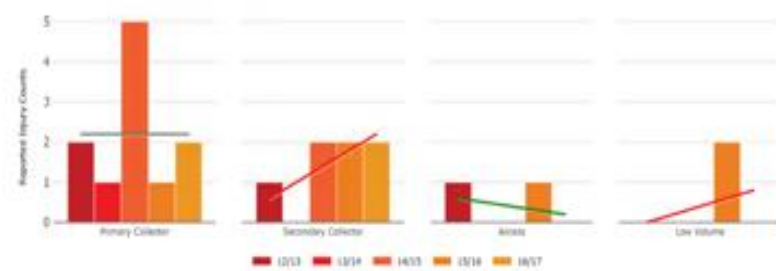


**KEY ASSET GROUPS**

Asset Type	Asset Type Component	Replacement Cost 2016	Replacement Cost 2018	Depreciated Replacement Cost 2018	Annual Depreciation 2018
Berm	Berm	\$10,726,818	\$11,643,336	\$11,643,336	\$0
Bridge	Bridge (Superstructure)	\$30,749,951	\$33,377,266	\$12,113,089	\$351,939
Drainage	Drainage General	\$16,499,383	\$15,064,890	\$4,273,904	\$188,321
Footpath	Footpath formation	\$6,115,137	\$6,241,626	\$3,288,230	\$77,510
Railing	Railing	\$820,414	\$894,153	\$202,072	\$18,190
Retaining Wall	Retaining Wall	\$4,389,684	\$4,724,071	\$3,109,080	\$59,051
SW Channel	SW Channel	\$5,011,774	\$5,419,190	\$1,213,358	\$67,740
Sign	Sign Total	\$1,578,241	\$1,731,299	\$210,620	\$94,794
Street Light	Street Light Total	\$2,202,271	\$1,731,299	\$210,620	\$94,794
Treatment Length	Treatment Length Total	\$202,307,133	\$3,462,598	\$421,240	\$189,588
Sub-Totals		\$280,400,806	\$280,379,571	\$199,683,860	\$2,804,009
Land Value		\$53,638,711	\$53,638,711	\$53,638,711	\$0
<b>1 July Road Asset Valuation Totals</b>		<b>\$334,039,517</b>	<b>\$280,379,571</b>	<b>\$199,683,860</b>	<b>\$2,804,009</b>



**LEVELS OF SERVICE PERFORMANCE**



**Safety – Fatalities and Serious Injuries**

In 2016/17 there were 2 reported Fatalities and Serious Injuries in the Stratford District. When looking at the trends, we are neutral for primary collector roads, a higher trend for secondary collector, an improving trend for access roads and a high trend for low volume roads.

**Amenity – Average Roughness Exceeded**

For this performance indicator, we can clearly show that the smooth travel exposure for our Primary Collector is greater than the other regions, as well as the national average.

However Stratford District Council will need to focus our pavement repairs on the Secondary Collector and sealed Access roads. We undertake an annual road roughness rating survey and these results are entered into the RAMM database by the consultant undertaking the survey.

**Cost Efficiency – Chipseal Surfacing Renewed Annually**

Our average reseal life across all road categories is 13 years. It is our expectation to extend the life of our reseals to at least 15 years or more, with the maintenance strategy and renewal programme which will be implemented.

Figure 2 - Network Level Overview

# 1.0 Introduction

## 1.0: Introduction

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## 1.1 PURPOSE OF THE PLAN

The Roding Activity Management Plan 2021-2031 ('the RAMP') is a 10 Year Strategic Plan for the Stratford District Council ('the Council'). It details how the Council will manage the Roding activity, assets and services in an efficient, safe, reliable and sustainable manner to provide value for money our customers and investors.

The RAMP informs the development of the Council's 2021-2031 Long Term Plan ('the LTP') and the New Zealand Transport Agency (NZTA)'s National Land Transport Programme for 2018 ('2018 NLTP'). It shows how the Council will prioritise and address key District land transport issues, in the face of competing projects and constrained resources. The prioritisation of competing projects is necessary to deliver on Community Outcomes, the agreed Levels of Service (LoS) and also meet legislative objectives and requirements. The RAMP proposes work programmes that deliver good value for money for our investment partners. This is achieved by doing the right things, in the right places, at the right times, for the right price and in the right ways.

## 1.2 THE STRATFORD DISTRICT

The Stratford District is a land locked area encompassing 2170km<sup>2</sup> located in the heart of Taranaki. The district is adjacent to the New Plymouth and South Taranaki districts in the Taranaki region and the Ruapehu and Whanganui Districts in the Horizons Regional Council. Within the district there are four distinct geographical areas:

- The alpine and bush environment of Egmont National Park;
- The ring plain around Mt Taranaki;
- Hill country located between the ring plain and the eastern hill country; and
- Eastern hill country to the boundary with Ruapehu District Council.

The district's rural landscape supports large farming, forestry and Department of Conservation reserves. Stratford is a growing tourist destination, with attractions such as Egmont National Park, the Manganui Ski Field, Forgotten World Highway (SH43), Whangamomona, Dawson and Mt Damper Falls to name a few.

The Stratford District Council ('the Council') is responsible for maintaining 597 km of local roads and 14km of Special Purpose Roads located within the National Park. Thirty four percent of our Roding network is unsealed; the majority being located in the eastern hill country. Many of these unsealed roads carry less than 50 vehicles per day.

The majority of the road users on our road network consist of the Farming community; Forestry industry; Oil and Gas industry; Haulers associated with the farming industry; Tourists; School buses and rural postal delivery service.

### 1.2.1 DISTRICT HISTORY

The site for Stratford Township on the north bank of the Patea River was cleared in 1877 and was originally named Stratford-on-Patea. It was named after Stratford-Upon-Avon, Shakespeare's birthplace, and the streets were named after Shakespearean characters including Oberon, Cordelia, Juliet and Hamlet. By 1906 the population of Stratford numbered almost 6,000. Other towns throughout the district sprung up as the bush was cleared and new farming districts developed. Schools, hotels, stores and other community facilities were established, however, the Stratford Township remained the hub of the area.

From early on in the twentieth century there was rapid development of the dairy industry, with most communities having their own factory. Roads through the district were still relatively basic, which meant travelling any distance was difficult. As roads improved throughout the 20th century, communities in the district gradually began to lose their facilities. It was cheaper and easier to travel to larger towns for services than to maintain those services in smaller settlements.

The Forgotten World Highway (State Highway 43) links the towns of Stratford and Taumarunui and later became New Zealand's first heritage trail. It passes through the village of Whangamomona which was first settled in 1895, with no road or rail access. Today the village has approximately 25

full-time residents, a hotel, a handful of historic buildings and the odd goat. (Refer: *Stratford District Council Website*.)

## 1.2.2 DISTRICT GEOGRAPHY

The Stratford District is one of three territorial authorities ('TA') in the Taranaki region, overlying of which is the administrative area of the Taranaki Regional Council. The far eastern portion of the Stratford District is also overlain by the administrative area of the Horizons (Manawatu/Wanganui) Regional Council. The political division between the two regional councils lies along the Whangamomona Saddle.

Mount Taranaki or Mount Egmont, and Egmont National Park, dominate the landscape of the District. In the past, successive eruptions of ash and natural erosion have created an "apron" or a "ring plain" around the base of the mountain. The fertile and generally free draining soils of this ring plain support intensive pastoral farming, especially dairying.

East of the ring plain lies the rolling topography of the frontal hill country and further east, the deeply dissected hill country. These hills are not volcanic but consist of sedimentary rocks (mudstone, sandstone and siltstone). Soil properties in the eastern hill country are closely linked to the differences in rock hardness and composition. Most are steepland soils, ie, are shallow soils which have developed on steep, relatively unstable slopes. (Refer: *Stratford District Plan 2014*.)

## 1.2.3 DISTRICT MAIN COMMUNITIES

The Stratford District is home to many settlements, with the three main centres being Stratford, Midhirst, and Toko. A brief description of each town is summarised from *The Encyclopaedia of New Zealand, 1966*.

### **Stratford**

Stratford (Māori: Whakaahurangi) is the main town in the Stratford District. It is located on the banks of the Patea River roughly 48 km south-east of New Plymouth and 30 km north of Hawera at the junction of State Highways 3 and 43. Stratford is near the geographic centre of the Taranaki region and the largest settlement of the Stratford District with an estimated population of 6,690. The town is central Taranaki's main rural servicing centre, and the administrative base of the Stratford District Council and the Taranaki Regional Council.

### **Midhirst**

Midhirst is located approximately 4 km north of Stratford, on State Highway 3. Inglewood is 17 km (11 mi) north of Midhirst and New Plymouth is 35 km (22 mi) to the northwest. An estimated 234 people live in Midhirst. One of the most distinctive features of Midhirst is the towering concrete and glass milk-powder drying plant, which was one of New Zealand's most advanced in its time (1980). The factory closed after amalgamating with Kiwi Dairies in 1983 and is now used for bulk grain storage.

### **The Toko Township**

Toko is located 10 km east of Stratford, at the intersection of East Road (State Highway 43) and Toko Road. It is situated on a railway, the Stratford–Okahukura Line, the western portion of which was operated as a branch line known as the "Toko Branch" prior to the line's completion. The Toko Stream flows through the area to join the Patea River. An estimated 1,188 people live in or around Toko. This includes people living in the settlement and those living in the surrounding rural areas.

# Introduction

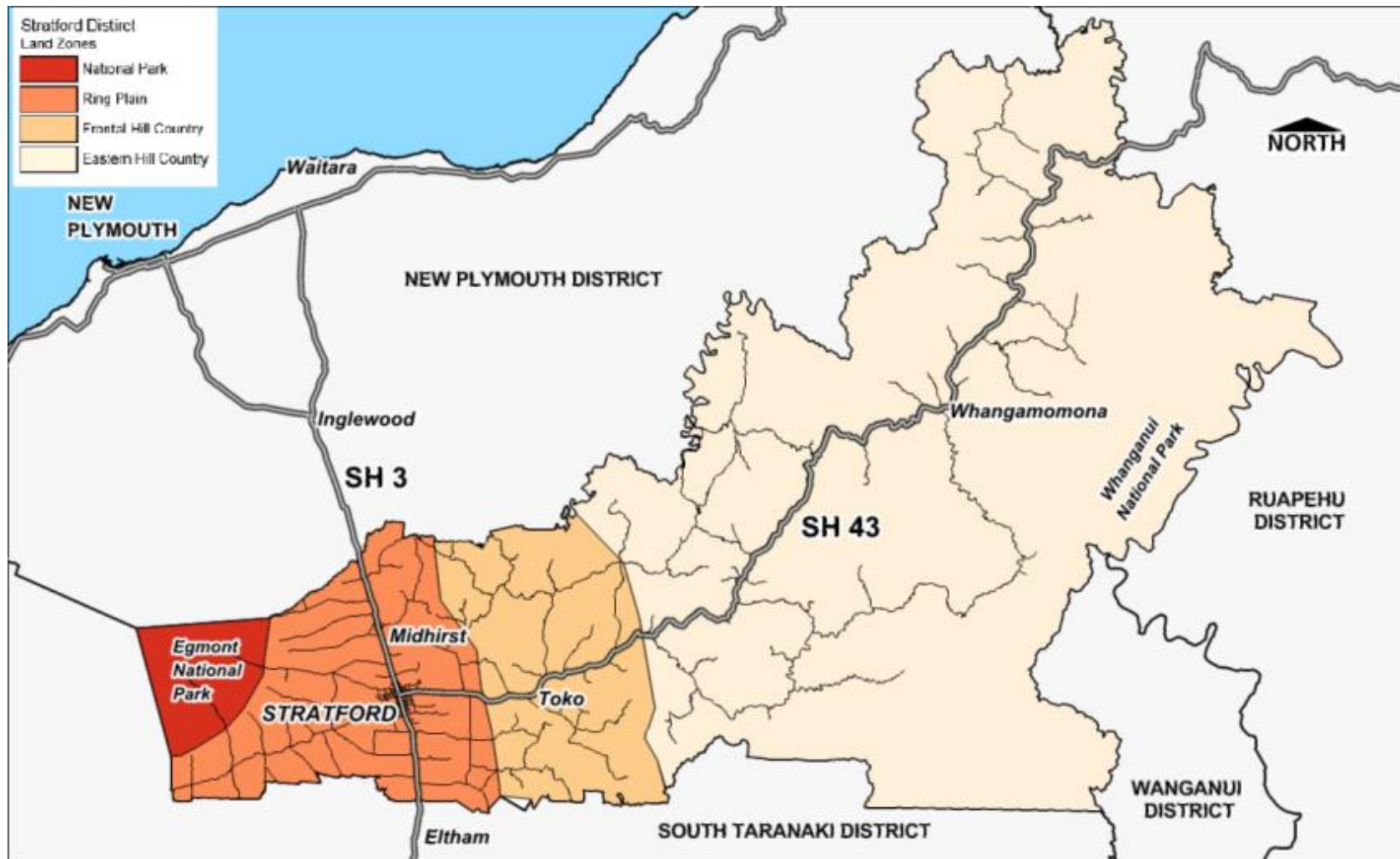


Figure 3 - The Stratford District 2020

### 1.3 OUR MISSION, VISION AND VALUES

Stratford District Council is local territorial authority and road controlling authority for the Stratford District. Council's role in accordance with the Local Government Act 2002 (LGA) is to:

- Enable democratic local decision-making and action by, and on behalf of communities.
- Promote the social, economic, environmental, and cultural well-being of communities in the present and for the future

**The Stratford District Council's Mission Statement is**

*'To serve the district and its communities through advocacy, promotion, services, facilities and positive leadership'*

**The Stratford District Council's Vision Statement is**

*"A vibrant, resilient, and connected community – in the heart of Taranaki"*

**The Stratford District Council's Values are:**

- Integrity:** *Be loyal to the organisation and trustworthy, honest and courteous with everyone we deal with.*
- Teamwork:** *Work together in the same direction, assist each other and have respect for others. Maintain a positive attitude and encourage teamwork.*
- Excellence:** *Be effective in everything we do using our experience and knowledge. Do the right thing at the right time. Be efficient by being cost effective and ensure prudent management of public money and assets.*
- Pride:** *Take pride in our performance and our organisation.*
- Commitment:** *Have commitment and respect for each other, our business and our customers.*
- Innovation:** *Examine alternatives, challenge the obvious and have a flexible attitude.*

The Stratford District Council carries out its duties under the LGA (2002) through two key Management Teams:

- The *Executive Management Team*, comprising the Senior Leaders of the Council and headed by the Chief Executive. This team sets the overall direction for delivery of Roading activities and services; and
- The *Assets Management Team*, comprising the operational and maintenance staff who carry out the direction set by the *Executive Management Team*.

The structure for each Management Team is provided in Figures 4 and 5.

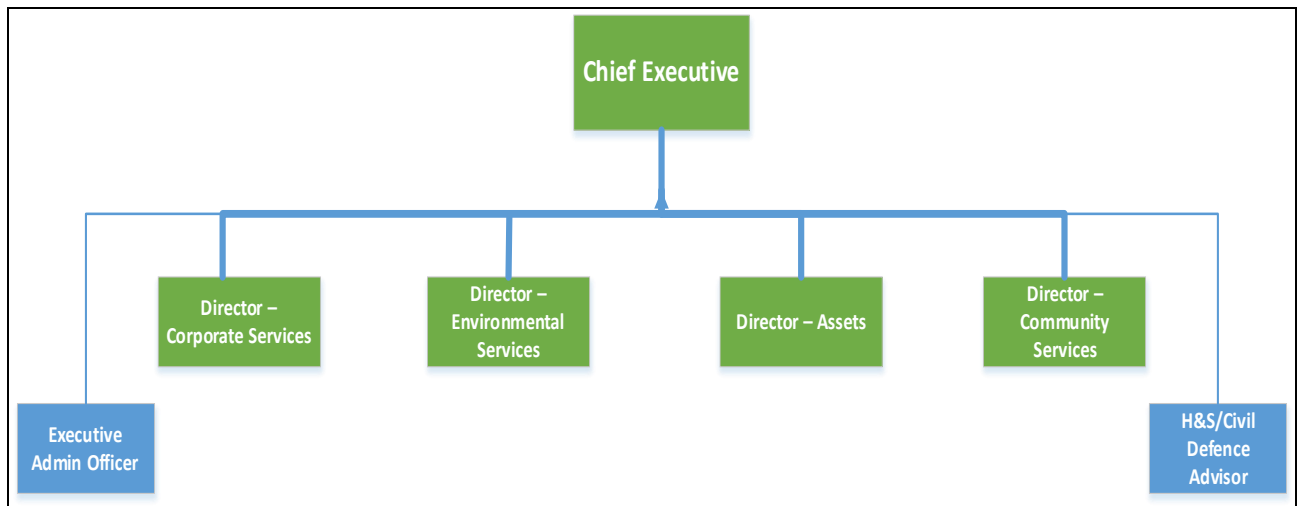


Figure 4 - Executive Management Team

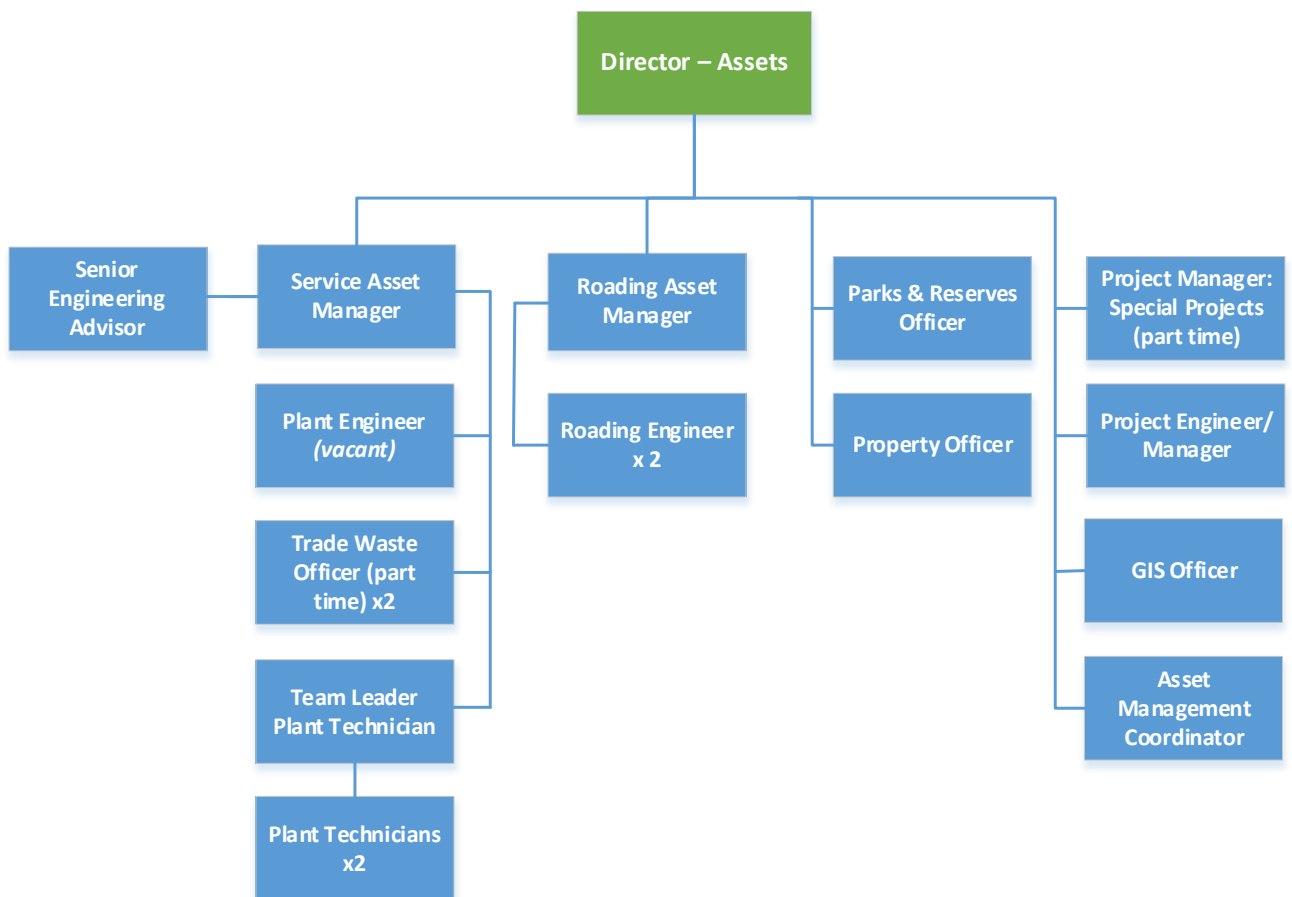


Figure 5 - The Assets Department

## 1.4 THE ROADING ACTIVITY

The Stratford District Council is the road controlling authority under the Local Government Act 1974 with responsibility for all local roads in the Stratford District. The Council aims to provide an integrated, safe, responsive and sustainable local land transport system for the District.

The Roothing Activity covers all land transport activities Stratford District Council pays for, either fully or with co-investment from NZTA. As part of our planning we consider how the Council's assets can best be managed to deliver the required transportation services to meet both our Community Outcomes and the five key elements to the One Network Road Classification (ONRC) framework of:

- Safety;
- Resilience and Travel Time Reliability;
- Amenity;
- Accessibility; and
- Cost efficiency

A full description of services provided is detailed in Section 8, Life Cycle Management of this RAMP. Table 1 below provides an overview of how these five key elements are applied to maintaining and renewing the land transport network within the Stratford District.

## 1.5 THE IMPORTANCE OF THE ROADING ACTIVITY

An effective land transport network is pivotal to the efficient functioning of Stratford District and our economy. The economic and social activities of the Stratford district depend on a well-connected and well-managed network for the movement of people and goods.

The following goals and objectives of the Roothing activity are proposed to be met through the key performance measures detailed in Section 5 of this Plan. Table 3 shows how the Stratford District Roothing activity contributes to the Stratford District's Community Outcomes.

- To provide a safe Roothing network.
- To provide a well maintained Roothing network.

## 1.6 STRATEGIC AND LEGISLATIVE CONTEXT

The Council has statutory obligations under the Land Transport Management Act (LTMA) 2003 to maintain a road network within the district and the transport activity is delivered by the Council. The Council has an obligation to provide a safe and efficient road network that enables the movement of people and products, both within and through the district. An effective road network is also essential to ensuring the economic growth, sound well-being of the community, through the provision of access and mobility for people, goods and services.

Further to the requirements of the Land Transport Management Act 2003 the transport activity is also guided by the following:

- Government Policy Statement
- New Zealand Transport Agency "Arataki"
- One Network Road Classification/Framework
- Regional Land Transport Plan

## 1.7 BUSINESS CASE APPROACH

The Business Case Approach (BCA) supports planning and investing for outcomes, ensuring early collaboration between stakeholders and progressive development of robust, evidence based investment case. It is a structured process that integrates best practice decision-making, programme management and investment assurance tools. Its intention is to progressively build an investment case by:

- Identifying and defining the core problems/opportunities that are unique to the Stratford District;

- Identifying the benefits to be gained by investing in solutions to address identified problems/opportunities; and
- Identifying the consequences of not addressing the problems/opportunities the District is faced with.
- Clearly shows the “line of sight” from the issue to the treatment that will reduce the benefits of addressing the problems identified.

For Maintenance, Operations, Renewals and Minor Improvements, the Road Efficiency Group developed the following diagram to explain how the Business Case Approach is applied to these activities.

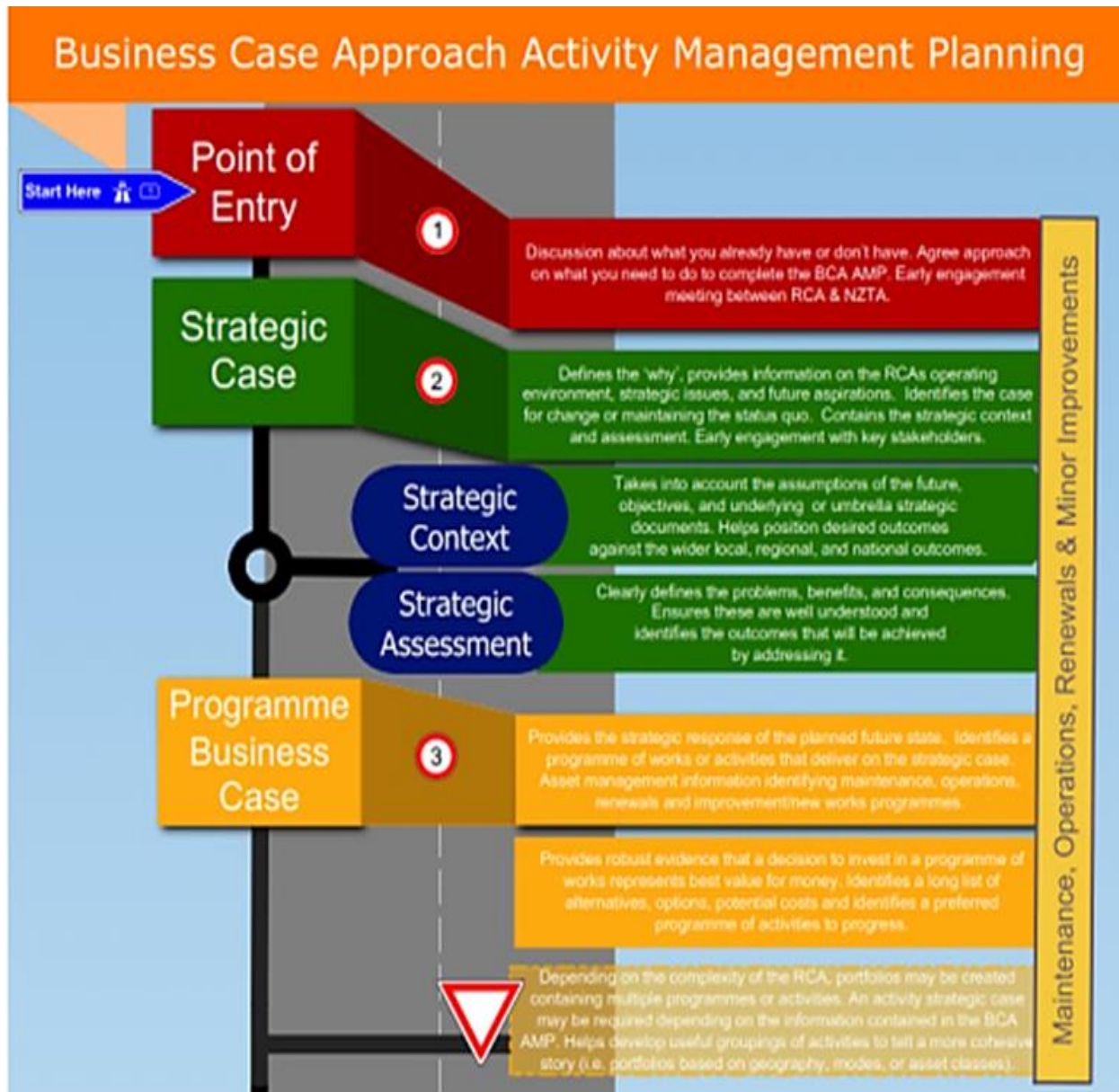


Figure 6 - Business Case Approach Activity Management Planning

Table 3 - Overview of ONRC application to land transport network

Roading Activity	ONRC Outcomes	Community Outcomes
<b>Transport Activity:</b> Passenger and Freight movement		
Maintenance of the roading network to provide a safe, accessible and resilient land transport network.	<p><b>Resilience:</b> Adequately maintain drainage systems to reduce interrupted journeys.</p> <p><b>Accessibility:</b> Provide a network which can be easy to navigate around.</p> <p><b>Accessibility:</b> Provide a road network which is smooth and fit for purpose.</p> <p><b>Safety:</b> Providing a safe land transport system via road safety improvement programmes.</p> <p><b>Amenity:</b> Tidy and functional network through vegetation control and roadside furniture.</p> <p><b>Amenity:</b> Comfortable journeys due to pavement repairs for sealed and unsealed roads.</p>	<p>Growing and developing the urban network.</p> <p>Meeting the needs of our current and future community.</p> <p>Working to create an attractive and safe built environment.</p> <p>Fund infrastructure that is cost effective for households.</p>
<b>Transport Activity:</b> Walking and Cycling		
<p>Maintenance and renewals of footpaths.</p> <p>Creation of new cycleways</p> <p>Provision of safe crossing facilities.</p> <p>Safety projects in school zones.</p> <p>Improvement to traffic services for wayfinding.</p> <p>Painting of pedestrian crossing islands/kerb extensions.</p>	<p><b>Safety</b> – Improvements to footpaths to provide safe crossing facilities.</p> <p><b>Amenity</b> – Footpaths are widened to accommodate multiple modes of transport including micro-mobility.</p>	<p>Meeting the current and future needs of the community.</p> <p>Supporting and providing access to health, educational, recreational and social facilities.</p> <p>Creation of a safe and attractive built environment.</p> <p>Develop an attractive and vibrant CBD.</p>
<b>Transport Activity</b> –Pparking		
Maintenance and renewal car parks.	<p><b>Safety:</b> Regular re-painting of roadmarkings to clearly delineate on and off road parking bays.</p> <p><b>Accessibility:</b> – Provision of parking spaces within the CBD and periphery of the CBD for visitors and the community to access local bussesses</p>	<p>Creation of a vibrant, attractive and prosperous CBD.</p> <p>Performing regulatory functions that are cost effective.</p> <p>An attractive and safe built environment,</p>



Underpinning this approach is good quality evidence to support the investment proposed in the Activity Management Plan. The above principles underpin the Business Case Approach.

The District applies a robust business case approach in the way it develops and justifies its programmes of work and Long Term Plan.

These nine steps form the Strategic and Programme Business Case for the District, and are further explained below:

1. What outcomes does the activity deliver and why is it important to the Community?
2. Outline what services are currently delivered, and how they are delivered.
3. Clearly articulate the problems on the network and the benefits of addressing them or the consequences of ignoring them.
4. Assess the current state of the asset using the Performance Measure Tools developed by the REG and Company X.
5. Use these tools to identify gaps or deficiencies in the level of service.
6. Develop work programmes to address the deficiencies identified in the Performance Measure Tools.
7. Identify solutions, activities to address the problems identified and test those solutions to substantiate develop forward work programmes.
8. Recommend the preferred work programmes for the term of the activity management plan.
9. Inform senior management and elected members through long term plan workshops of the intended programme.

This Activity Management Plan demonstrates how Stratford District will achieve its goals and associated strategic targets to achieve its community outcomes through effective sustainable management of land transport infrastructure.

## 1.8 OUR COMMUNITY OUTCOMES

The Council's vision for the 2021-2031 Long Term Plan (LTP) is '*a progressive, prosperous district where communities are celebrated*'. The Council's identified *Community Outcomes* (table 4) to achieve the vision are:

- Vibrant Community;
- Sustainable Environment;
- Connected Communities; and
- Enabling Economy.

The delivery of good quality infrastructure and the provision of essential land transport services in a cost-effective manner via effective activity management planning will ensure the achievement of Council's Community Outcomes. The Council's goals are to ensure:

- The safety of roads and of all transport modes for all users;
- That requests from the public are responded to in a timely manner;
- The quality of roads and safety of its users; and
- That all roads remain available to users.

**Table 4 - Community Outcomes**

Community Outcomes		Roading Activity Contribution
Vibrant community	<ul style="list-style-type: none"> <li>We celebrate and embrace our community's cultures and traditions.</li> <li>We tell our unique story.</li> <li>We will develop strong relationships with iwi, hapu and marae.</li> </ul>	<ul style="list-style-type: none"> <li>Providing a resilient and connected land transport infrastructure network that provides for the movement of people and goods throughout the district.</li> </ul>
Sustainable environment	<ul style="list-style-type: none"> <li>Our natural resources can be enjoyed now and by future generations.</li> <li>We are committed to working towards zero waste.</li> <li>We have well planned and resilient infrastructure that meets the current and future needs of the district.</li> <li>We strive to understand and support Te Ao Māori values and principles.</li> </ul>	<ul style="list-style-type: none"> <li>Planning a land transport network to protect the natural environment with social and cultural affects managed appropriately.</li> </ul>
Connected communities	<ul style="list-style-type: none"> <li>Our neighbourhoods are safe and supported</li> <li>We enable positive healthy lifestyles, through access to health, social and recreation services</li> <li>We have a strong sense of belonging</li> <li>We value opportunities to be involved and work together as a community</li> </ul>	<ul style="list-style-type: none"> <li>Providing access to health, education, social and recreational services and facilities</li> <li>Providing and maintaining local roads that form a significant part of the regional transport system. Provision will be made for local procurement in keeping with Council's policy.</li> <li>Providing a well maintained transport system to ensure communities are connected and desirable.</li> <li>Leading initiatives for urban growth with well-planned land transport networks which provide connections between centres.</li> <li>Providing good quality land transport infrastructure as a significant part of the regional land transport system.</li> </ul>
Enabling economy	<ul style="list-style-type: none"> <li>We are a welcoming and business friendly District</li> <li>We encourage a strong and diverse local economy</li> <li>We promote opportunities to visit, live and invest in the district</li> <li>We support economic opportunities for Māori</li> </ul>	<ul style="list-style-type: none"> <li>Fund capital works which offer value for money for current and future generations of Stratford District ratepayers and ensures the financial security of Council is not compromised.</li> <li>Stratford will encourage developers to provide well planned road layouts that allow for the free passage of all forms of transport throughout Stratford</li> <li>Providing good quality land transport infrastructure as a significant part of the regional land transport system.</li> </ul>

## 1.9 ACTIVITY MANAGEMENT PLAN FRAMEWORK

To achieve the goals of this Activity Management Plan there are key parts that show how these aspects of the plan link together.

- The **Strategic Case**: This encompasses the Executive Summary and outlines the issues facing Stratford for the next three years.
- The **Programme Business Case**: This section provides the evidence to support the proposed investment the "line of sight" showing what we are going to do to address these issues.
- The **Detailed Business Case**: Evidence to support investment based on the Performance, Monitoring and Reporting tools, the Lifestyle Management of our assets and how we can demonstrate value for money.

## **2. Legislative and Strategic Context**

## 2.0: Legislative and Strategic Context

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## 2.1 OVERVIEW

This section of the plan describes the strategic context of the Rooding activity and the linkages between national, regional and district goals and objectives.

The diagram below shows how national and regional strategic documents provide strategic context and feed into the Stratford District planning and asset management approach.

## 2.2 NATIONAL DRIVERS

Legislative and strategy drivers invariably set the minimum Levels of Service (LoS) and influence the operation and management of the Rooding activity. A description of these national drivers is provided below. While many of the national drivers are listed below, the key drivers are described in detail in the following section.

- The Government Policy Statement 2021/22 – 2030/31
- The Local Government Act (2002) Amendment Act (2012)
- The Land Transport Management Act (2003)
- The One Network Road Classification (ONRC)
- The National Land Transport Programme (NLTP)
- The Investment Decision Management Framework (IDMF)
- The Land Transport Rule: Vehicle Dimensions and Mass 2016 (the VDAM Rule)
- The Resource Management Act 1991;
- The Public Health and Safety at Work Act 2015;
- The Public Works Act 1981;
- The Telecommunications Act 2001;
- The Railway Safety and Corridor Management Act 1992;
- The Civil Defence Emergency Management Act 2002; and
- The Utilities Access Act 2010.

### 2.2.1 GOVERNMENT POLICY STATEMENT 2021/22 – 2030/31 (GPS)

The Government Policy Statement 2021/22 – 2030/31 is where the Government determines how investment into the land transport system will contribute to achieving overall government outcomes.

The purpose of the transport system is to improve people's wellbeing and the liveability of places. It does this by contributing to five key outcomes.

- Inclusive Access
- Economic Prosperity
- Healthy and Safe People
- Environmental Sustainability
- Resilience and Security

The Government Policy Statement strategic priorities for 2021 are:

- Safety
- Better travel options
- Improving freight connections
- Climate change

#### Strategic Priority - Safety

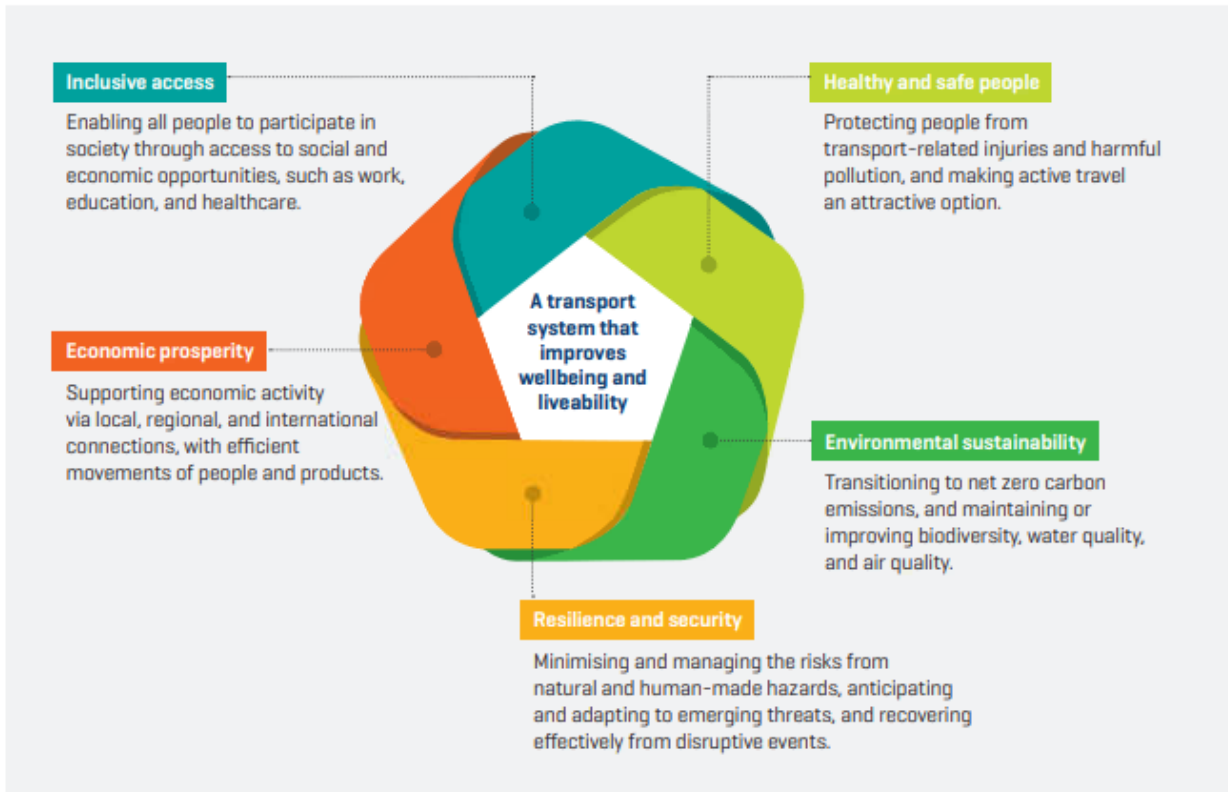
The primary focus is to develop a transport system that advances New Zealand's vision that no one is killed or seriously injured while travelling New Zealand roads.

The Government will implement the Road To Zero to achieve a target of 40% reduction in death and serious injury by 2030. Key elements of this strategy are:

- Infrastructure safety treatments
- Enhancing footpaths

- Road safety campaigns
- Tackling unsafe speeds

## Transport Outcomes Framework



**Figure 7 - Transport Outcomes Framework**

SDC has liaised with NZTA Safe Network Programme Manager, Janine Stewart to determine and agree where the Road To Zero programme can be applied to our network. The pipeline tool has identified Opunake Road as a road requiring some intervention. At this time we have requested a quote to install RIAWS (Rural Intersection Activated Warning Signs) at the Opunake/Cardiff/Climie Roads intersection. The pipeline tool suggests reducing the speed limit to 80km/h. Further conversations with our community will be undertaken before this potential change can occur.

### Strategic Priority – Better Travel Options

This priority relates to providing better travel options to access places for earning, learning and participating. The benefits derived from the inclusive access are:

- Healthy and safe people
- Environmental sustainability
- Economic prosperity
- Resilience and security

These goals can be achieved by optimising and maintaining existing transport networks.

Within Stratford we are currently developing a Walking and Cycling Strategy to compliment this objective. It is in it's infancy at present. Our goal is to encourage greater up-take of cycling by school children and families, as well as providing safe, resilient cycle routes for tourists.

Stratford is not a cycling commuting town, with approximately 50% of our working population travelling to New Plymouth or Hawera to go to work. There are a few residents that work in the nearby town of Eltham. However State Highway 3 is seen as an un-safe cycle route, due to the volume and make-up of the traffic.

## Strategic Priority – Improving Freight Connections

This priority relates to improving freight connections that will support economic growth.

We will achieve this through our maintenance programmes focussing on key routes, primarily used by Heavy Commercial Vehicles (HCVs) or our defined High Productivity Motor Vehicle (HPMV) routes. Currently forestry is an issue and it will continue to be throughout the term of this Long Term Plan.

We will and are working with forestry operators to improve some of the roads used by the logging industry. Unfortunately many of these roads are narrow and will require significant investment in time and money to be improved.

## Strategic Priority – Climate Change

This priority is for local authorities to encourage their community to change the way they travel from private vehicles to public transport or walking and cycling.

Within Stratford we do not have an urban public transport network. However there is the “Connector” bus service which operates between New Plymouth and Hawera, which is regularly used by our community.

Stratford District Council is currently developing a Walking and Cycling Strategy to support this strategic priority. The emphasis of this strategy is to encourage a greater uptake of school children walking and cycling to school and provide cycling routes for tourists.

During the course of this Long Term Plan period, SDC will investigate the possibility of installing electric charging stations within Stratford for the increasing number of electric vehicles using the land transport system.

## **2.2.2 THE LOCAL GOVERNMENT ACT 2002 AMENDMENT ACT 2012**

The purpose of the Local Government Act (2002) Amendment Act (2012) (LGA) is ‘*to meet the current and future needs of communities for good quality local infrastructure, local public services, and the performance of regulatory functions in a way that is most cost-effective for households and businesses*’.

The LGA outlines the responsibilities of local authorities and the decision-making process for activities undertaken on behalf of their community, primarily through the requirement to adopt a Long Term Plan. It includes the principles that require Council to:

- Make itself aware of community views;
- Provide opportunities for Māori to participate in decision-making processes;
- Collaborate and cooperate with other local authorities as appropriate; ensuring prudent stewardship of resources; and
- Take a sustainable development approach.

## **2.2.3 THE LAND TRANSPORT MANAGEMENT ACT 2003 (LTMA)**

The purpose of the Land Transport Management Act (2003) ‘*is to contribute to an effective, efficient, and safe land transport system*’. It sets out requirements for the operation, development and funding of the land transport system and:

- Provides an integrated approach to land transport funding and management that takes into account the views of affected communities, improves social and environmental responsibility in land transport funding, planning and management.
- Provides the NZ Transport Agency with a broad land transport focus
- Ensures options and alternatives are given full consideration at an early stage in the development of programmes
- Improves long-term planning and investment in land transport
- Ensures that land transport funding is allocated in an efficient and effective manner

- Improves the flexibility of land transport funding by providing for alternative funding mechanisms.

The LTMA provides for the development of a GPS on Land Transport, a National Land Transport Strategy (NLTS) and Regional Land Transport Strategies (RLTS).

### 2.2.4 THE ONE NETWORK ROAD CLASSIFICATION (ONRC)

Within the Stratford District we have three road categories based on the ONRC classification system:

- Private Collector
- Secondary Collector
- Access Roads

Our access roads have been further classified as:

- Low volume access sealed
- Low volume access unsealed

Where we provide a lower level of service to our community.

At the present time, the Roding Efficiency Group (REG) is developing a further framework to replace ONRC that takes into account the “place” function of the road. This One Network Framework (ONF) is likely to be introduced during the course of this AMP. This will require Stratford District Council to review our current ONRC hierarchy.

## 2.3 REGIONAL DRIVERS

### 2.3.1 THE REGIONAL TRANSPORT NETWORK

The Taranaki region covers an area of 7,258 km<sup>2</sup>. Taranaki lies on the west coast of the North Island and includes the New Plymouth, Stratford and South Taranaki Districts. The transport network for Taranaki includes:



The Taranaki road network forms part of the wider Central North Island and national land transport network. Important State Highway inter-regional connections for Stratford are north to New Plymouth and south to Hawera (SH3) and east to Ruapehu (SH43).



The New Plymouth domestic airport provides service to various locations within New Zealand and the Stratford Aerodrome owned by Stratford District Council provides for small private and commercial aircraft.



The Port at New Plymouth handles large volumes of cargoes, principally those of the farming, engineering and petrochemical industries. Additionally it is a servicing base for sea transport and related industries for the region and central New Zealand and is a significant destination for product and freight from Stratford, particularly for logging.



Cycling and walking are becoming key focuses for active transport modes throughout Taranaki. This activity management plan links to the strategies outlined in the Taranaki Regional Council's “Regional Walkways and Cycleways Strategy for Taranaki 2007”. This document is to be reviewed in 2018 following the growth in this activity throughout the region.





Urban networks in New Plymouth provide public transport option for commuting, and other daily travel needs. Commercial public transport options are available using State Highways for regional and national transport. Taranaki Regional Council runs a daily bus service from Hawera through Stratford to New Plymouth and back. This service is crucial to students that attend WITT or Taranaki Base Hospital in New Plymouth who live in Stratford.



Goods and freight are transported through the region by rail to other parts of the country. Freight trains utilise lines owned by Kiwirail run through the Stratford District.

### 2.3.2 REGIONAL LAND TRANSPORT PLAN (RLTP) FOR TARANAKI 2015-2021

The Regional Land Transport Plan (RLTP) for Taranaki 2015-2021 provides a strategic direction for the region for the next six year period.

This plan is currently being reviewed in light of the draft GPS 2021-2031 and that many of the projects listed with the 2015-2021 RLTP have been completed.



Figure 8 - Regional Connections

## 2.4 DISTRICT DRIVERS

The Rooding Activity Management Plan has connected a number of district strategies. The Rooding AMP forms a critical part of the planning framework as shown in figure 7. Table 5 provides a description of the District Strategic Drivers for the Rooding AMP and how they influence or relate to the Rooding AMP.

### 2.4.1 THE LONG TERM PLAN (LTP) 2021-2031

The Long Term Plan (LTP) 2021-2031 is a regulatory document pursuant to Section 93 of the Local Government Act 2002 Amendment Act 2014 that:

- Describes the activities of Stratford District Council;
- Outlines Council's contribution to the community outcomes and describes how we will manage activities we are responsible for;
- Provides integrated decision making and co-ordination of resources; and
- Provides a long-term focus for Stratford District Council's decisions and activities

The LTP provides the direction and strategies that drive the RAMP. Programmes for Capital, Maintenance and Renewal works are linked to the LTP along with essential budgeting requirements. The LTP covers a planning period of 10 years and is reviewed three yearly.

### 2.4.2 THE INFRASTRUCTURE STRATEGY (IS) 2021-2051

A regulatory document pursuant to Section 101B of the Local Government Act 2002 Amendment Act 2014 for the purpose of:

- Identifying significant issues over the period covered by the strategy; and
- Identifying the principal options for managing those issues and the implications of these options.

The IS Identified issues/opportunities from the 30 year strategy inform the relevant AMP and is reviewed every 3 years.

### 2.4.3 THE DISTRICT PLAN

Developed in compliance with the requirements of the Resource Management Act 1991(RMA), the District Plan specifies land use policies aiming to mitigate and control the detrimental environmental effects of new developments. The RAMP sets out the Rooding hierarchy and standards to be achieved including levels of service.

This plan is due for review in 2021.

### 2.4.4 THE ANNUAL PLAN

The Annual Plan is a regulatory document pursuant to Section 95 of the Local Government Act 2002 Amendment Act 2014. The Annual Plan is developed in compliance with section 95 of the LGA 2002 the Annual Plan updates information reported on within the LTP including its objectives, intended activities, performance, income and expenditure.

The Annual Plan shows how that year of the LTP will be funded. It provides detailed financial forecasts for the first 3 years, with summary forecasts provided for years 4 to 10. The AP provides annual KPI targets that are reported in the Annual Plan.

**Table 5 - District Strategic Drivers**

Strategies/ Plans/ Documents	Description	Review Frequency	Relationship to the Activity Management Plan
Financial Strategy	Developed to provide a financial framework for Council debt and rate levels and limits - future proof Council owned and operated assets.	Ten yearly	Provides financial framework for asset management and activity budgeting and expenditure.
District Plan	Developed in compliance with the requirements of the Resource Management Act 1991(RMA), the District Plan specifies land use policies aiming to mitigate and control the detrimental environmental effects of new developments.	As applicable	Sets out the Roding hierarchy and standards to be achieved including levels of service.
Economic Development Strategy	Sets the direction for economic development and identifies priorities and measurable goals.	Three yearly	Support asset management planning and good practice.
Structure Plan (to be developed)	Provide a long term planning framework for the future development and redevelopment of the Stratford District. The plan will set out in broad terms, the layout of land uses, key infrastructure and transport links.	Unknown at this stage	Support asset management planning.
Significance and Engagement Policy	Developed in compliance with Section 76AA to set out Councils approach to: <ul style="list-style-type: none"> <li>• The assessment of significance during decision-making. It provides direction on the consideration of community views and the level of community engagement that might be desirable to enable Council to develop a clearer understanding of community views and preferences on an issue or proposal.</li> <li>• Regarding community engagement and the ways the community can influence and participate in the decision-making of the Council.</li> </ul>	Three yearly	Determines level of engagement required for asset management planning activities/projects
Annual Report (AR)	Reports Council's performance for the previous year.	Annually	Provides annual KPI targets that are reported in the Annual Report.
Assessment of Water and Sanitary Services	Undertaken in compliance with Section 125 of the Local Government Act 2002 as part of Council meeting its obligation under the Health Act 1956 to improve, promote, and protect public health within its district.	Ten yearly	Informs the AMP with regard to services which could have an impact on the land transport network.
Other Council Policies, By-laws, etc.	The tools that guide and direct Council activities. (see <a href="#">Appendix 8</a> )	As applicable	Support asset management planning and good practice.

## **3.0**

# **Asset Information**

### 3.0: Asset Information

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### 3.1 ASSETS OVERVIEW

The Stratford District Council is the Road Controlling Authority (RCA) under the Local Government Act 1974 with responsibility for all local roads in the Stratford District area. It provides an integrated, safe, responsive and sustainable local land transport system for the District.

The Roothing activity exists to meet the needs and requirements of its customers and stakeholders.

The goals and objectives of the Roothing activity are:

- To provide a safe land transport network.
- To provide a well maintained land transport network.
- Offer value for money through properly managed work programmes.

By meeting its goals and objectives the Roothing activity contributes to the achievement of national, regional and district goals and objectives:

- Government Policy Statement (GPS).
- One Network Road Classification (ONRC).
- National Land Transport Plan (NLTP).
- Community Outcomes.

The land transport activity is significant and essential to the Stratford District. It provides for both urban and rural access across the District and contributes to the social and economic well-being of residents, visitors and businesses within the District through the provision of land transport services and infrastructure.

This activity encompasses the management, construction, maintenance and renewal of rural and urban roads, footpaths, kerb and channel, street lighting and associated infrastructure for the District excluding State Highways.

The Council manages the land transport infrastructure assets to provide services to its customers and stakeholders. Our inventory of existing land transport infrastructure is held within the Road Assessment and Maintenance Management system (RAMM). The Stratford District Roothing activity is comprised of:

**Table 6 - Overview of Infrastructure Assets**

Asset Group	Length/N°	Infrastructure	Length/N°
Sealed Roads	392.056km	Retaining Walls	250
Unsealed Roads	205.808	Signs (advisory and safety)	4802
Footpaths	61.725km	Markings	2,252
Bridges including large culverts	152	Guard Rails	828
Culverts	2950	Streetlights	755
Tunnels	3	Surface Water Channels	747.063km

**Note:** Infrastructure asset length/number is as at 01 July 2017 – RAMM.

As of 1 July 2016 the Stratford Districts road network comprises of the following ONRC classifications:

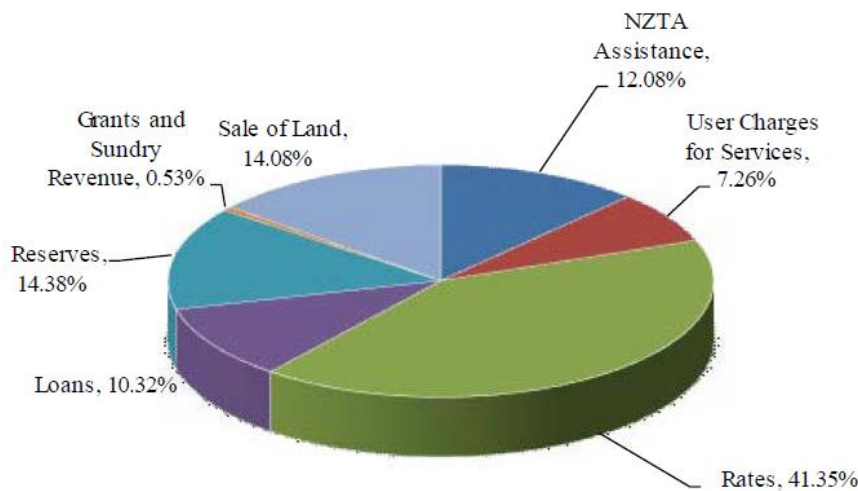
**Table 7 - SDC Road Network Hierarchy**

Road Classification	Length (km)	% of Network
Primary Collector	14	2
Secondary Collector	129.6	21
Access	264.5	43
Access Low Volume	203.6	33
Total	611.8	100

**Note:** Road Network Hierarchy as at 01 July 2017 – RAMM.

The land transport network consists of approximately 600km (rounded up) of roads covering the entire district. Based on the last valuation (30 July 2018) the optimal replacement value of the network is \$280.4m. Further to this SDC manages 14km of Special Purpose Roads located within the Egmont National Park with both Pembroke and Upper Manaia Road providing access to Mt Taranaki and the tourist experiences the national park has to offer.

Figure below shows where money came from in 2019/2020 (source – Annual Report)



	<u>\$'000</u>
NZTA Assistance	3,741
User Charges for Services	2,249
Rates (includes water by meter charges)	12,808
Reserves	4,454
Grants and Sundry Revenue	165
Loan Funding	3,198
Sale of Land	4,360
<b>Total Gross Revenue (excl GST)</b>	<b>30,974</b>

**Figure 9 - Roding Funding Split**

**Table 8 - Operating and Capital Expenditure**

Expenditure	Council \$000	Roading \$000
Total Operating Expenditure	\$23,449	\$6,474
Total Capital Expenditure	\$7,467	\$3,199
<b>Note:</b> As at 30 June 2020 – Annual Report.		

### 3.2 ASSET VALUATION

The Local Government Act 2002, Section 111 requires that local authorities comply with statement of “General Accepted Accounting Practice” that are prepared by the New Zealand Society of Accountants (ICANZ) and included in the New Zealand Accounting Standards.

The Local Government (Financial Reporting and Prudence) Regulations 2014, Section 6 requires Local Authorities to disclose information about core assets in its annual report, including the local authority’s most recent estimate of the replacement cost. The concept of intergenerational equity in the funding of infrastructure asset is included as one of the principles of financial management. Without accurate knowledge of serviceability of assets, local authorities will only be guessing when they attempt to spread the costs of infrastructure across present and future ratepayers.

As required under the Act Stratford District Council has its assets revalued every three years by independent qualified valuer. Valuations will be undertaken more regularly if necessary to ensure no individual item of property, plant or equipment within a class has a carrying value that is materially different from its fair value.

The following asset valuation is as at 01 July 2018. The Roothing activity assets were revalued by Calibre Consulting following a request from Audit New Zealand regarding the annual depreciation value. As a result the value of the roading assets had reduced by \$45m. This was attributed to the contracted rates for sub-base and base course being lower than the replacement rates held in RAMM.

A review of the valuation tool will be undertaken during the term of this AMP, as there has been a change in the Contractor, whose contract rates will be higher or lower to those used in the valuation module.



Table 9 - Asset Summary provided by Calibre Group NZ (Email [Peter.Ollivier@calibregroup.com](mailto:Peter.Ollivier@calibregroup.com))

Asset Type	Asset Type Component	Replacement Cost 2016	Replacement Cost 2018	Depreciated Replacement Cost 2018	Annual Depreciation 2018
<b>Berm</b>	Berm	\$10,726,818	\$11,643,336	\$11,643,336	\$0
<b>Bridge</b>	Bridge (Superstructure)	\$30,749,951	\$33,377,266	\$12,113,089	\$351,939
<b>Drainage</b>	Drainage General	\$16,499,383	\$15,064,890	\$4,273,904	\$188,321
<b>Footpath</b>	Footpath formation	\$6,115,137	\$6,241,626	\$3,288,230	\$77,510
<b>Railing</b>	Railing	\$820,414	\$894,153	\$202,072	\$18,190
<b>Retaining Wall</b>	Retaining Wall	\$4,389,684	\$4,724,071	\$3,109,080	\$59,051
<b>SW Channel</b>	SW Channel	\$5,011,774	\$5,419,190	\$1,213,358	\$67,740
<b>Sign</b>	Sign	\$1,203,720	\$1,324,778	\$164,207	\$72,177
	Sign Post	\$374,521	\$406,521	\$46,413	\$22,616
	<b>Sign Total</b>	<b>\$1,578,241</b>	<b>\$1,731,299</b>	<b>\$210,620</b>	<b>\$94,794</b>
<b>Street Light</b>	Street Light (Bracket)	\$90,260	\$216,232	\$50,838	\$8,651
	Street Light (Light)	\$361,338	\$392,889	\$295,916	\$16,231
	Street Light (Pole)	\$1,750,673	\$854,655	\$226,749	\$34,600
	<b>Street Light Total</b>	<b>\$2,202,271</b>	<b>\$1,463,776</b>	<b>\$573,502</b>	<b>\$59,482</b>
<b>Treatment Length</b>	Formation	\$100,331,226	\$109,044,454	\$109,044,585	\$0
	Base course	\$41,439,663	\$46,130,515	\$16,185,255	\$816,776
	Subbase	\$49,237,136	\$30,229,097	\$30,229,097	\$0
	Top Surface	\$11,299,108	\$14,433,897	\$7,597,732	\$1,070,206
	<b>Treatment Length Total</b>	<b>\$202,307,133</b>	<b>\$199,837,964</b>	<b>\$163,056,669</b>	<b>\$1,886,982</b>
<b>Sub-Totals</b>		<b>\$280,400,806</b>	<b>\$280,397,571</b>	<b>\$199,683,860</b>	<b>\$2,804,009</b>
<b>Land Value</b>	(See note below)	\$53,638,711	\$53,638,711-	\$53,638,711-	\$0
<b>1 July Road Asset Valuation Totals</b>		<b>\$334,039,517</b>	<b>\$280,397,571</b>	<b>\$199,683,860</b>	<b>\$2,804,009</b>



### 3.3 ASSET USEFUL LIFE

Useful life refers to either;

- The period over which an asset or component is expected to be available for use by an entity, or
- The number of production or similar units expected to be obtained from the asset or component by the entity. *Refer: International Infrastructure Management Manual (2015).*

With the increase in the number of HPMV commercial vehicles using the Stratford District’s land transport network, we are experiencing the accelerated consumption of the road pavement on key routes. This was identified in the previous Roothing AMP. Stratford district has undertaken “falling weight deflectometer” (FWD) tests on one of our pre-described HPMV routes. Out of a survey length of 8.50km along Opunake Road, the results from the FWD test showed that 3.8km has deflection greater than 1.50mm. As this route is a key HPMV route, our granular pavement rehabilitation programme will consider sections of Opunake Road for strengthening.

### 3.4 ASSET INFORMATION SYSTEM

Stratford District Council uses Road Assessment and Maintenance Management (RAMM) to support management of the Roothing activity.

Data on infrastructure assets is collected during inspections and monitoring using both paper based and electronic methods. All data collected in relation to the Roothing activity infrastructure is entered into RAMM by the Roothing Engineer, engaged Consultants or the Contractor.

Prompted by the Roothing Efficiency Group’s (REG) Data Quality Project, Stratford District Council, along with New Plymouth District Council and South Taranaki District Council have engaged GHD Consultants to review the data gaps held within our respective RAMM databases.

GHD’s software programme, Max. Quality, identifies where there are data quality errors. When the first report was run on 14 April 2020, the error report indicated there are 44,000 errors within our database. The main areas are:

- Ownership of the road surface 4762 errors
- Age/Life – construction date for drainage 1263 errors
- Condition of drainage assets 2577 errors
- Drainage shape/dimensions 1755 errors
- Drainage offset 3043 errors
- Sign installation dates 4574 errors
- Sign background colour 2361 errors
- Sign background material 3374 errors
- Sign substitute material 2864 errors
- Sign height 3342 errors
- Sign width 3340 errors
- Maintenance Cost History 1846 errors

### 3.5 INFRASTRUCTURE ASSETS

#### Roads

Stratford District Council manages 597.8km of roads within the Stratford District consisting of 41.6km of urban streets and 556.1km of rural, boundary and special purpose roads as detailed in Table 10 - Roothing Network Length

The Stratford District Roothing network is a mix of urban and rural roads. For benchmarking and peer group comparisons Stratford District Council and the Stratford District Roothing network come under the rural peer group category. Peer groups are determined by their Roothing network size and structure.

Figure 11 presents Roding data across each ONRC road classification compared to other road controlling authority (RCA) in the same peer group.

**Table 10 - Roding Network Length**

Roads	Urban	Rural	Boundary	Special Purpose	State Highways	Total (km)
Sealed	43.41	326.98	8.45	14.01	0.00	<b>391.05</b>
Unsealed	0.07	206.25	0.23	0.18	0.00	<b>206.73</b>
<b>TOTAL</b>	<b>43.48</b>	<b>533.23</b>	<b>8.68</b>	<b>14.19</b>	<b>0.00</b>	<b>597.78</b>

**Note:** Roding Network Length as at 31 December 2020 – RAMM.

**Table 11 - SDC Network by ONRC Road Classification**

Classification	Urban / Rural	Network length (km)	Lane (km)
<b>Primary Collector</b>	Urban	1.9	3
	Rural	12.1	24
	<b>Total</b>	<b>14.0</b>	<b>27</b>
<b>Secondary Collector</b>	Urban	18.5	37
	Rural	111.0	222
	<b>Total</b>	<b>129.6</b>	<b>259</b>
<b>Access</b>	Urban	11.4	19
	Rural	252.6	505
	<b>Total</b>	<b>273.6</b>	<b>524</b>
<b>Low Volume</b>	Urban	11.7	23
	Rural	180.4	360
	<b>Total</b>	<b>192.1</b>	<b>383</b>

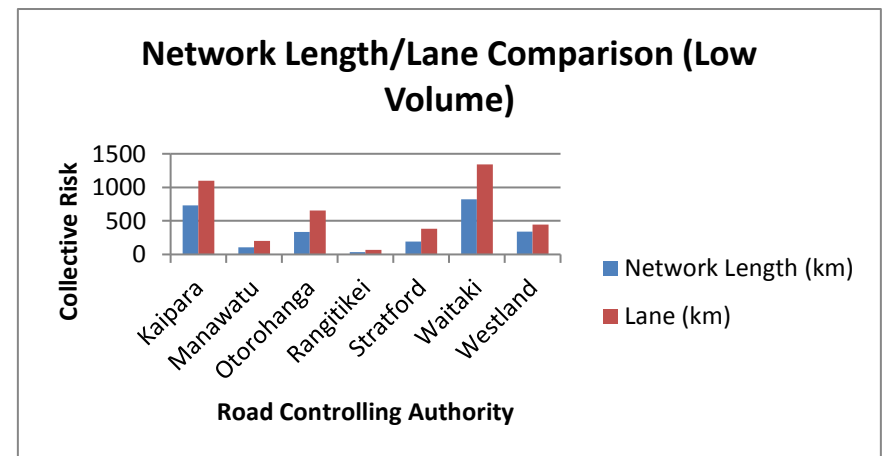
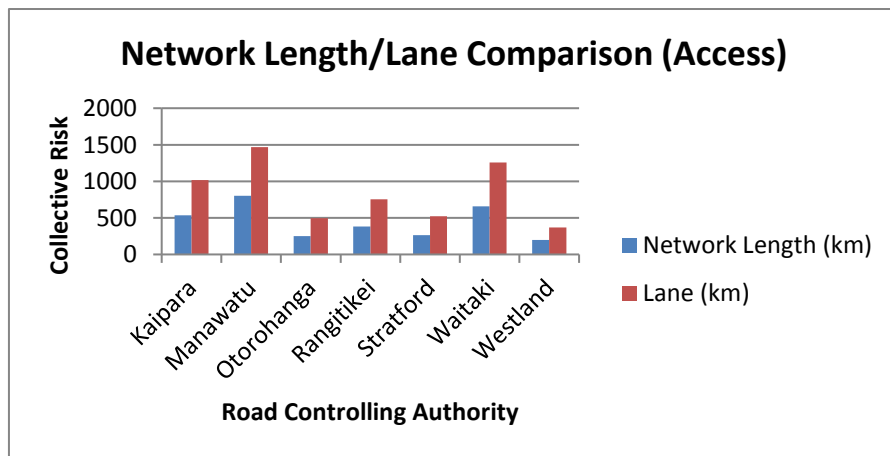
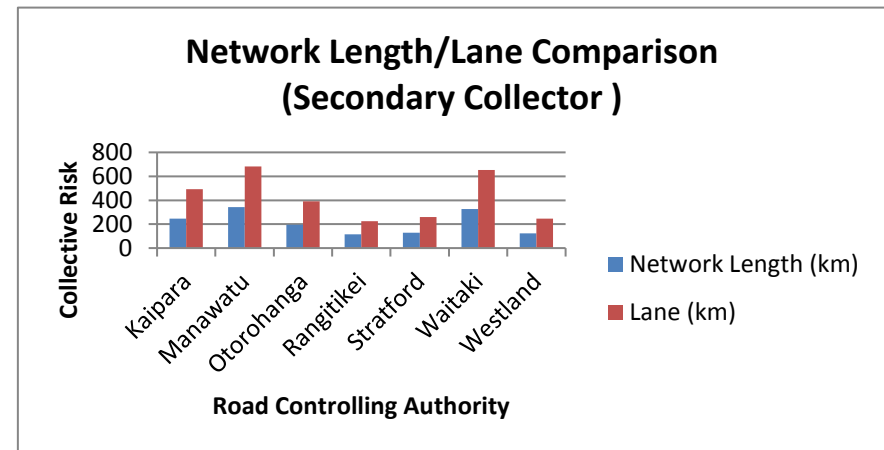
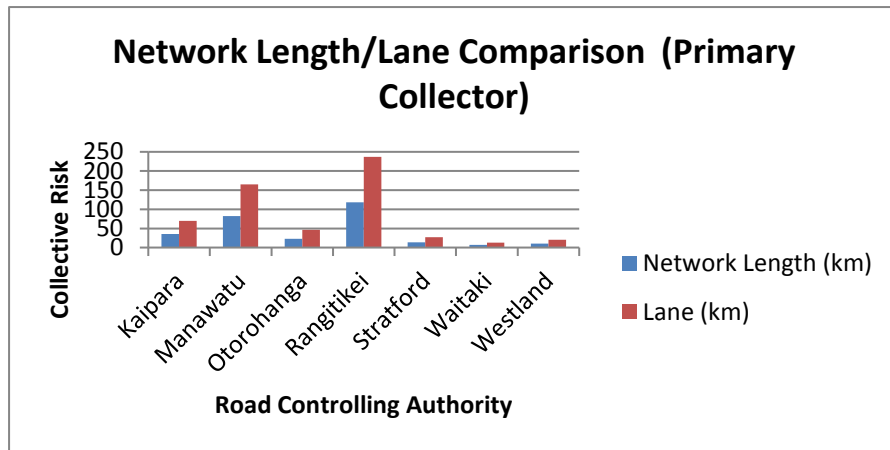


Figure 11 - Network Length/Lane Comparison (Primary, Secondary, Access and Low Volume)

**Note:** Network Length/Lane Comparison (Primary Collector) as at 01 July 2020 – Company X.



Figure 12 - Hastings, Cornwall and Finnerly Roads



Figure 13 - Oru Road



Figure 14 - Okau Road

**Note:** Boundary Roads are as at 01 July 2020 – GIS.



Figure 15 - Upper Duthie, Rowan and Palmer Roads

**Boundary Roads** - The Stratford District Roding network includes ten boundary roads, managed by the Council but maintained in agreement with our neighbouring Territorial Local Authority, as shown in Figures 12-15 and listed in Table 12 below:

**Table 12 - Boundary Roads**

District Council	Boundary Road
New Plymouth District Council	<ul style="list-style-type: none"> <li>• Croydon Road</li> <li>• Okau Road</li> <li>• Junction Road</li> </ul>
South Taranaki District Council	<ul style="list-style-type: none"> <li>• Oru Road</li> <li>• Upper Duthie Road</li> <li>• Rowan Road</li> <li>• Palmer Road</li> <li>• Hastings Road</li> <li>• Cornwall Road</li> <li>• Finnerty Road</li> </ul>

In 2016 Stratford District Council reviewed the way it deals with the maintenance and renewal/replacement of boundary roads.

For roads that cross the Stratford/South Taranaki boundary Stratford District Council will maintain the roads and invoices South Taranaki District Council a set amount annually to cover 50% of maintenance costs. The amount agreed is an average cost based on historical maintenance expenditure.

Where renewal/replacement is required SDC invoices South Taranaki District Council the annual set amount for maintenance plus 50% of renewal work activities such as sealed pavement resurfacing, sealed road pavement rehabilitation and structural component replacement.

The Stratford District Roding network also includes two special purpose roads as illustrated in the following map. The Special Purpose Roads are:

- Upper Manaia Road (Dawson Falls)



- Pembroke Road

**Note:** Special Purpose Roads are as at 01 July 2020 – GIS.

**Figure 16 - Stratford District Special Purpose Roads**

**Footpaths** - Stratford District Council manages 69.704km of footpaths constructed in seal, concrete, or cobble. These are used in the residential, commercial, retail, industrial areas of the district.

**Table 13 - Footpaths**

Type	Location	Reason	Width (m)	Length (m)	Network proportion (%)
<b>Asphalt</b>	Higher amenity areas that adjoin the CBD	Due to the width of these footpaths and high pedestrian usage, seal is the most cost effective option	1.2 – 2	4,437	6.37
<b>Seal</b>	Commercial areas that adjoin the CBD	Due to the width of these footpaths and lower pedestrian usage seal is the most cost effective option	1.2 – 2	6,563	9.42
<b>Slurry Seal</b>	Commercial areas that adjoin the CBD	Due to the width of these footpaths and lower pedestrian usage, slurry seal is the most cost effective option	2.2-3.1	492	0.71
<b>Concrete</b>	Predominantly residential areas	Offer higher aesthetic amenity	1.2 – 1.5	57,270	82.15
<b>Pavers</b>	Located within CBD	Offer higher aesthetic amenity	3 – 4	942	1.35
<b>Total</b>				<b>69,704</b>	<b>100</b>

In 2020 the Stratford District Council undertook a detailed condition rating of all the footpaths it manages. The results of this survey indicate that 62% have less than 10% defects along their length. This is an improvement on last year’s achievement of 41.7%. We recognise that we are behind our expected target of 84% however this is due to postponing our footpath replacement programme for two years whilst Ultrafast Broadband was being installed.

**Structures**

Structures include all bridges maintained by Council, culverts (greater than 3.4m<sup>2</sup> in cross-sectional end area), retaining walls and road tunnels.

**Bridges, Culverts and Tunnels**

There are an estimated 157 bridges, culverts and tunnels within the Stratford District managed by Stratford District Council. Many of these bridges provide access to the rural community and enable the transportation of goods to market. Bridges that are not fit for purpose or resilient restrict access. They increase the risks of public health and safety and hinder economic growth and development for the Stratford District community.

In 2020 we engaged a local consultant to undertake a review of all our bridges with the aim of developing a 30 year replacement programme. This work has been completed with seven bridges nominated for replacement within 10 years at a value of \$1.7m.

Within the district we have six posted bridges and thirty one bridges that are not suitable for the new Vehicle Mass and Dimension Rule 2016.



Figure 17 - Bridges and Estimated Replacement Dates

Bridge Location ID Number	Road Name	Replacement Date
0002/0033	Ahuroa Road	2016
0006/0071	Barclay Road	2042
0010/0915	Bird Road	2040
0447/0004	Mangaehu Road - Buchanan's Access 10,000 kg (Axle); 10 km/hr (Speed limit)	2052
0446/0002	Upper Mangaehu Road - Curtis's Access	2053
0024/0017	Denbigh Road	2048
0149/0014	Tapuni Rd Bridge – Will Hopkirk (not posted but assessed to 30T capacity)	2022
0147/1016	Matau North Rd No. 5 - Jensen's Bridge – 3,000 kg (Axle); 10 km/hr (Speed limit)	2028
0033/0266	Finnerty Road	2069
0154/0005	Upper Mangaehu Road – Ford's Access	2053
0155/0010	Lower Kohuratahi Road – Gower's Access	2037
0048/0002	Jury Road	2052
0056/0026	Kota Road	2062
0133/0203	Lower Kohuratahi Road – Bellringer's Access 1,500 kg (Axle); 10 km/hr (Speed limit)	2033
0146/0011	Matau Road	2045
0153/0017	Mangaehu Road – McBride's Access 4 Tonne (Axle); 10 km/hr (Speed limit)	2034
0134/0375	Mt Damper Road 4,000 kg (Axle); 10 km/hr (Speed limit)	2035
0078/1118	Opunake Road	2060
0078/1566	Opunake Road	2055
0088/0025	Prospect Road - Culvert	2055
0094/0255	Radnor Road	2045
0094/0530	Radnor Road	2045
0096/0618	Raupuha Road	2062
0104/0271	Skinner Road - Culvert	2035
0107/0336	Standish Road	2049
0113/0008	Tahunaroa Road	2035
0118/0274	Toko Road	2060
0118/0468	Toko Road	2060
0120/0014	Tututawa Road	2046
0064/1868	Upper Mangaehu Road - Culvert	2035
0064/2033	Upper Mangaehu Road - Culvert	2040

With many competing work activities, bridge maintenance is generally the work category that lags behind. This cannot continue for much longer into the future without putting the asset and community at risk. It is likely there will need to be an increase in the budget allocation within the next 3-10 years to address the backlog of repairs.

### Retaining Walls

Retaining walls are structures designed to restrain soil to unnatural slopes. They are used to bind soils between two different elevations often in areas of terrain possessing undesirable slopes or in areas where the landscape needs to be shaped severely and engineered for more specific purposes like hillside farming or roadway overpasses.

Having undertaken an initial survey of the retaining walls in 2016. Further work has been carried out on this asset since this date.

**Table 14 - Existing Work Programme from Previous LTP**

	Issue	Progress
1	Capture and inspect the retaining walls throughout the district.	Initial inspection undertaken by a summer student in November 2015 - February 2016. Detailed inspection undertaken by Calibre Consultants Ltd in April – May 2016.
2	First revision of the Retaining Wall Report	Dated July 2016.
3	Second draft report for retaining walls including a 10 year replacement/repair programme	Delivered in April 2020.
4	Final version of the second report.	Delivery date to be confirmed.
5	Inspections of retaining walls.	Every two years. To be included in a new Bridge Inspection contract.

**Current Issues:**

- None of the retaining walls located within the district have been previously inspected prior to November 2015.
- Condition of existing retaining walls varies from excellent to very poor.
- 248 retaining walls have been inspected. There could be more on the roading network that we are not aware of due to being covered with vegetation.
- Funds are limited therefore the replacement/repair programme could take longer than 10 years to fix 58 walls.
- There another 66 walls that will deteriorate over time as these have been given a condition of “average”.
- Very little maintenance undertaken on the current retaining walls stock.
- Increase in the number of retaining walls following the June 2015 storm.
- Potential for increase in the number of retaining walls following storm events, or slips.

**Cost to Replace/Repair Retaining Walls during the next 10 years.**

Taking the report delivered by Calibre in April 2020 and using the estimates and suggested repairs or replacement therein, table 15 provides a breakdown of the cost between years 2021 – 2031.

**Table 15 - Estimated costs for retaining wall repairs and replacements**

	Year	Maintenance Cost	Replacement Cost	Total
1	2021	\$17,500	\$120,000	\$137,500
2	2022	\$12,000	\$152,000	\$164,000
3	2023	\$2,500	\$210,000	\$212,500
4	2024	\$11,000	\$135,000	\$146,000
5	2025	\$6,300	\$175,000	\$181,300
6	2026	\$9,500	\$165,000	\$174,500
7	2027	\$8,000	\$155,000	\$163,000
8	2028	\$8,000	\$87,500	\$95,500
9	2029	\$7,500	\$93,000	\$100,500
10	2030	\$5,000	\$70,000	\$75,000

### **Traffic Services**

Traffic Services include signs, markers, Railings and lighting.

**Signs** - Stratford District Council manages around 4802 regulatory, advisory and safety signage to provide awareness to road users within the Stratford District. Signs include road, street and information signage (regulatory and advisory) accepted by funding authority policy.

### **Markings**

The annual re-marking of all road markings is undertaken in February and March on a “measure and value” basis. The information gathered from the re-marking will be uploaded into the RAMM database.

### **Railings**

Stratford District Council manages around 828 No. of railings within the Stratford District. Railings (Guardrails) are designed to help prevent vehicles running off the road and guide traffic safely along roads or identify roadside hazards, such as deep drains or drop-offs.

### **Street Lighting**

Stratford District Council manages 755 streetlights within the Stratford District. Street lighting includes street (carriageway) lighting and under-veranda lighting. The maintenance and renewals of under veranda lighting is solely funded by SDC.

Stratford District Council has successfully completed the conversion of streetlights to Light Emitting Diodes (LEDs).

### **State Highway Carriageway Lighting**

The New Zealand Transport Agency (NZTA) funds all maintenance (including power charges) for all lights on the state highway in both urban and rural areas. This maintenance will continue to be carried out by the local authority contractor, with the highway portion billed to NZTA. NZTA agree to contribute to the procurement costs of these contracts.

### **Drainage**

Stratford District Council manages 3308 drainage assets within the Stratford District. Drainage assets include catchpits, culverts, flumes and sumps.

With the change in the maintenance contract, the contract rate has significantly increased for clearing roadside water tables. This has resulted in a reduction of the length of water tables we clean out each year. Previously we had set ourselves a target of 200kms per year, however we have reduced this to 90kms a year.

Stratford District Council has requested an overview of our maintenance contractor of the condition of the road side drains, Our initial findings show for the unsealed road network the cost to improve the roadside drains is \$320,000. The unsealed road network is approximately one third of the total length of Stratford District Council's roading network.

For the purposes of programming we have assumed the total cost for renewing water tables will be in the order of \$4m for the entire network. This is simply unaffordable over the duration of the maintenance contract with potentially six years remaining.

Clearing inlet and outlets are undertaken as part of the rural patrols. Good drainage maintenance is essential to reduce the risk of pavement failures, underslips, flooding scouring of the unsealed road surface in order to provide a resilient and accessible land transport network.

### 3.6 ASSET MANAGEMENT MATURITY ASSESSMENT

The Council has assessed its Asset Management maturity across 5 key disciplines of asset management practice including:

- Setting the Strategic Direction;
- Establishing Levels of services;
- Forecasting Future Demand;
- Collecting Asset Information; and
- Monitoring Asset Performance and Condition.

The Asset Management Maturity Index assessment in Table 16 below provides a snapshot of where the Council is at in its asset management practices and in particular, emphasizes that seeking advanced practice in all areas may not be the best solution across activities, as this depends on the scale and type of assets being managed.

**Table 16 - Roading Asset Management Maturity Index**

	Asset Management Disciplines	Maturity Index	Maturity Description	What we do
1	Strategic Direction	Intermediate	<ul style="list-style-type: none"> <li>• AM System scope is defined and documented.</li> </ul>	<ul style="list-style-type: none"> <li>• This is part of the Strategic Business Case as required by Waka Kotahi NZTA in the AMP.</li> <li>• The Council has adopted an <b>Asset Management Policy</b> to provide the overall direction for asset management in the district.</li> <li>• Scope is also refined as a consequence of our Early Conversation discussions with Elected Members, which inform the LTP, and also during our regular workshops to define Strategic Direction for the Council.</li> </ul>
2	Defining Level of service	Intermediate to Advanced	<ul style="list-style-type: none"> <li>• Level of service and cost relationship understood.</li> <li>• Customers are consulted on significant service levels and options.</li> <li>• Customer communications plan in place.</li> <li>• Levels of service are integral to decision making and business planning.</li> </ul>	<ul style="list-style-type: none"> <li>• The LOS are defined in the AMP for each of the work activities funded by Waka Kotahi.</li> <li>• As part of the LTP process if there are significant changes to the LOS provided or stated in the AMP, these will be captured as part of the LTP planning.</li> <li>• This will part of the LTP consultation process.</li> <li>• The level of service provision will govern the funding request, for example, another round of grading of unsealed roads will add an additional \$80,000 to the budget.</li> </ul>
3	Forecasting future demands	Core to Intermediate	<ul style="list-style-type: none"> <li>• Risk associated with demand change broadly understood and documented.</li> <li>• Demand management considered as an alternative to major project development.</li> </ul>	<ul style="list-style-type: none"> <li>• We have a broad understanding of the issues facing SDC. These are included in the AMP as “Problem Statements”.</li> <li>• Forecasting is based on population and economic growth statistics in addition to regulatory changes at the central government level.</li> <li>• Demand Management is in its infancy, being associated with urban growth, rather than traffic growth and signalisation of intersections, or the construction of major arterial routes.</li> </ul>

	Asset Management Disciplines	Maturity Index	Maturity Description	What we do
4	Collecting Asset Information	Intermediate	<ul style="list-style-type: none"> <li>A reliable register of physical, financial and risk attributes recorded in an information system with data analysis and reporting functionality. Systematic and documented data collection process in place.</li> </ul>	<ul style="list-style-type: none"> <li>RAMM is the database for the roading assets, including maintenance costs, replacement unit rates and design live.</li> <li>RAMM has the capability of reporting theoretical pavement replacements and reseal sites.</li> <li>Data is collected bi-annually for pavement roughness, annually for footpath condition. Also, any new assets are recorded in RAMM along with pavement information when undertaking sealed pavement repairs on the network.</li> </ul>
5	Monitoring Asset Performance and Condition	Core	<ul style="list-style-type: none"> <li>Condition and performance information is suitable to be used to plan maintenance and renewals to meet over the short term.</li> </ul>	<ul style="list-style-type: none"> <li>The REG Data Quality Project is key to the quality of the data in RAMM for SDC. We have engaged GHD to use their Max.Quality software to run monthly reports that highlight any data errors that require correcting. The data accuracy will have a flow on effect for the forward works programme, eg reseals, or pavement rehabs.</li> </ul>

### 3.7 ASSESSMENT OF ASSET CONDITION

Asset condition is a measure of an asset's physical integrity, while asset performance is a measure of whether the asset is delivering level of service requirements. Knowing the condition of an asset enables more accurate prediction of asset development, maintenance and renewal/replacement requirements. The Stratford District Council identifies the condition of Roothing infrastructure assets by age and through visual targeted inspections, analysis of collected statistical data, and through maintenance monitoring.

Generally, the Council takes a risk-based approach to monitoring the condition of assets and conducts condition assessments of its critical assets. Where assets have low risk because they are in the first half of their life, condition monitoring is low. If the consequences of running an asset through to failure are high, the Council, through a more intensive monitoring regime and targeted inspections, hold more information on the asset condition.

The Council has no backlog or deferred maintenance in its work programme.

**Targeted inspections** are carried out on asset components that are considered critical to Council and the community, have the potential to impact on public health and safety; or where there is a specific requirement, for example to meet regulatory requirements or for asset acquisition, disposal, or justification.

Targeted inspections of Roothing infrastructure assets are carried out by Council staff, the Maintenance Contractor, or specialist Consultant to identify the condition of specific asset components at intervals specified by the Asset Manager or upon request.

To identify the general condition of its Roothing infrastructure assets Stratford District Council undertakes the following targeted inspections:

- Culverts – annually by Contractor
- Local road Condition Rating Surveys – annually by Contractor
- Footpath Condition Survey – annually by Contractor

- Bridges – two yearly general inspection and detailed inspection as required by Consultant
- Retaining walls – six yearly general inspection and detailed inspection as required by Consultant
- Large culverts – two yearly general inspection and detailed inspection as required by Consultant

Statistical data is collected by specialists and specialised equipment as per NZTA requirements and directly entered into the Rooding asset management system for analysis and review by Council staff. Statistical data collected for analysis is:

- Crash Statistics – annually by Council staff
- Traffic Counts - annually by Council staff

**Maintenance monitoring** – The maintenance contract stipulates the frequency of inspections to be undertaken for the contractor. In summary these are as follows:

- Primary collector – Monthly
- Collector/Urban Roads – Monthly
- Rural Access Roads – One sixth of the network inspected monthly

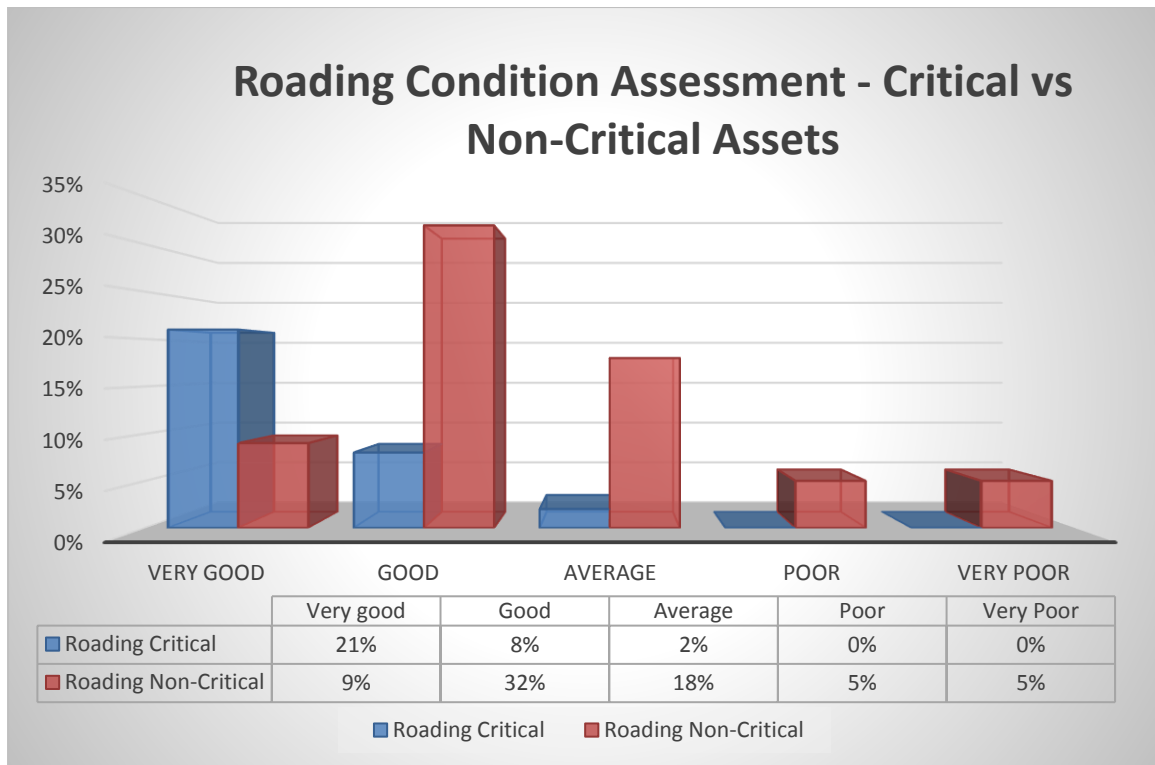
**Condition Grading** - Visual targeted inspections, analysis of collected statistical data, and maintenance monitoring provide both qualitative descriptions and quantitative grading of asset component condition. Condition grading supports the development, maintenance, and renewal/replacement of an asset by enabling more accurate prioritisation of forward works programmes.

The International Infrastructure Management Manual (2011) provides guidance on assessing the condition of assets and approaches to grading the condition. In line with this Stratford District Council has developed a condition grading system to support identifying the condition of assets at the group level. Using the system assets are ranked from 1-5 as illustrated in Table 17 below.

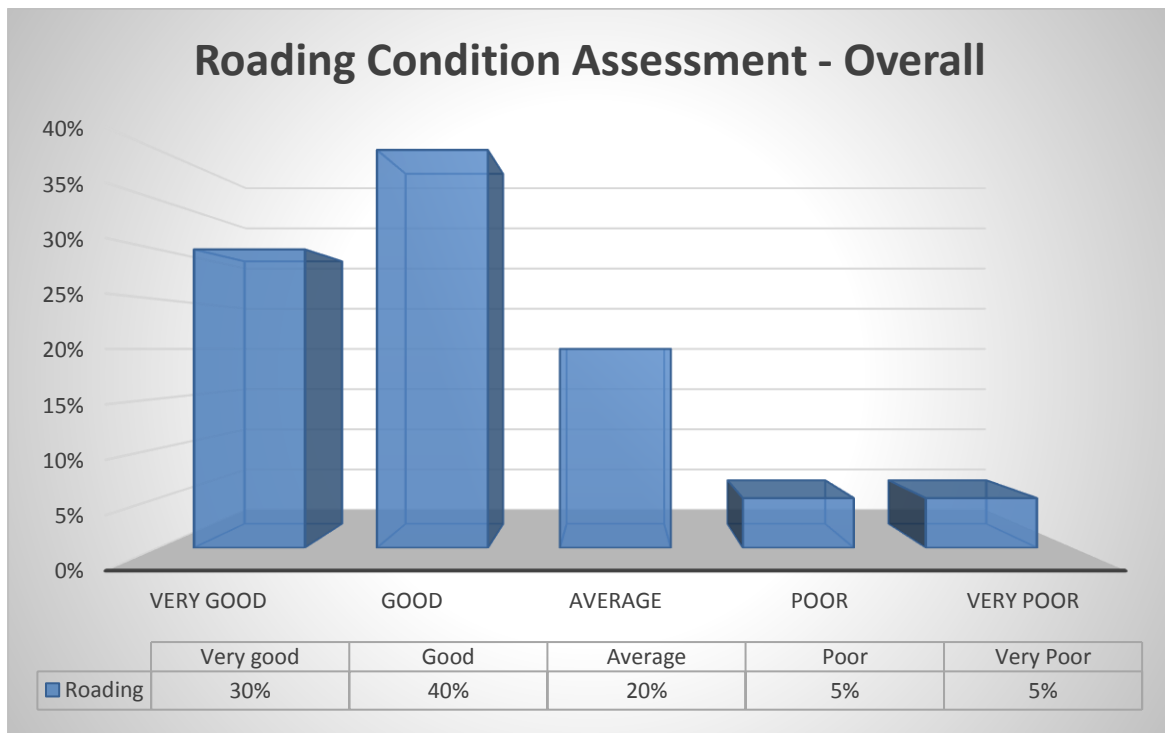
**Table 17 - Condition Grading System**

Grade	Condition	Description	Proportion of network (%)
1	Very Good	Asset in structurally sound and excellent physical condition. No work required	30%
2	Good	Asset in structurally sound and acceptable physical condition. Minor work required (if any)	40%
3	Fair	Asset is structurally sound but shows deterioration. Moderate work required to return asset to agreed level of service	20%
4	Poor	Asset failure likely in the short term. Significant work required now to return asset to agreed level of service	5%
5	Very Poor	Asset has failed/is about to fail. Renewal/Replacement required Urgently	5%

The Very Poor percentage relates to the condition of the water tables, culverts and old retaining walls. Generally on the whole, the road pavements are in good condition, albeit some roads are suffering from logging activity.



**Figure 18:Roading Condition Assessment - Critical vs Non-Critical Assets**



**Figure 19: Roading Condition Assessment – Overall**

### 3.8 DATA ACCURACY AND CONFIDENCE

The accuracy and currency of data is critical to effective asset management. Accurate data enables Council and the community to have confidence in decisions made about asset development, maintenance, and renewal/replacement.

To ensure accurate asset data is entered into the asset management system Stratford District Council has put in place the *Inspection Data Management Process* for managing targeted visual inspection data. Also, to determine the level of confidence Council has in targeted inspection data Stratford District Council has put in the *Data Confidence Grading System* in Table 18.

**Table 18 - Data Confidence Grading System**

Grade	Confidence Level	Description
1	Highly Reliable	Data based on sound records, procedures, investigations and analysis which is properly documented and recognised as the best method of assessment - dataset is complete and estimated to be accurate +- 2%
2	Reliable	Data based on sound records, procedures, investigations and analysis which is properly documented but has minor shortcomings; for example the data is old, some documentation is missing and reliance is placed on unconfirmed reports or some extrapolation - dataset is complete and estimated to be accurate +- 10%
3	Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolation from a limited sample for which grade A or B data is available - dataset substantially complete but up to 50% extrapolated data and estimated to be accurate +- 25%
4	Very Uncertain	Data based on unconfirmed verbal reports and/or cursory inspection and analysis -  dataset may not be fully complete and most data is estimated or extrapolated and estimated to be accurate +- 40%
5	Unknown	None or very little data held

**Table 19 - Asset Confidence Grading by Asset Group**

Asset Group	Grade	Confidence Level
Sealed Roads	2	Reliable
Unsealed Roads	2	Reliable
Footpaths	2	Reliable
Bridges; Large culverts	1 - 2	Highly Reliable to Reliable
Culverts	4	Very Uncertain
Tunnels	3	Uncertain
<b>Critical Assets Assessment</b>	<b>Highly Reliable to Reliable</b>	
<b>Non-Critical Assets Assessment</b>	<b>Reliable to Uncertain</b>	



While Council's overall confidence around its data quality is '*Reliable*', the Council's confidence level for the Roding activity is '*highly Reliable to Reliable*' for its critical assets and '*Reliable to Uncertain*' for non-critical assets.

This uncertainty stems from data held around the age of the non-critical assets, which have been deduced from the approximate date of construction, and also from the quality of data held on our service connections. However, given these are non-critical assets, impact of premature asset failure or continued service delivery is very low, as any disruption to service is limited to a few properties. The associated financial impact is also very low.

It is important to note that these assets do not fail simultaneously, as they are individual assets - any failed part can be isolated and managed, so the risk and consequences of failure is very low. This is evidenced from our annual performance indicators reported every month to the Council and summarized in the Annual Report. Our track record is good. Our strategy to mitigate the impacts of this *Uncertainty* is to be ready at all times to respond to all asset failures. Therefore we have, on hand or ready access to, supplies to replace any failed asset. Our contractors are on board as per the requirements of their maintenance contract.

The Council continues to validate the data in the RAMM database - as assets are replaced. Our maintenance contractors interact directly with our asset management system and provide corrections and updates to the condition data which is reviewed and/or updated as new data becomes available. Assets that are frequently interacted with therefore, are generally better documented than others. Each month, the Council reviews the RAMM Hosting Reports that identify the data quality errors which have been resolved and the errors which require rectifying. Many of the errors relate to dates assets were constructed or the pavements of our roading network. As part of our improvement plan we will address these data errors over time.

It will take some time for the assessment of our 'confidence level' of our non-critical assets to be '*Reliable*'.

The charts above provide snapshots of the overall *Condition Grading Assessment* for all assets – critical and non-critical and a summary of the *Data Confidence Levels*.

# **4.0**

## **Strategic Assessment**

## 4.0: Strategic Assessment

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## 4.1 OVERVIEW

The 'Strategic Assessment' section presents an assessment of the need for investment against strategic outcomes. It defines the problems facing the Stratford District Council; collates the evidence base for these problems and highlights the benefits of the investment in addressing these problems.

## 4.2 OUR BUSINESS CASE

Since writing the previous activity management plan our land transport problems remain, by and large, the same as they did in 2018. The slight change is associated with improvements to the drainage of our network.

At the time of writing the 2018-2028 Activity Management Plan, we had just completed a significant volume of remedial works following a storm event in June 2015. At that time our second problem statement was a reflection of this event.

The three remaining problem statements still hold true

**Problem Statement Number 1 – Increasing Heavy Commercial Vehicles (HCV) and forestry activity along with the current standard of the asset is resulting in an increase in reactive investment and inefficient use of resources. (40%).**

Logging continues to affect the low volume access roads and will do so for at least another five to ten years. Not only forestry activity, we have seen a significant increase in the number of overweight permits being requested for HPMV commercial vehicles. From 1 July 2019 to 30 June 2020 we have issued 475 HPMV permits. This compares to 63 issued in 2016/2017 year.

**Problem Statement Number 2 - The geography and environmental conditions have led to poor damage controls and the inability of the roading network to cope with intense weather events. This restricts access to road communities and economic impacts (35%).**

This issue has been superseded by identifying the poor condition of our roadside drains. This issue is in reflection on previous maintenance contracts which were paid using lump sum items along with performance indicators. As a result, renewing water tables was seldom undertaken. With the change in contract style and contractor this activity has been identified as an area for improvement.

**Problem Statement 3 - There is misalignment between Council and Community regarding the appropriate level of service to meet the expectations for a safe and resilient roading network (15%).**

We continue to upgrade footpaths to provide a better level of service for our community. Active modes of transport has limited uptake as we are developing a Walking and Cycling Strategy. The focus of this strategy is to engage with the schools to promote active modes of travel to and from schools and develop tourist cycling routes throughout the district.

**Problem Statement 4 - Poor driver behaviour, challenging road conditions and unforgiving roads and roadsides is resulting in death and serious injury crashes to our community. (10%).**

Safety continues to be our focus for the next Long Term Plan period. We have been liaising with Janinie Stewart from the Safe Road Network Road to Zero Programme. This has identified Opunake Road as a road requiring safety improvements along with a reduced speed limit. Within the last five years there have been 57 crashes along this road corridor. These crashes comprise of the following:

- 28 Non Injury
- 15 Minor Injury
- 11 Serious Injury
- 3 Fatal

In November 2020 REG held a workshop to assist the Roding Teams to update and refine the AMP. Although we did not attend the workshop, we have answered the Dragon Den's questions to assist us in preparing the AMP. These are in [Appendix 7](#).

Following the Covid-19 pandemic, Crown Infrastructure Partners request local authorities to submit any major infrastructure projects that were "shovel ready". Stratford District Council put forward 10

projects, of which five were road safety improvements. Out of these five we received funding for four of them, including one on our Primary Collector Road, Opunake Road. This project was completed in September 2020.

## 4.2.1 POINT OF ENTRY DISCUSSION

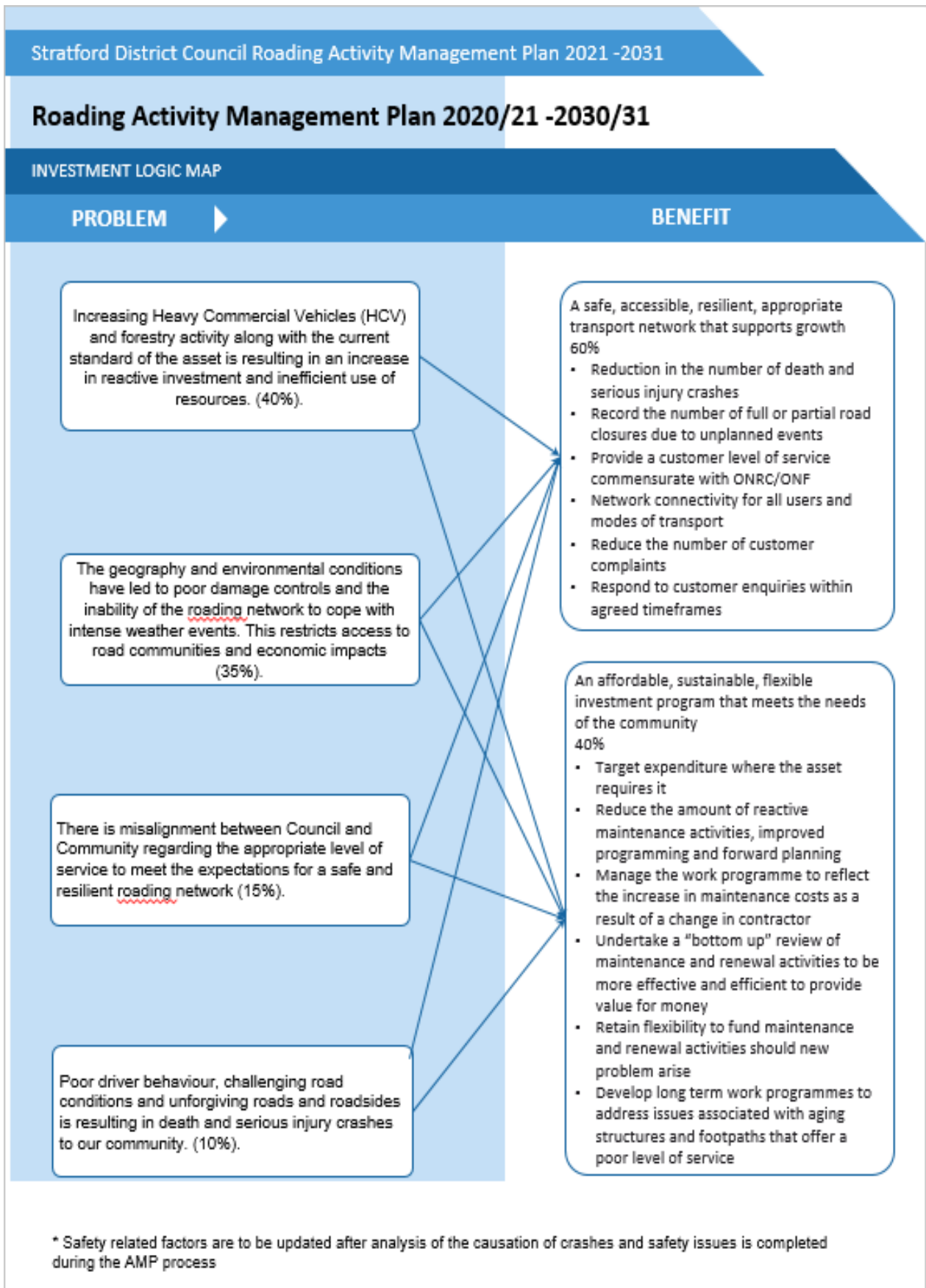
The Stratford District Council held a '*Point of Entry*' discussion with NZTA on 13 July 2020. This discussion was aimed at providing our co-investor an insight into the issues and problems that we are facing for the 2021-2031 Long Term Plan. The discussion centred on issues including:

- Future forestry operations and the impact on the low volume access roads;
- The disproportionate expenditure on those low volume roads due to HCV and logging trucks;
- Poor roadside drainage and associated costs to renew 1000kms of water tables;
- The long term programme on how this backlog of drainage work will be addressed; See *Lifestyle Management - Drainage*
- The focus to strengthen key HPMV/HCV routes;
- Ageing bridge stock;
- The number of "poor" or "very poor" retaining walls that need replacing within the next 10 years; See *Lifestyle Management - Structures*
- Potential or the possibility that 31 bridges will require strengthening to meet the new Vehicle Dimension and Mass Rule 2016.
- Long term plan for improving the footpaths in Stratford
- Development of the Walking and Cycling Strategy

## 4.2.2 INVESTMENT LOGIC MAPPING

The Investment Logic Map in Figure 20 captures our four problem statements as well as the investment benefits of addressing these problems. The investment benefits that address the four problem statements will enable Council to provide:

- A safe, accessible, resilient, appropriate transport network that supports growth (60%)
- An affordable, sustainable, flexible investment programme that meets the needs of the community (40%)



**Figure 20 - Investment Logic Map**

## 4.3 EARLY CONVERSATIONS

Between May and June 2020 Council staff prepared and presented *Early Conversation* papers for discussion with the elected members as part of the Long Term Plan (LTP) process. The purpose of these early conversations was to ask elected members for direction regarding some capital projects being proposed in the 2021-2031 LTP.

The conversations were centred on the future strategies for delivering a number of competing projects in the face of constrained resources, including:

- Brecon Road Extension;
- Walking and Cycling Strategy;
- Junction Road Bridge at boundary with NPDC – Seismic Assessment;
- Alternate Route from Whangamomona Road to Upper Mangaehu Road = Feasibility Study and Options Assessment;
- Whangamomona Road – upgrade and continued maintenance;
- Retaining wall replacement;
- Bridge strengthening – Seismic assessment of key bridges to identify resilient works and strengthen bridge;
- ‘Raising’ of bridges to increase capacity to cater for climate changes and extreme storm events and high rainfall intensity – Feasibility study and options assessment;
- Replacement of uneconomical bridges.

## **5.0**

# **Levels of Service Performance**



## 5.0: Levels of Service Performance

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## 5.1 OVERVIEW

Levels of Service (LoS) define the form and quality of service that the Stratford District Council provides to the community. They are the balance between what the community wants and what the community is willing to pay for.

Through asset management planning, the relationship between the LoS and the cost of service is determined. Once determined, the relationship is evaluated in consultation with the community to define the agreed LoS, which are then used to:

- Inform customers of the proposed LoS;
- Develop AM strategies to the deliver LoS;
- Develop targets to measure performance; and
- Evaluate the costs and benefits of services offered.

The LoS enable customers to assess customer values such as accessibility, quality, safety, and sustainability in accordance with the ONRC road classification.

This section:

- Highlights the current LoS provided by the Stratford District Council;
- Defines the desired LoS for the futures; and
- Outlines performance measures that will be used to monitor the delivery of the agreed LoS.

## 5.2 PERFORMANCE MONITORING AND REPORTING

The Stratford District Council has undertaken to provide a safe and well maintained Roading network that provides access for all, is resilient and at a cost that is affordable to our community.

In order to achieve these goals we undertake contract monitoring to ensure the performance of our maintenance contractor achieves these outcomes.

Our maintenance contractor Fulton Hogan, has developed their own “Contract Workspace” programme which we have access to. This web based system monitors:

- Programme achievement – actual v programmed;
- Current jobs by staff;
- Priority breakdown – level 1 and 2 priorities;
- Maps programmed jobs – outstanding and completed;
- Programmed tasks by month and work activity;
- Reactive works completed – by number and activity;
- Programmed work categories. This is used for trend analysis;
- Job details

All of the above are represented graphically on a “dashboard”

# Levels of Service Performance

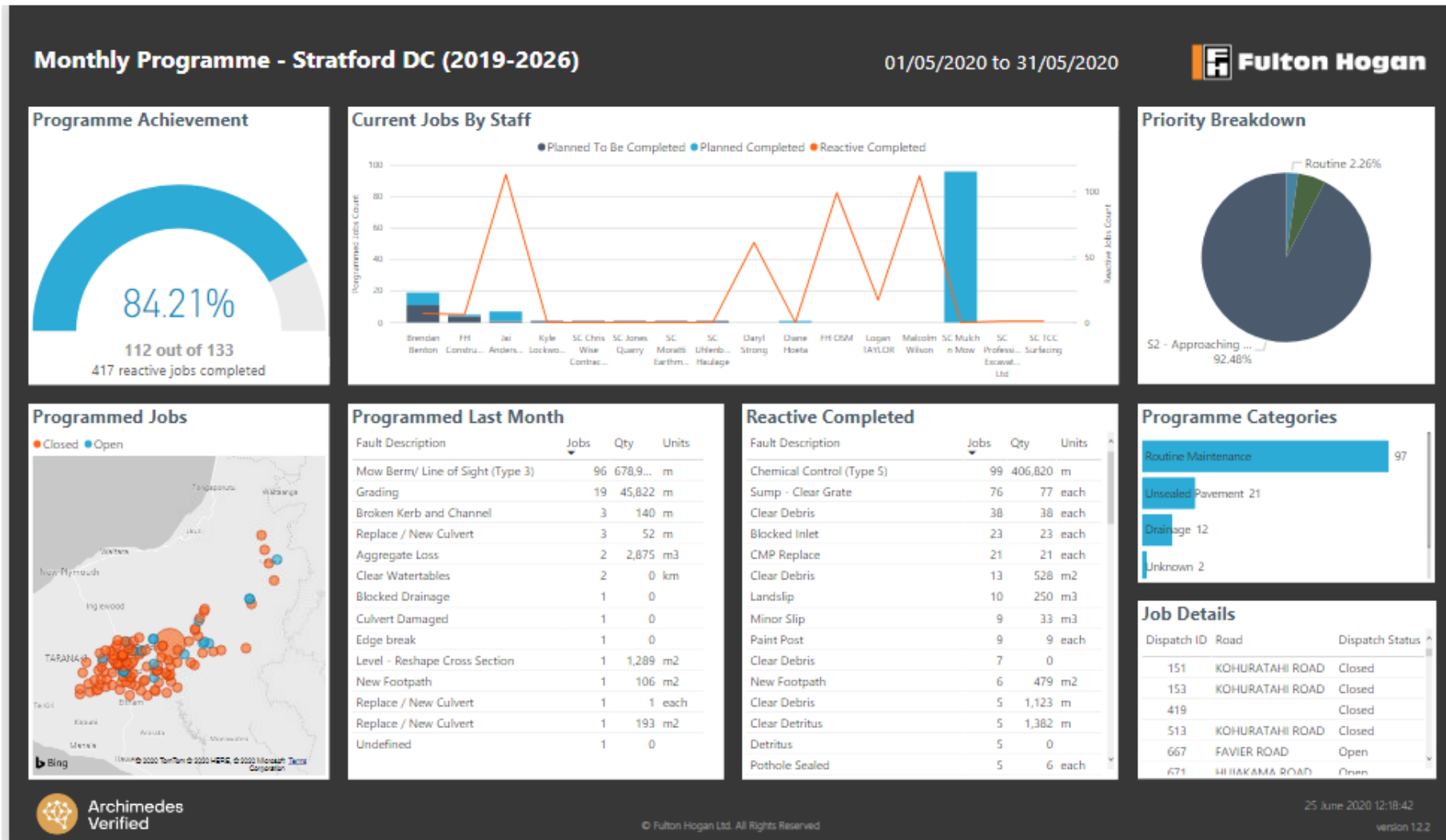


Figure 21 - Fulton Hogan Programme Achievement May 2020

# Levels of Service Performance

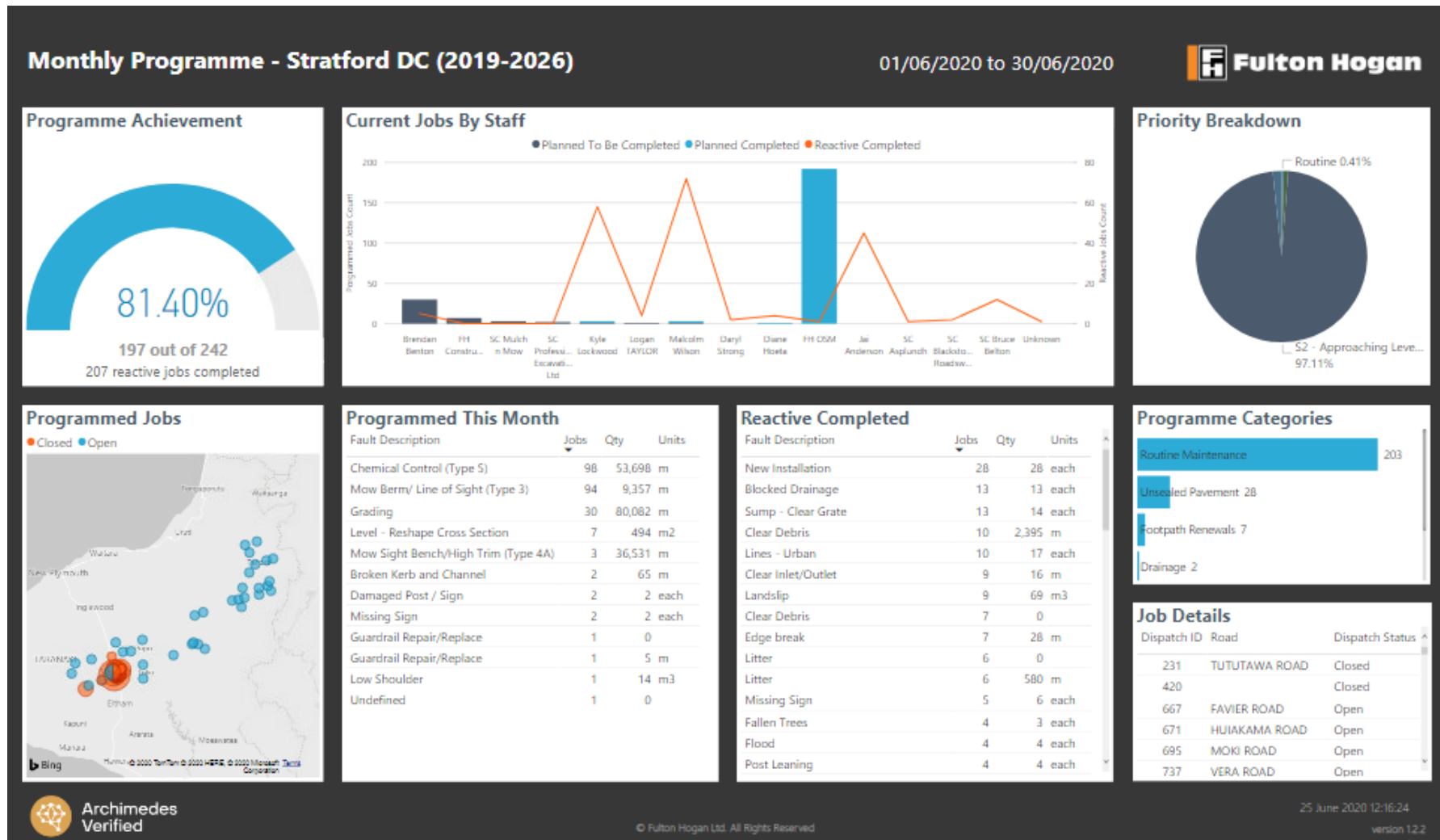
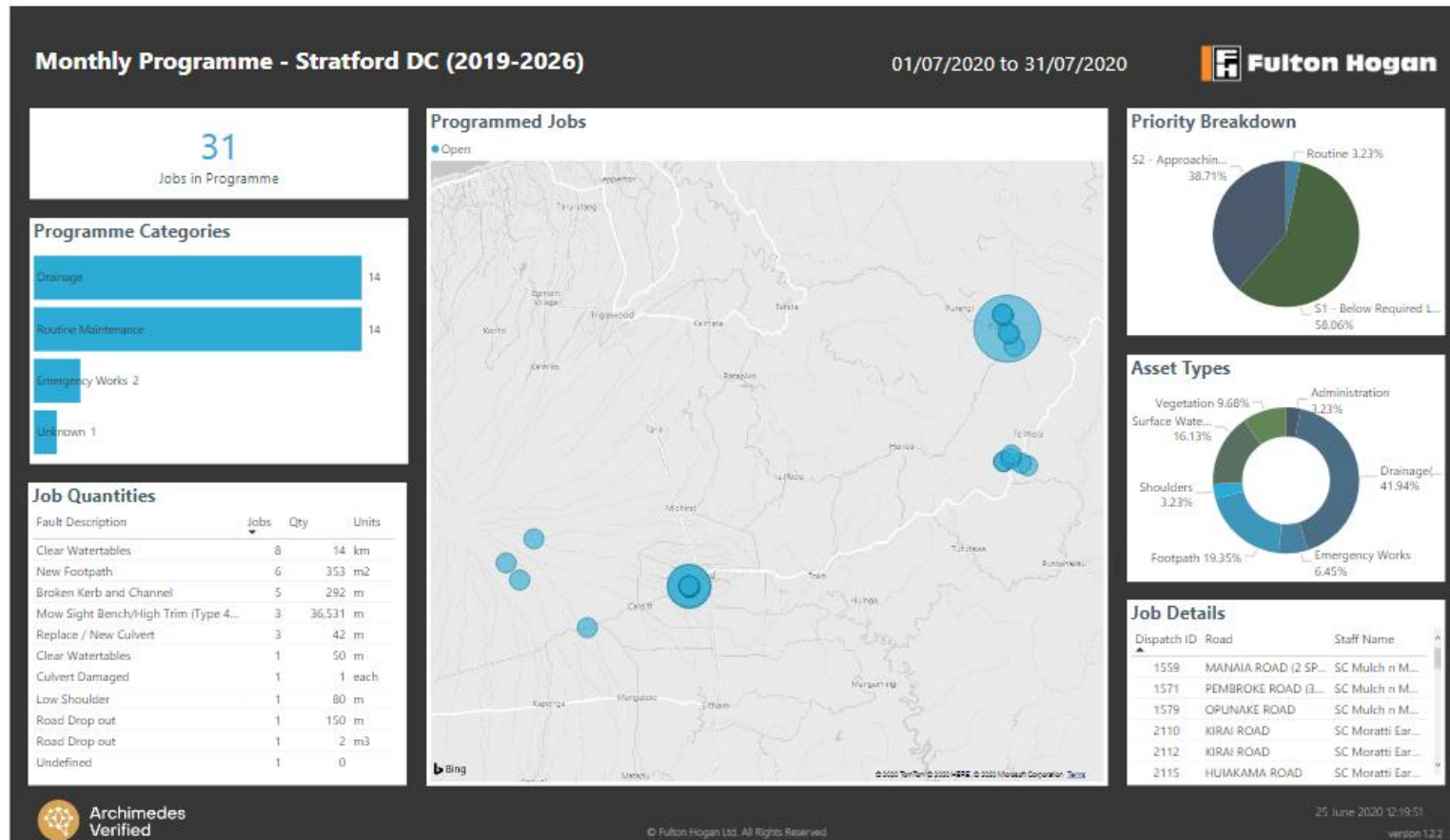


Figure 22 - Fulton Hogan Programme Achievement June 2020

# Levels of Service Performance



**Figure 23 - Fulton Hogan Programme Achievement July 2020**

We use this tool to monitor Fulton Hogan's performance and to identify where programmed works may be deferred to later months.

The results of the performance monitoring are reported internally and externally through:

- Monthly reports to Elected Members;
- Long Term Plan;
- Annual Plan;
- Auditors

## 5.3 CURRENT PERFORMANCE

Our current performance is monitored through the measures from three main sources:

- The ONRC performance measures;
- The Department for Internal Affairs (DIA) performance measures; and
- Internal performance measures.

In maintaining its roads, the Council must deliver on three Outcome categories:

- Customer Outcome;
- Technical Output; and
- Cost Efficiency.

**The ONRC Performance Measures:** The ONRC Performance Measures are outlined in Table 19 and define the customer level of service we are required to achieve.

**The Department of Internal Affairs (DIA) Performance Measures:** These measures are shown in Table 20. There is a cross over for some of these measures with ONRC, for example the number of death and serious injury crashes and smooth travel exposure. Over and above these we have internal reporting measures which include:

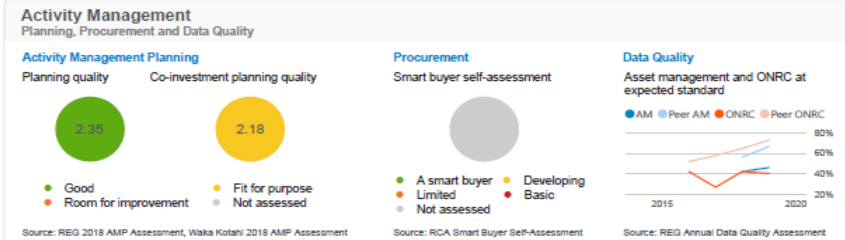
- Responses to Customer Requests >88%
- The percentage of the network resurfaced each year >5%
- The percentage of the unsealed road re-metalled each year >7%
- Footpaths that meet our levels of service standard >70%
- Customer Satisfaction
  - I. Roding Network >80%
  - II. Footpaths >80%

The Data Quality Report provides an opportunity for improvement in the way both individual Road Controlling Authorities (RCA) and the industry collects, manages and uses data to support our decision making processes. The report shows, for each measure, how the Council is positioned against what is considered good and where the industry sits, Figure 24 is Stratford District's results.

# Levels of Service Performance



## 2018/19 Stratford District Council RCA Report



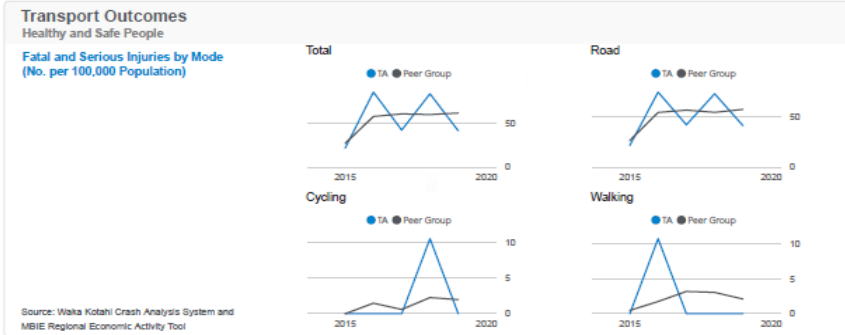
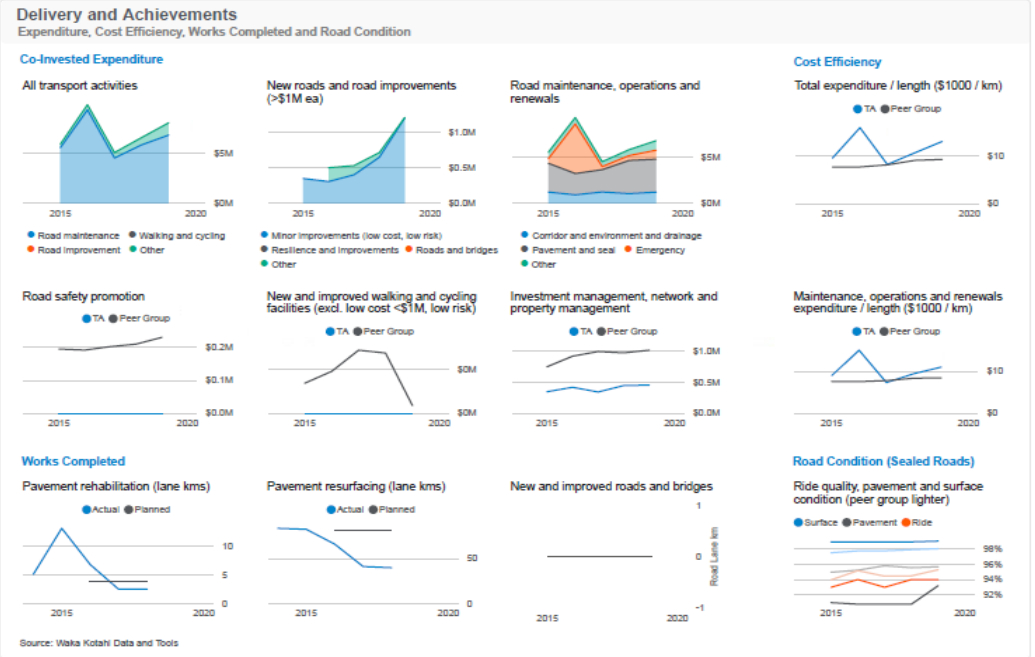
### Service Performance

LGA Non-Financial Performance Measures

Legend: Target achieved (Green), Partially achieved (Yellow), Target not achieved (Red), Not reported (Grey)

Annual Targets Achieved	2015-25 Long Term Plan			2018-28 LTP
	2015/16	2016/17	2017/18	2018/19
Provision of roads and footpaths	Target not achieved	Target achieved	Target not achieved	Target achieved
Road safety	Target not achieved	Target achieved	Target achieved	Target achieved
Condition of the sealed road network	Target not achieved	Target achieved	Target achieved	Target achieved
Maintenance of the sealed road network	Target not achieved	Target achieved	Target achieved	Target achieved
Condition of the footpaths within the local road network	Target not achieved	Target achieved	Target achieved	Target achieved
Response to service requests	Not reported	Target achieved	Target achieved	Target achieved

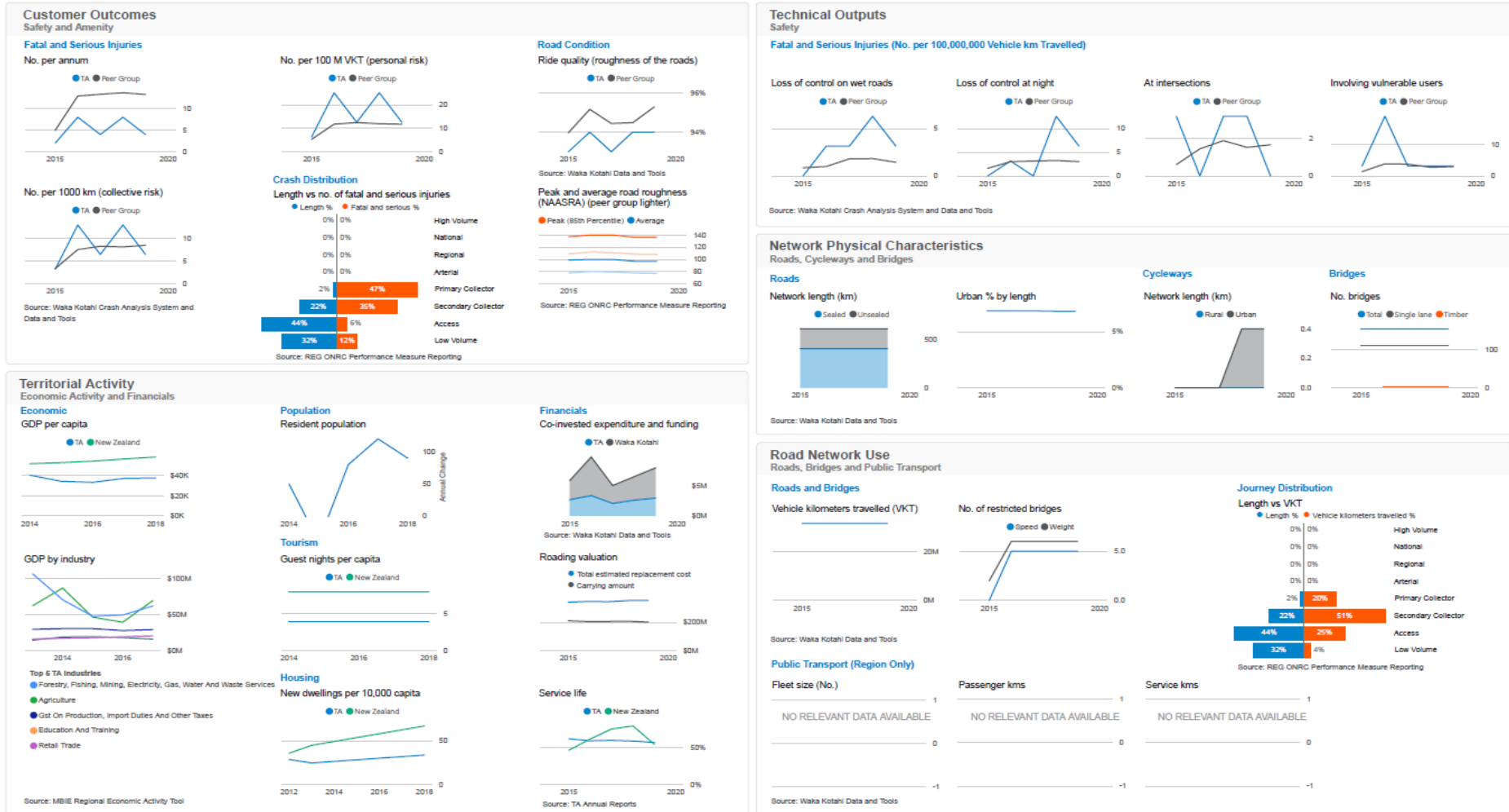
Source: TA Annual Reports



# Levels of Service Performance



## 2018/19 Stratford District Council RCA Report



Status: Final for publication

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v0.9 10 June 2020

Figure 24 - Road Controlling Authority (RCA) Report 2018/19



## Levels of Service Performance

**Table 20 - ONRC Performance Measures**

	Level of Service	Performance Measure	Outcome Category
1.	Safety	<b>Serious Injuries and Fatalities</b> - The total number of reported serious injuries and fatalities each year on the local network.	Customer Outcome 1
		<b>Collective Risk</b> - The total number of reported serious injuries and fatalities per kilometre over the past ten years on the local network.	Customer Outcome 2
		<b>Personal Risk</b> - The total number of reported serious injuries and fatalities by traffic volume over the past ten years on the local network.	Customer Outcome 3
		<b>Temporary Hazards</b> - The number of work sites, event sites and temporary hazards. Inspected.	Technical Output 2
		<b>Temporary Hazards</b> - The total number of audits compliant with the Code of practice for temporary traffic management (COPTTM).	Technical Output 2
		<b>Loss of Control on Wet Roads</b> - The number of reported serious injuries and fatalities attributable to loss of driver control on wet roads each year on the local network.	Technical Output 4
		<b>Loss of Driver Control at Night</b> - The number of reported serious injuries and fatalities attributable to loss of driver control at night each year on the local network.	Technical Output 5
		<b>Intersections</b> - The number of reported serious injuries and fatalities attributable to loss of driver control at intersections each year on the local network.	Technical Output 6
		<b>Vulnerable Users</b> - The number of reported serious injuries and fatalities involving vulnerable users on the local network.	Technical Output 9
2.	Resilience	<b>Vehicles Interrupted by Unplanned Events</b> - The annual number of unplanned road closures.	Customer Outcome 1
		<b>Vehicles Interrupted by Unplanned Events</b> - The annual number of vehicles affected by closures.	Customer Outcome 1
		<b>Instances Where Road Access is Lost</b> -The number of unplanned road closures where there was no viable detour.	Customer Outcome 2
		<b>Instances Where Road Access is Lost</b> -The number of vehicles affected by closures where there was no viable detour.	Customer Outcome 2
3.	Amenity	<b>Smooth Travel Exposure</b> -The percentage of travel on roads smoother than the specified threshold for each classification	Customer Outcome 1
		<b>Peak Roughness</b> - Length of network that does not meet the level specified by classification	Customer Outcome 2
		<b>Average Roughness</b> - The average roughness of local roads	Technical Output 1
		<b>Median Roughness</b> - The median roughness of local roads	Technical Output 1
4.	Accessibility	<b>Proportion of Network Not Available to Heavy Vehicles</b> - The proportion of each road classification that is not accessible to Class 1 Heavy vehicles.	Customer Outcome 1

## Levels of Service Performance

	Level of Service	Performance Measure	Outcome Category
		<b>Proportion of Network Not Available to Heavy Vehicles</b> - The proportion of each road classification that is not accessible to 50MAX vehicles.	Customer Outcome 1
		<b>Proportion of Network Not Available to Heavy Vehicles</b> - The number of instances where the road is not marked in accordance with national standards RTS-2 and MOTSAM and the Traffic Control Devices manual.	Technical Output 1
5	Cost Efficiency	<b>Pavement rehabilitation</b> - The total quantity and cost of pavement rehabilitation undertaken over the previous year as renewal work (lane km and m2), by classification and average lives achieved.	Cost Efficiency 1
		<b>Chipseal Resurfacing</b> - The total quantity and cost of sealed road chipseal resurfacing undertaken over the previous year (lane km and m <sup>2</sup> ), and the average lives achieved.	Cost Efficiency 2
		<b>Asphalt Resurfacing</b> - The total quantity and cost asphalt sealed road resurfacing undertaken over the previous year (lane km and m2), and the average lives achieved.	Cost Efficiency 3

**Table 21 - DIA Performance Measures**

	Level of Service	Performance Measure	Outcome Category
1.	Safety	<b>Fatalities and Serious Injuries</b> - The change from the previous financial year in the number of fatalities and serious injury crashes on the local road network. (DIA measure 1)	DIA Measure
2	Road Condition	<b>Road Condition</b> - The average quality of ride on sealed road network, measured by smooth travel exposure.	DIA measure
3	Maintenance for Sealed and Unsealed roads	<b>Sealed Road Maintenance</b> - The percentage of the sealed road network that is resurfaced.	DIA measure
		<b>Unsealed Road Maintenance</b> - The percentage of the unsealed road network that has been metal dressed.	DIA measure
4	Footpaths that fall within the LoS Standards	<b>Footpaths that fall within LoS Standard</b> - The percentage of footpaths within the District that fall within the level of service standard for the condition of footpaths that is set out in the territorial authority's relevant document (annual plan, activity management plan, annual works programme or long term plan)	DIA measure
		<b>Response to Requests for Service</b> - The percentage of customer service requests relating to roads and footpaths responded to within the time frame specified in the long term plan (note: this information is actually held in the activity management plan not the long term plan)	DIA measure

## 5.3.1 SAFETY

On average, one person is killed every day on New Zealand roads, and another seven are seriously injured. The number of road deaths in New Zealand rose significantly between 2013-2017. Deaths and serious injuries should not be an inevitable cost of moving people and freight from place to place. A transport system needs to be created in both urban and regional areas that protects people. This priority gives effect to, but is not limited to, the Road to Zero.

## 5.3.2 ONRC PERFORMANCE TOOL

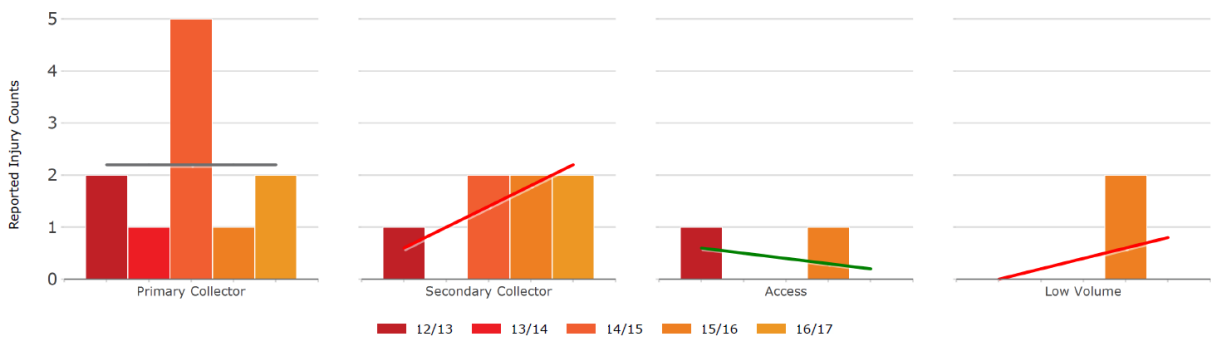
### ONRC Safety Outcome 1 – Serious Injuries and fatalities

**Safety Customer Outcome 1 - Serious Injuries and Fatalities**

Financial Year: 2018/19  
 RCA: Stratford  
 Classifications: Primary Collector, Secondary Collector, Access, Low Volume  
 Urban/Rural: Urban, Rural  
 Number of Years: 5 (2016/17 represents the most recent complete year of crash data)  
 \* There are 3 data validation errors.



The total number of reported serious injuries and fatalities (DSI) each year on the network



Comparative trend in reported serious injuries and fatalities (DSI) over a five year period

This graph shows the trend in serious injuries and fatalities over the last five years as a percentage of the average. Worsening trends are shown in red, improving trends in green.

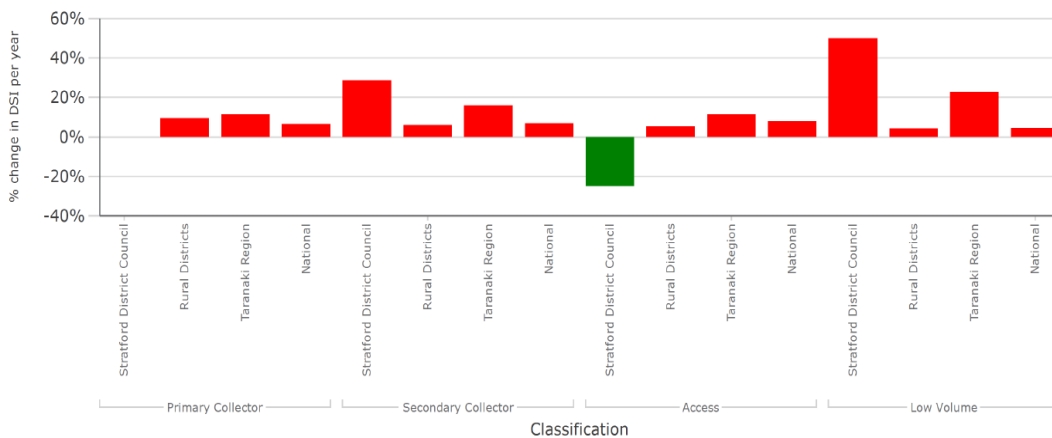


Figure 25 - Road Safety – Serious Injuries and Fatalities

# Levels of Service Performance

Following a peak in Death and Serious Injury (DSI) crashes in 2014/2015, the current trend shows a reduction in these crashes. For 2018/2019 there were four DSI's across the district's roading network.

When looking at the trends, we are neutral for primary collector roads, a higher trend for secondary collector, an improving trend for access roads and a high trend for low volume roads.

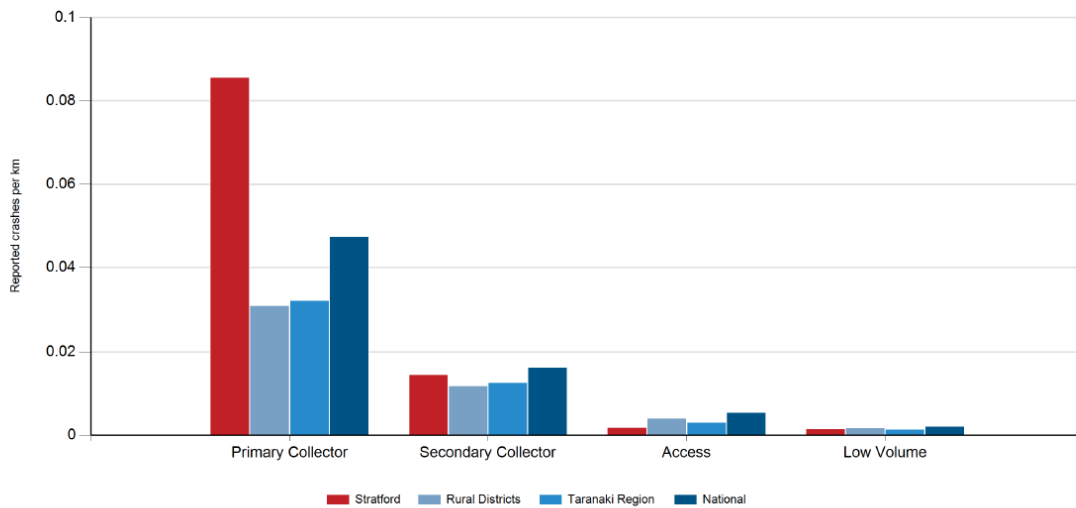
Further investigations and studying of the crash analysis system will highlight the locations of the crashes on the secondary collector and low volume roads.

Any potential safety improvements will form part of our Low Cost/Low Risk Safety Improvements programme for 2021-2024.

## Safety Customer Outcome 2 - Collective Risk



The total number of reported crashes per kilometre over the past 10 years on the network



The latest 10 year crash dataset in RAMM is used for each Road Controlling Authority. This allows for comparison across road classifications, however totals may not exactly match those from specialist safety statistic reporting.

The crash history for the last five years for these three roads are as follows:

Road Name	Non Injury	Minor Injury	Serious Injury	Fatal
Opunake Road	28	15	11	3
Palmer Road	5	2	0	0
Manaia Road	3	0	2	0

Figure 26 - Collective Risk

**Table 22 - Collective Risk Matrix**

Rating	Description
≤ 0.039	Low
Between ≤ 0.04 and ≤ 0.069	Low to Medium
Between ≤ 0.07 and ≤ 0.10	Medium
Between ≤ 0.11 and ≤ 0.189	Medium to High
≥ 0.189	High

Based on the data for this customer outcome our target for the next three years will be to address the Primary and Secondary Collector roads.

Opunake Road is the district's longest primary collector of 12.10kms. Unfortunately for Stratford District Council this road does have a high number of crashes including fatalities. This road has been identified through MegaMaps and the Safe Network Programme as one of our top 10% roads requiring attention.

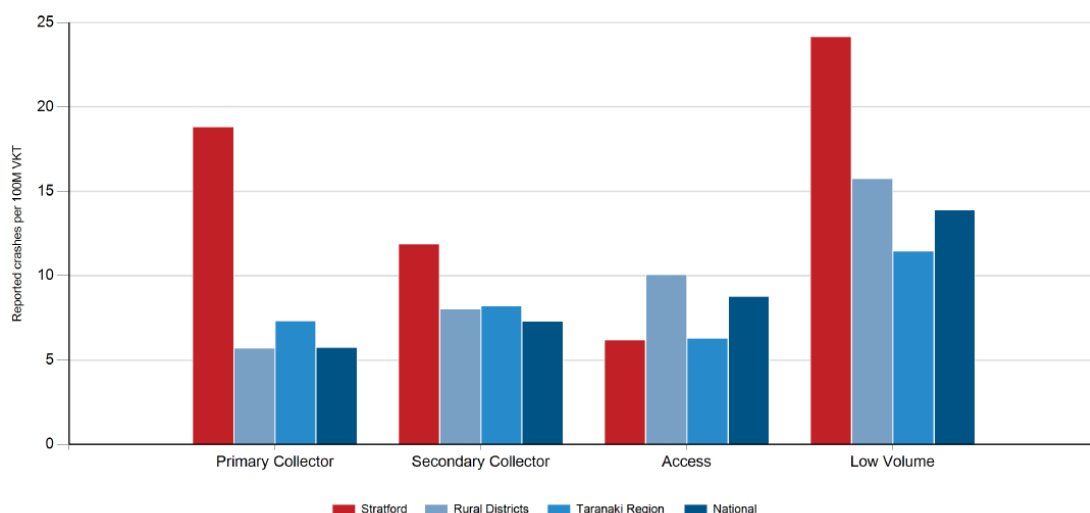
With this in mind we will be considering safety improvements, speed reduction and installing Rural Intersection Activated Warning Signs at the Opunake Road/Climie Road/Cardiff Road intersection.

During 2020/2021 financial year we will be completing a safety improvement project at RP9.90 or approximately 500m west of Palmer Road Intersection. This double curve has been the scene of three crashes in the last three years.

### **ONRC Safety Outcome 3 - Personal Risk**



The total number of reported crashes by traffic volume over the past 10 years on the network



The latest 10 year crash dataset in RAMM is used for each Road Controlling Authority. This allows for comparison across road classifications, however totals may not exactly match those from specialist safety statistic reporting.

**Figure 27 - Personal Risk**

Based on the data held within RAMM, our focus for this customer outcome will be on the Primary Collector, Secondary Collector and Low Volume Roads.

As discussed previously, we have a plan in place for addressing the safety issues on our primary collector (Opunake Road).

Our next focus will be the low volume roads as this road category makes up 32% of our road network by length.

Further investigation of CAS to identify possible clusters of crashes or individual locations will be undertaken. This will lead to minor safety improvements at these crash locations. The treatments may vary from traffic services (signs and road marking) to more substantial geometric re-alignment.

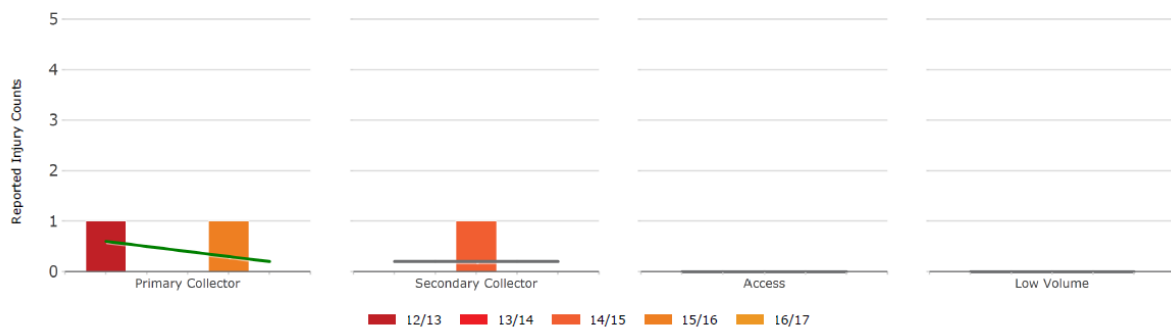
## ONRC Technical Output 4 - Loss of Control on Wet Roads

### Safety Technical Output 4 - Loss of Control on Wet Roads

Financial Year: 2018/19  
 RCA: Stratford  
 Classifications: Primary Collector, Secondary Collector, Access, Low Volume  
 Urban/Rural: Urban, Rural  
 Number of Years: 5 (2016/17 represents the most recent complete year of crash data)  
 \* There are 3 data validation errors.



The number of reported serious injuries and fatalities (DSI) attributable to loss of driver control on wet roads



Comparative trend in reported serious injuries and fatalities (DSI) attributable to loss of control on wet roads

This graph shows the trend in serious injuries and fatalities over the last five years as a percentage of the average. Worsening trends are shown in red, improving trends in green.

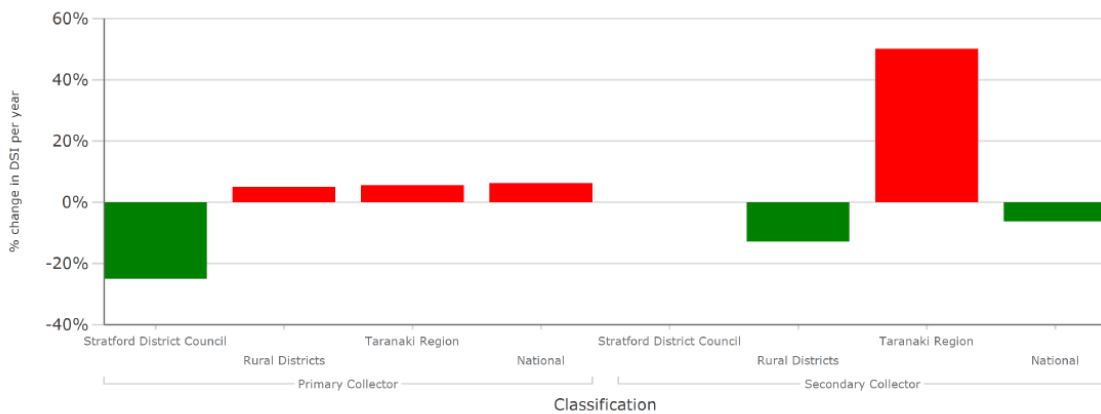


Figure 28 - Loss of Control on Wet Roads by Road Classification

Based on the result indicated above we have an improving trend of reducing the loss of control crashes across all road categories.

The number of crashes recorded where a wet road was seen as a contributing factor are low, with one recorded crash in 2015/2016.

Our annual resealing programme is predominantly undertaken on Access and Low Volume roads, This, in turn, is reducing the loss of control on wet road crashes.

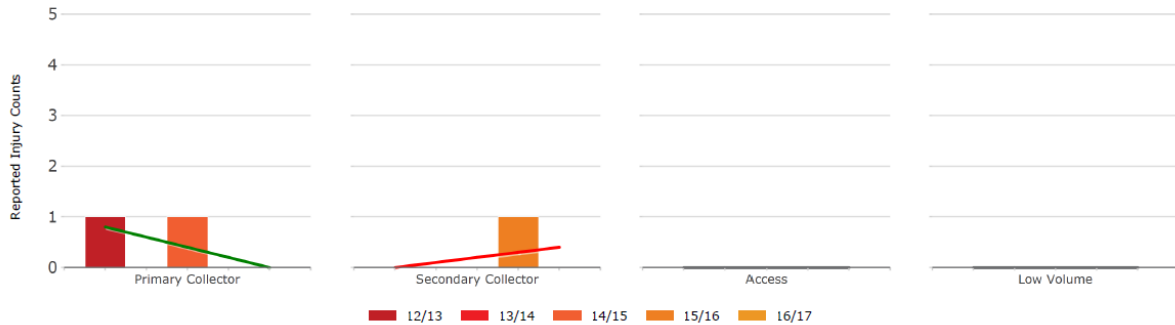
## Safety Technical Output 5 - Loss of Driver Control at night

### Safety Technical Output 5 - Loss of Driver Control at Night

Financial Year: 2018/19  
 RCA: Stratford  
 Classifications: Primary Collector, Secondary Collector, Access, Low Volume  
 Urban/Rural: Urban, Rural  
 Number of Years: 5 (2016/17 represents the most recent complete year of crash data)  
 \* There are 3 data validation errors.



The number of reported serious injuries and fatalities (DSI) attributable to loss of driver control at night



Comparative trend in reported serious injuries and fatalities (DSI) attributable to loss of driver control at night

This graph shows the trend in serious injuries and fatalities over the last five years as a percentage of the average. Worsening trends are shown in red, improving trends in green.

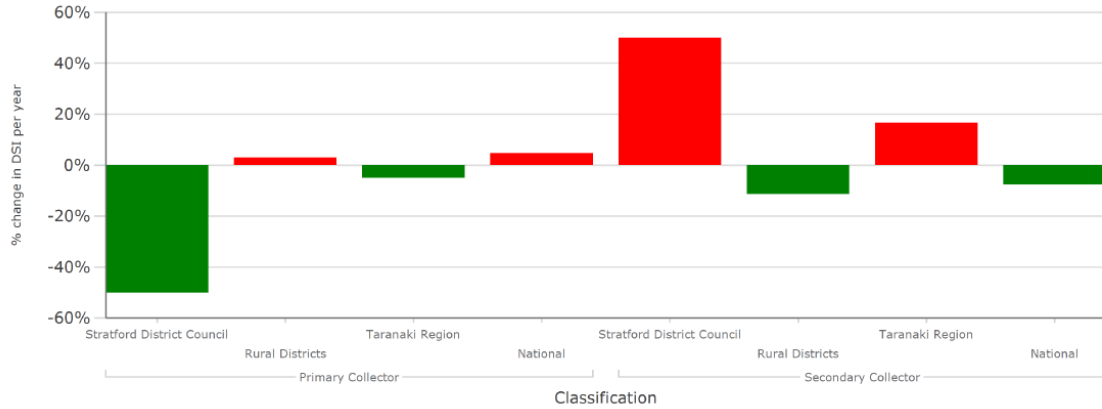


Figure 29 - Loss of Driver Control at Night by Road Classification

The above graphs clearly show that Stratford District has a safety issue on our Secondary Collector Roads or 21% of our network.

With the installation of LED streetlights in the urban area, night time visibility for drivers has improved. Our focus for this next long term plan period will be the rural roads, which is 18% of our network. Many of these rural roads have reasonably straight alignments with slow curves (65km/h or less). As mentioned previously further investigation into CAS will identify possible hotspots that warrant safety intervention projects. Whilst our trend shows 50% increase, the actual number of crashes is low, with only one recorded in 2015/2016.

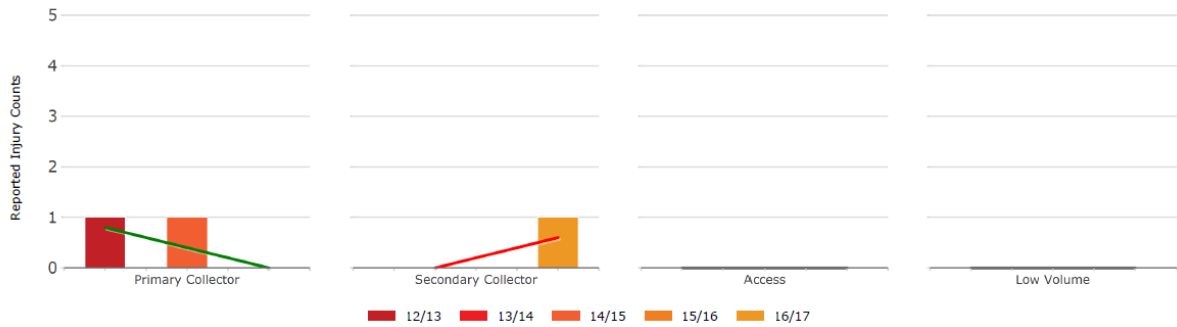
## Safety Technical Output 6 - Intersections

### Safety Technical Output 6 - Intersections

Financial Year: 2018/19  
 RCA: Stratford  
 Classifications: Primary Collector, Secondary Collector, Access, Low Volume  
 Urban/Rural: Urban, Rural  
 Number of Years: 5 (2016/17 represents the most recent complete year of crash data)  
 \* There are 3 data validation errors.

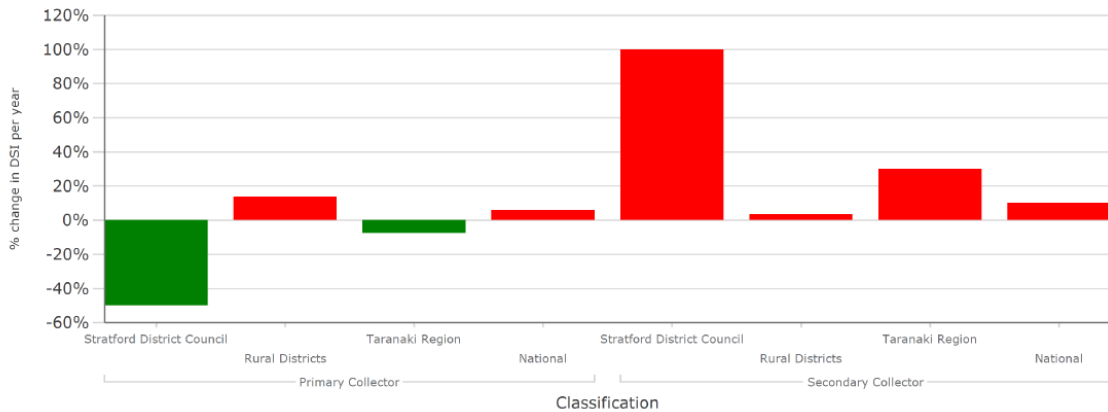


#### The number of reported serious injuries and fatalities (DSI) at intersections each year on the network



#### Comparative trend in reported serious injuries and fatalities (DSI) at intersections

This graph shows the trend in serious injuries and fatalities over the last five years as a percentage of the average. Worsening trends are shown in red, improving trends in green.



**Figure 30 - Intersections**

It appears Stratford District Council has an increasing trend of intersection crashes on our Secondary Collector network. With one crash recorded 2016/2017, this has resulted in a 100% down turn in our statistics.

Further work will be undertaken to identify this crash site. From the 2016/2017 crash reports it appears a truck failed to give way at the Celia Street/Orlando Street Intersection. This particular intersection was re-surfaced with asphalt in the 2017/2018 year. No further crashes have occurred at this particular intersection.



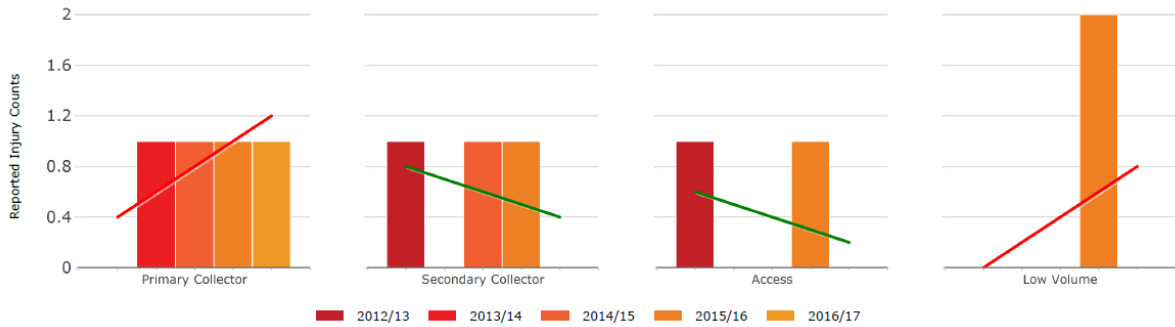
## Safety Technical Output 9 – Vulnerable Users

### Safety Technical Output 9 - Vulnerable Users

Financial Year: 2018/19  
 RCA: Stratford  
 Classifications: Primary Collector, Secondary Collector, Access, Low Volume  
 Urban/Rural: Urban, Rural  
 Number of Years: 5 (2016/17 represents the most recent complete year of crash data)  
 \* There are 3 data validation errors.



#### The number of reported serious injuries and fatalities (DSI) involving vulnerable users on the network



DSI Counts	Vulnerable User	Primary Collector	Secondary Collector	Access	Low Volume	Total	Percent of DSI
2012/13	Motor Cycle		1	1		2	50
2013/14	Motor Cycle	1				1	100
2014/15	Moped		1			1	14.3
	Motor Cycle	1				1	14.3
2015/16	Motor Cycle	1	1	1	2	5	83.3
2016/17	Motor Cycle	1				1	25



#### Comparative trend in reported serious injuries and fatalities (DSI) involving vulnerable users on the network

This graph shows the trend in serious injuries and fatalities over the last five years as a percentage of the average. Worsening trends are shown in red, improving trends in green.

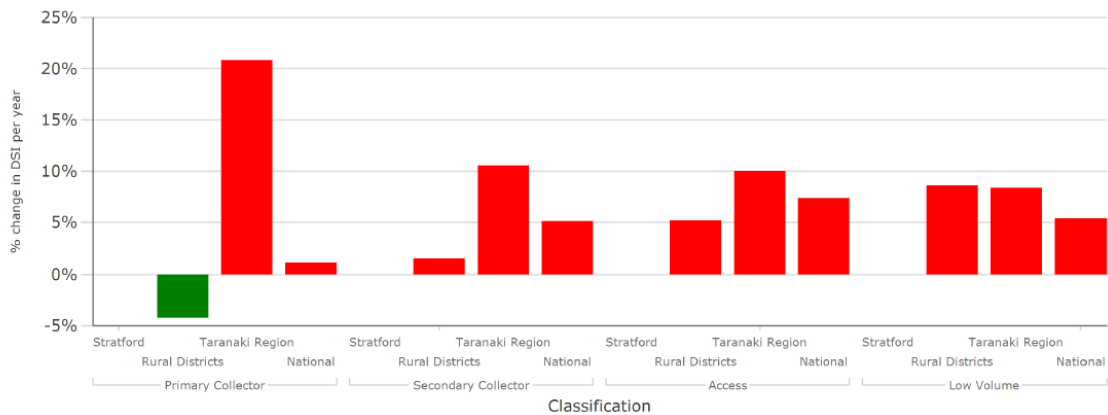


Figure 31 - Vulnerable Users

# Levels of Service Performance

As with the other safety related performance tools, our Primary Collector road will be the target for safety improvements.

Whilst the crash numbers are low, there has been two fatalities involving motorcycles on Opunake Road in the last three years.

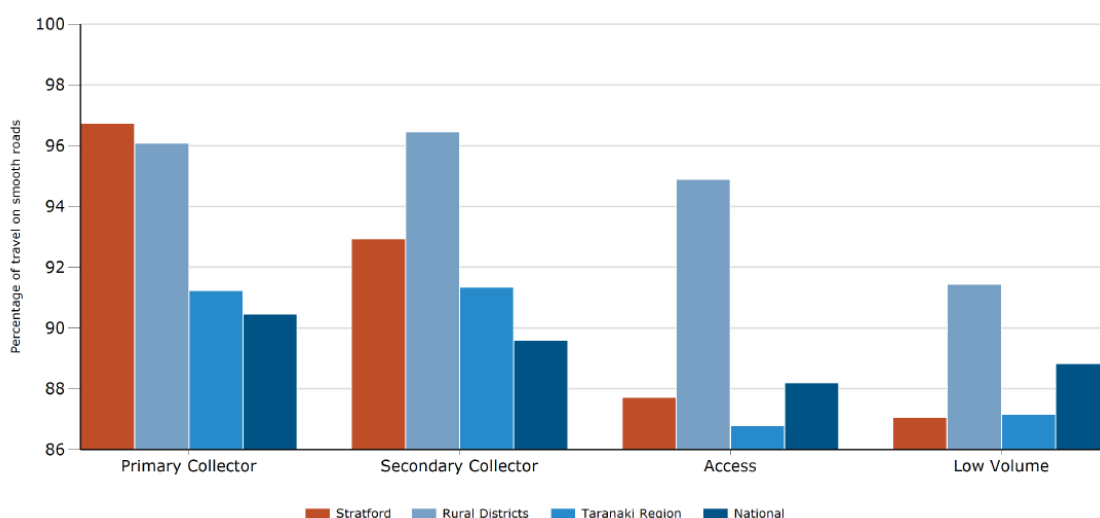
Given the number of crashes on this road throughout the last five years. This road would be a suitable candidate for a road safety audit.

## 5.3.3 AMENITY

### Amenity Customer Outcome 1 – Smooth Travel Exposure



The trend of percentage of travel on roads smoother than the threshold



The percentage of travel on roads smoother than the threshold for each traffic grouping

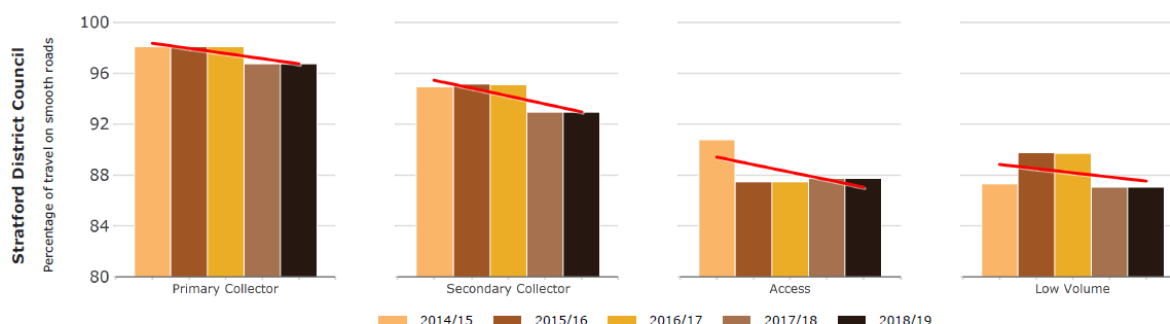


Figure 32 - Smooth Travel Exposure Targets by Road Classification

For this performance indicator, we can clearly show that the smooth travel exposure for our Primary Collector is greater than that of our peers, the regions, as well as the national average.

However this cannot be said for the other three road categories, where across all three road categories we are below our peers for this KPI. It is clear that Stratford District Council will need to focus our pavement repairs on the Secondary Collector and sealed access roads for the duration of this long term plan period to elevate our percentages to be at least on par with our peers.

With the increase in forestry activity across the district many of the access roads are, or have been, affected by HCV traffic. For example, roads such as Douglas Road, Mangaotuku Road, Mountain

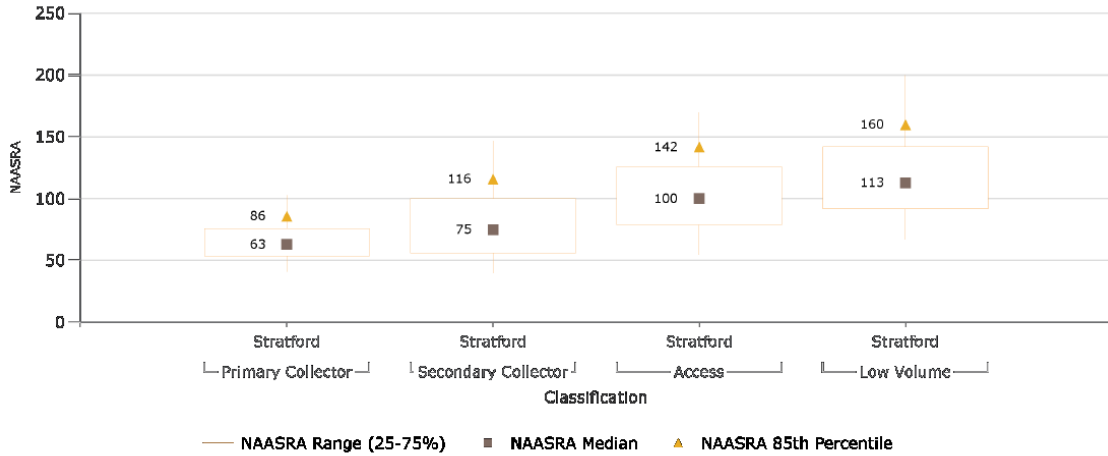
# Levels of Service Performance

Road, Mohakau Road all service or provide access to forestry blocks that have been harvested in the previous two years.

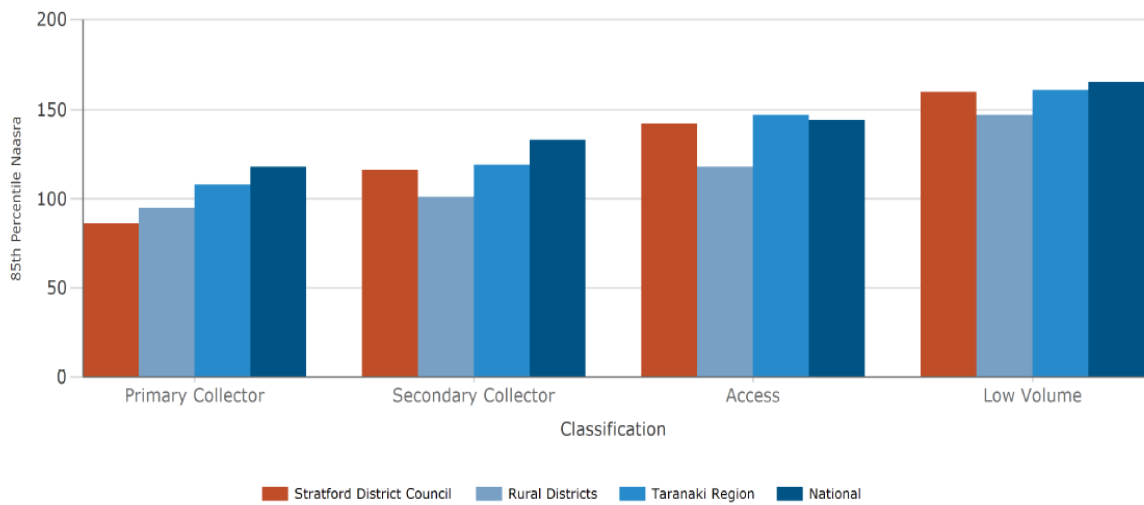
## Amenity Customer Outcome 2 and Technical Output 1 Comparative - Peak and Average Roughness



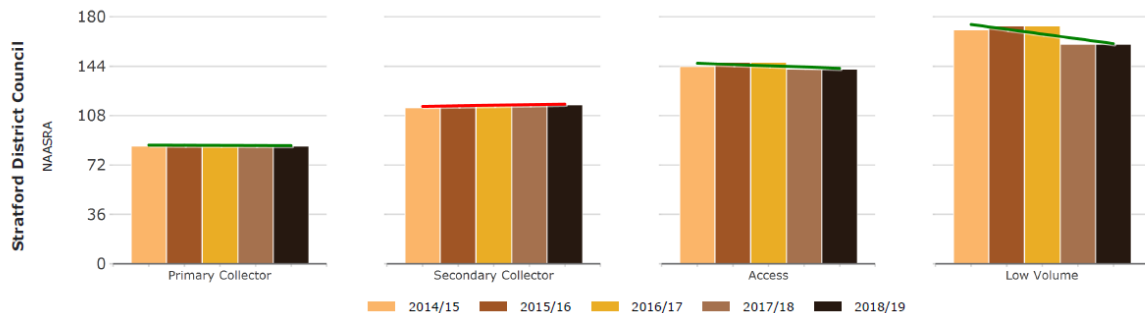
The 85th percentile roughness of your roads



85th percentile comparison



85th percentile trend



Classification		Year	Urban / Rural	5%	25%	Median	Average	75%	85%	95%
Primary Collector	Stratford	2014/15	Urban	51.0	59.5	66	80	97	114.0	143.0

**Figure 33 - Peak and Average Roughness**

Our peak and average roughness is very compatible with our peers, We are slightly higher than other rural districts for Secondary, Collector Access and Low Volume roads.

This can be attributed to two contributing factors:

- The increase in the number of HPMV permitted vehicles using the Secondary Collector and Access roads. During the 2019/2020 financial year, we issued in the order of 470 HPMV permits.
- The other factor is the forestry industry and the escalation in timber production. Many of the forestry blocks are located on the Low Volume roads.

Stratford District Council's programme for sealed pavement maintenance will concentrate on the annual reseal sites, thereafter the remaining sealed road network will be repaired as faults are identified through routine inspections.

With regard to the secondary collector roads those will be the candidates that are nominated for sealed pavement rehabilitation projects.

Given the level of funding for Stratford District Council, we have set our sights on a ten year pavement rehabilitation programme, to improve this customer outcome.

## 5.3.4 ACCESSIBILITY

### **Proportion of Network not Available to Class 1 Heavy Vehicles - (ONRC Customer Outcome1)**

The aim of this measure is ensure trucks that need to use roads with restrictions can do so.

Based on our current knowledge of our bridge stock, there is 99% accessibility to class 1 heavy vehicles. We currently have six posted bridges which are located at either road ends (McBride's Bridge, Buchannan's Access, Lower Kohuratahi Road, and Mt Damper Road), or located on an un-maintained Road (Tapuni Road, Matau North Road).

All of the above posted bridges provide access to local farmers, who own land beyond the river and bridge crosses. With regard to their farming practices, these farmers have to request delivery of supplies or removal of stock in tonnages that do not adversely affect the structural integrity of the posted bridges.

### **Proportion of Network not Available to 50MAX Heavy Vehicles - (ONRC Customer Outcome1)**

The aim of this measure is to ensure trucks that need to use roads with restrictions can do so. The performance measure target for the proportion of the network not available to 50MAX vehicles by road classification are 15% for Years 1 through to 3 and 12% for years 4 – 10. Council is unlikely to undertake a bridge strengthening programme in the next three years.

We currently have 32 bridges located on the network which are not suitable for HPMV/50 Max capability. This equates to 93 km of Stratford district land transport network that will not meet the ONRC Customer Outcome 1 for Accessibility.

We are currently undertaking further detailed analysis of these bridges to determine if the current restrictions will continue to apply. Following this analysis, some bridges maybe posted, or depending on the economic wealth created from land accessed over these bridges, some could be strengthened.

During the term of the 2021-24 LTP, we will undertake a review of the bridges that currently do not meet the 50max and HPMV weight requirements. This could lead to a funding request in the 2024-27 LTP for bridge strengthening work.

### **Proportion of Network not Available - (ONRC Technical Output 1)**

The aim of this measure is ensure signage is fit for purpose in providing direction and guidance to road users. The performance measure target for the number of wayfinding signage or markings that are not in accordance with National Standards RTS-2, MOTSAM and the TCD manual are:

- 20% - Year 1
- 18% - Year 2
- 16% - Year 3
- 14% - Years 4-10

As this is a new measure, Council neither currently has this information nor established auditing regime for this purpose.

In order to report on this technical outcome, the Council will commence an inspection programme. The targets stated in this Section are based on local knowledge of the Roading network rather than data collected via an audit.

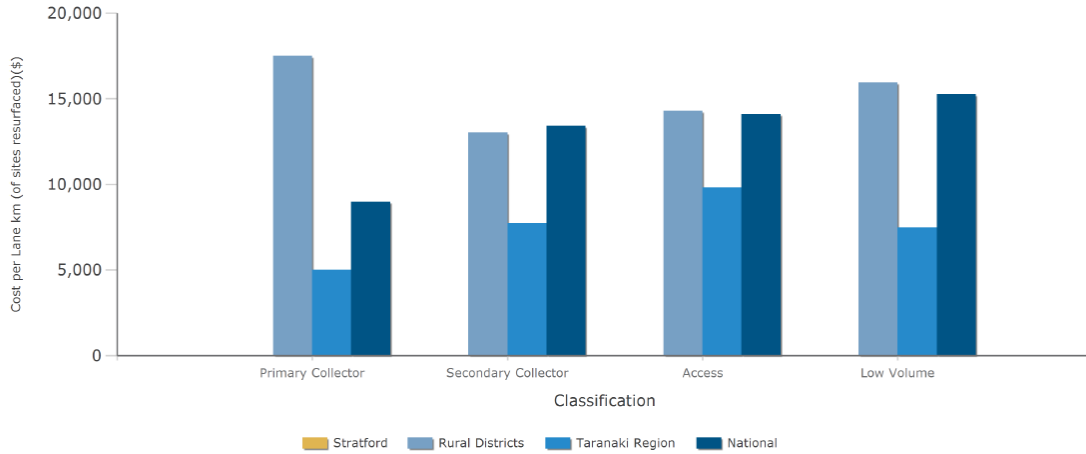
## 5.3.5 COST EFFICIENCY

### Cost Efficiency 2 - Chipseal Resurfacing Cost

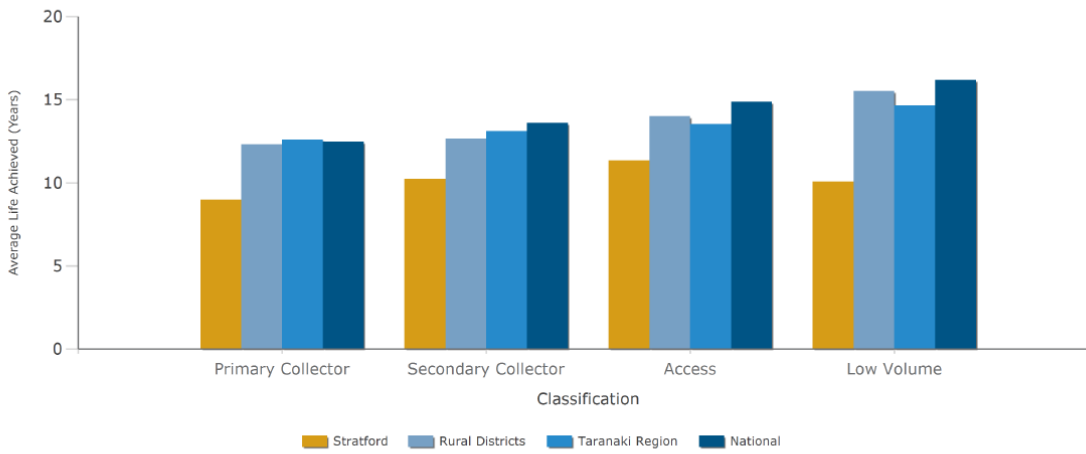


The total cost of chipseal resurfacing undertaken over the selected Financial Year

This classifies the Original Cost field for Surface records in RAMM



Chipseal resurfacing average life achieved, four year average to



Classification		Total Cost of Resurfacing (\$)	Cost per Lane km (\$)	Average Life Achieved (Years)
Primary Collector	Stratford			9.0
	Rural Districts	3,728,304	17,495	12.3

Figure 34 - Chipseal Resurfacing

## Levels of Service Performance

Whilst the table from Company X does not show the cost of resurfacing, the table below is taken from our annual achievement return to the New Zealand Transport Agency. The information is for chip sealing over the previous four financial years.

**Table 23 - Cost of Chip Sealing**

Year	Cost	Lane KM's	Cost Per Lane KM	Average Life (years)P
2016/2017	\$ 703,855.00	40.1	\$17,552.00	20
2017/2018	\$1,157,265.00	62	\$18,665.00	12.9
2018/2019	\$ 875,798.00	45.4	\$20,180.00	18.4
2019/2020	\$ 773,858.00	43.2	\$17,913.00	18.5

It should be noted there was a change in the maintenance contractor on 1 July 2019. Whilst the lane KM's sealed in 2018/2019 is very similar to the 2019/2020 year, the contract rates and seal type reflect the lower cost.

### 5.4 DESIRED PERFORMANCE

A summary of the Council's targets/desired performance levels are presented in Tables 26 and 27. This desire stems from the Council's resolve to maintain its agreed level of service delivery and strengthen the community's confidence in the Council's ability to deliver excellent Roding Service to the users.

Over and above our own levels of service we are working to achieve the levels of services associated with the One Network Road Clarification System (ONRC) including the performance and monitoring tools mentioned earlier.

As a co-investor, NZTA want to ensure their co-investment is appropriately used to maintain the districts roading network to pre-determined levels of service.

#### 5.4.1 EXPECTED OUTCOMES BY ROAD CLASSIFICATION

The aims of ONRC and the One Network Framework (ONF) will be to provide a consistent level of service across the four road categories throughout the district.

The following benefits will be achieved by embedding the ONRC/ONF levels of service into maintenance programmes and activities. For example, large expenditure on maintenance metalling for an unsealed road, serving less than five properties should be avoided.

Whilst the road may require some additional metal, the quantum should be commensurate with the hierarchy and function of the road. With this in mind, SDC has further classified some of our roads as "Low Low Volume" roads that service less than five residential properties. The table below provides a list of these roads. A map encompassing the low low volume roads is also available to view in [Appendix 6](#)

**Table 24 - List of Low Low Volume Roads**

AHUROA ROAD (2543 – 2898)	MARUARAU ROAD
ARMSTRONG STREET	MAUKU ROAD
ARNOLD ROAD	MCBRIDES ACCESS
AUKAWA ROAD	MOKI ROAD (6051 – 7265)
BARLEYMANS ROAD	MOUNT DAMPER ROAD
BAYLY ROAD (1316 – 1698)	MURCOTT ROAD
BUCHANANS ACCESS	OLD MOUNTAIN ROAD
CHESSWAS ACCESS	OXFORD TERRACE
DENBIGH ROAD (5310 – 7381)	POPUANUI ROAD
DOUGLAS NORTH ROAD	PROSPECT ROAD
DUNNS ROAD	PUKEKO ROAD
FAVIER ROAD	PUKENGAHU ROAD
FORDS ACCESS	QUARRY ROAD
GOWERS ACCESS	RADNOR ROAD (WEST OF SH3)
HARTNET ROAD	RAEKOHUA ROAD
HEAO ROAD	RAUPUHA ROAD (4549 – 7014)
HUIAKAMA ROAD	RIMUPUTA ROAD
HUNGERS ROAD	SANGSTER ROAD
JURY ROAD	SOLDIERS ROAD
KAHOURI ROAD	TAHUNAROA ROAD
KAIAPOI ROAD	TANGARAKAU ROAD
KAITIEKE ROAD	TAUWHARENKAU ROAD
KIRAI ROAD	TAWHIWHI ROAD
KOTA ROAD	TAYLOR ROAD
KUPE ROAD	TOKO DOMAIN ROAD
LOWER KOHURATAHI ROAD	TOKO STATION ROAD
MAKARA ROAD	TUNA ROAD
MANGAMAIRE ROAD	TUTUTAWA ROAD
MANGAOAPA ROAD (1357 – 10340)	VERA ROAD
MANGAOWATA ROAD	WAIU ROAD
MANGARE ROAD	WALTER ROAD
	YORK ROAD (6534 – 7127)

The following figure is the Network Characteristics for the four road classifications within the Stratford District.

## Network Characteristics

Financial Year: 2018/19  
 RCA: Stratford  
 Classifications: Primary Collector, Secondary Collector, Access, Low Volume

ONRC	Urban (Km)	Rural (Km)	Total Length (Km)	Lane (Km)	Urban Journeys (M VKT)	Rural Journeys (M VKT)	Annual Total Journeys Travelled (M VKT)	Percentage of length
Primary Collector	2	12	14	28	1.4	4.9	6.4	2%
Secondary Collector	19	111	130	259	4.3	11.7	16.0	22%
Access	10	253	262	524	1.0	7.1	8.1	44%
Low Volume	12	180	192	384	0.4	0.8	1.2	32%
Unclassified								0%
<b>TOTAL NETWORK</b>	<b>42</b>	<b>556</b>	<b>598</b>	<b>1,196</b>	<b>7.2</b>	<b>24.5</b>	<b>31.7</b>	

Table 1: Network Statistics for network length (km) and journeys travelled (Million vehicle km) by ONRC Class

**Figure 35 - Network Characteristics**



## Levels of Service Performance

The table below provides a summary of the customer outcomes for the four road classifications within the Stratford District

**Table 25 - Expected Customer Outcomes by Road Classification**

ONRC Outcome Area	Primary Collector	Secondary Collector	Access	Low Volume Access
<b>Safety</b>	Variable road standards and alignment.			
	Lower speeds and greater driver vigilance required on some roads/sections particularly depending on topography, access, density and use.			
	Road user safety guidance may be provided at high risk locations.			
	Active road users should expect mixed use environments with some variability in the road environment, including vehicle speed.	All road users should expect mixed use environments with some variability in the road environment, including vehicle speed.		
<b>Resilience</b>	Route is nearly always available except in major weather events or emergency event and alternatives may exist.		Route may not be available in moderate weather events and alternatives may not exist.	
	Clearance of incidents affecting road users will have a moderate priority.	Clearance of incidents affecting road users will have a Lower priority.	Clearance of incidents affecting road users will have the lowest priority.	
	Road users may be advised of issues and incidents.	Road user information will have a lower priority.	Road user information will have the lowest priority.	
<b>Reliability</b>	Generally consistent travel times except where affected by other road users (all modes) or Weather conditions.	Travel times may vary as a result of other road users (all modes), weather conditions or the physical condition of the road.		
<b>Amenity</b>	Moderate level of comfort, occasional areas of roughness.	Moderate level of comfort, longer areas of roughness.	Lowest level of comfort may include extended areas of roughness and unsealed surfaces (on rural roads).	
	Aesthetics of adjacent road environment reflects journey experience needs of all road users and adjacent land use.		Aesthetics of adjacent road environment strongly reflects land use and place function.	
	Urban roads reflect urban fabric and contribute to local character.			
	Specific provision where active road users present.		Strong shared space philosophy between active road users (if present) and vehicular traffic. Active road users expect environment appropriate to their needs.	
	Clean, safe and secure [lighting, reasonable cycle numbers, accessible parking facilities].		Urban areas clean, safe [low vehicle speed] and secure [lighting].	
<b>Accessibility</b>	Land use access for road users generally permitted but some restrictions may apply.		Access to all adjacent properties for road users.	

## Levels of Service Performance

ONRC Outcome Area	Primary Collector	Secondary Collector	Access	Low Volume Access
	Road user connection at junctions with Arterial or Collector roads, and some restrictions may apply in urban areas to promote Arterials.	Road user connection at junctions with other Collectors or Access roads.		
	Active road users should expect mixed use environments with some variability in the road environment, including vehicle speed.			
	Traffic on higher classification roads generally has priority over lower classification roads.			
	Provision of quality information relevant to Collector road user needs.		Provision of quality information.	
<b>Cost Efficiency</b>	Efficiency measures are required to provide assurance that the work we do is necessary, is coordinated and is delivering value for money. We will improve efficiency by ensuring the work we do is done at the right time, i.e. it is not done too early, nor is it done too late.			

### 5.4.2 PERFORMANCE RATING

The following tables provide a summary of the performance indicators and levels of service targets for Stratford.

**Table 26 - Performance Rating Index**

<b>Achieved</b>	Required actions have been completed and the intended level of service has been achieved, or Where a long-term level of service is targeted, the results for the year are in keeping with the required trend to achieve the intended level of service.
<b>New Measure</b>	This measure was introduced after the commencement of the relevant financial year, hence no data is available.
<b>Not Achieved</b>	None of the required actions have been undertaken, or The result for the year is less than half of the intended level of service, or Where a long-term level of service is targeted, the results for the year are contrary to the required trend to achieve the intended level of service.
<b>Not Applicable</b>	No action was required during the year.

**Table 27 - Performance Measures for Objective 1 - To provide a safe roading network**

Level of Service	Performance Measure	Outcome Category	Trend				Current	Target				How Measured
			2016/17	2017/18	2018/19	2019/20	2020/ 21	Year 1 2021/22	Year 2 2022/23	Year 3 2023/24	Years 4 2024-31	
Safety	<b>Serious Injuries and Fatalities</b>	Customer Outcome 1	5	13	8	5	5	-1	-1	-1	-1	CAS Database
	<b>Collective Risk</b>	Customer Outcome 2	N/A	N/A	N/A	N/A	New Measure 0.086	0.07	0.06	0.05	0.05	ONRC Performance tool
	<b>Personal Risk</b>	Customer Outcome 3	N/A	N/A	N/A	N/A	New Measure 24.175	20	18	16	14	ONRC Performance tool
	<b>Loss of Control on Wet Roads</b>	Technical Output 4	3	5	2	1	New measure	0	0	0	0	CAS Database
	<b>Loss of Driver Control at Night</b>	Technical Output 5	0	4	1	1	New measure	0	0	0	0	CAS Database
	<b>Intersections</b>	Technical Output 6	1	3	4	1	New measure	0	0	0	0	CAS Database
	<b>Vulnerable Users</b>	Technical Output 9	1	1	1	2	New measure	0	0	0	0	CAS Database

**Table 28 - Performance Measures for Objective 2 - To provide a well-maintained Roding Network**

Level of Service	Performance Measure	Outcome Category	Trend				Current	Target					How Measured
			2016/17	2017/18	2018/19	2019/20	2020/ 21	Year 1 2021/22	Year 2 2022/23	Year 3 2023/24	Years 4- 10 2024- 2031		
<b>Condition</b>	<b>Road Condition</b>	DIA measure1											
	• Urban		≥91%	≥83%	≥83%	≥88%	Achieved - 88%	≥83%	≥83%	≥83%	≥83%	RAMM Rating Report	
	• Rural		≥95%	≥91%	≥91%	≥78%	Not Achieved - 78%	≥91%	≥91%	≥91%	≥91%	RAMM Rating Report	
<b>Resilience</b>	Vehicles Interrupted by Unplanned Events	Customer Outcome 1	N/A	N/A	1000	900	New measure	800	800	800	600	Internal database and traffic counts	
	Instances Where Road Access is Lost	Customer Outcome 2	N/A	N/A	21	29	New measure	25	23	20	20	Internal database and traffic Counts	
<b>Amenity</b>	<b>Smooth Travel Exposure</b>	Customer Outcome 1											
	• Primary Collector NAASRA Count												
	○ Urban		89%	86%	86%	88%	88%	≥83%	≥83%	≥83%	≥83%	RAMM Rating Report/ONRC Performance tool	
	○ Rural		100%	98%	98%	71%	71%	≥91%	≥91%	≥91%	≥91%	RAMM Rating Report/ONRC Performance tool	

## Levels of Service Performance

Level of Service	Performance Measure	Outcome Category	Trend				Current	Target				How Measured
			2016/17	2017/18	2018/19	2019/20	2020/ 21	Year 1 2021/22	Year 2 2022/23	Year 3 2023/24	Years 4- 10 2024- 2031	
	<ul style="list-style-type: none"> <li>• Secondary Collector NAASRA Count</li> </ul>	Customer Outcome 1										
	<ul style="list-style-type: none"> <li>○ Urban</li> </ul>		89%	86%	86%	88%	88%	≥83%	≥83%	≥83%	≥83%	RAMM Rating Report/ONRC Performance tool
	<ul style="list-style-type: none"> <li>○ Rural</li> </ul>		93%	95%	95%	88%	81%	≥91%	≥91%	≥91%	≥91%	RAMM Rating Report/ONRC Performance tool
	<ul style="list-style-type: none"> <li>• Access NAASRA Count</li> </ul>	Customer Outcome 1										
	<ul style="list-style-type: none"> <li>○ Urban</li> </ul>		93%	86%	86%	88%	87%	≥83%	≥83%	≥83%	≥83%	RAMM Rating Report/ONRC Performance tool
	<ul style="list-style-type: none"> <li>○ Rural</li> </ul>		93%	95%	95%	88%	81%	≥91%	≥91%	≥91%	≥91%	RAMM Rating Report/ONRC Performance tool
	<ul style="list-style-type: none"> <li>• Low Volume NAASRA Count</li> </ul>	Customer Outcome 1										
	<ul style="list-style-type: none"> <li>○ Urban</li> </ul>		93%	94%	94%	87%	87%	≥83%	≥83%	≥83%	≥83%	RAMM Rating Report/ONRC Performance tool

## Levels of Service Performance

Level of Service	Performance Measure	Outcome Category	Trend				Current	Target				How Measured
			2016/17	2017/18	2018/19	2019/20	2020/ 21	Year 1 2021/22	Year 2 2022/23	Year 3 2023/24	Years 4- 10 2024- 2031	
	○ Rural		93%	95%	95%	88%	81%	≥91%	≥91%	≥91%	≥91%	RAMM Rating Report/ONRC Performance tool
	<b>Peak Roughness</b>											
	• Primary Collector NAASRA Count											
	○ Urban	Customer Outcome 1	136	136	136	107	New measure	140	140	140	140	RAMM Rating Report/ONRC Performance tool
	○ Rural		102	98	98	102	New measure	120	120	120	120	RAMM Rating Report/ONRC Performance tool
	• Secondary Collector NAASRA Count											
	○ Urban	Customer Outcome 1	184	170	170	107	New measure	160	160	160	160	RAMM Rating Report/ONRC Performance tool
	○ Rural		134	136	136	102	New measure	130	130	130	130	RAMM Rating Report/ONRC Performance tool
	• Access NAASRA Count											
	○ Urban	Customer Outcome 1	187	185	185	109	New measure	160	160	160	160	RAMM Rating Report/ONRC Performance

## Levels of Service Performance

Level of Service	Performance Measure	Outcome Category	Trend				Current	Target				How Measured
			2016/17	2017/18	2018/19	2019/20	2020/ 21	Year 1 2021/22	Year 2 2022/23	Year 3 2023/24	Years 4- 10 2024- 2031	
												tool
	○ Rural		184	168	168	73	New measure	160	160	160	160	RAMM Rating Report/ONRC Performance tool
	• Low Volume NAASRA Count											
	○ Urban	Customer Outcome 1	211	220	220	132	New measure	170	170	170	170	RAMM Rating Report/ONRC Performance tool
	○ Rural		185	180	183	102	New measure	180	180	180	180	RAMM Rating Report/ONRC Performance tool
	<b>Average Roughness</b>	Technical Output 1	113	112	112	111	New measure	120	120	120	120	RAMM Rating Report/ONRC Performance tool
	<b>Median Roughness</b>	Technical Output 1					New measure	130	130	130	130	RAMM Rating Report/ONRC Performance tool
<b>Accessibility</b>	<b>Proportion of Network Not Available to Class 1 Vehicles</b>	Customer Outcome 1	N/A	N/A	N/A	N/A	New measure	10%	10%	10%	10%	50 Max maps, Bridge inspections, RAMM
	<b>Proportion of Network Not Available to 50 Max Vehicles</b>	Customer Outcome 1	N/A	N/A	N/A	N/A	New measure	30%	28%	26%	24%	50Max maps, RAMM

## Levels of Service Performance

Level of Service	Performance Measure	Outcome Category	Trend				Current	Target				How Measured
			2016/17	2017/18	2018/19	2019/20	2020/ 21	Year 1 2021/22	Year 2 2022/23	Year 3 2023/24	Years 4- 10 2024- 2031	
Cost Efficiency	<b>Pavement rehabilitation</b>	Cost Efficiency 1	2.6	3.7	2.0	2.0	New measure	1km	1km	1km	1km	RAMM
	<b>Chipseal Resurfacing</b>	Cost Efficiency 2										
	• Length (lane km)		40.1	62	43.4	43.2	New measure	40	40	40	40	RAMM/Annual Achievement Report
	• Area m <sup>2</sup>		126460	197442	139823	138400	New measure	160,00	160,00	160,000	160,000	RAMM/Annual Achievement Report
	• Average Achieved Life		13	13	13	13	New measure	13	14	15	16	RAMM
	<b>Unsealed Road Metalling</b>	Cost Efficiency 4										
	• Length (lane km)		53.2	100	105.8	118	New measure	65	65	65	65	RAMM/Annual Achievement Report
	• Volume m <sup>3</sup>		8547	17,364	10,969	9981	New measure	3000	3000	3000	3000	RAMM/Annual Achievement Report
	• Average Achieved Life		N/A	N/A	N/A	N/A	New measure	TBA	TBA	TBA	TBA	RAMM
	<b>Overall Network Cost</b>	Cost Efficiency 5										
• Sealed Pavement Maintenance	Cost Efficiency 2											



## Levels of Service Performance

Level of Service	Performance Measure	Outcome Category	Trend				Current	Target				How Measured	
			2016/17	2017/18	2018/19	2019/20	2020/ 21	Year 1 2021/22	Year 2 2022/23	Year 3 2023/24	Years 4- 10 2024- 2031		
	○ \$/lane km	Cost Efficiency 4	419	419	1329	781	New measure	446	446	446	TBA	RAMM Report	
	○ \$/vkt		0.007	0.006	0.005	0.007	New measure	0.014	0.014	0.014	TBA	RAMM Report	
	● Unsealed Pavement Mtce												
	○ \$/lane km		481	301	647	450	New measure	362	362	362	TBA	RAMM Report	
	○ \$/vkt		0.008	0.007	0.008	0.007	New measure	0.01	0.01	0.01	TBA	RAMM Report	
<b>Maintenance Assets Reports</b>	<b>Sealed Road Maintenance</b>	DIA measure	7%	10%	5.7%	5.4%	≥5%	≥5%	≥5%	≥5%	≥5%	RAMM/Annual Achievement Report/Annual Plan Report	
	<b>Unsealed Road Maintenance</b>	DIA measure	9%	18%	25.2%	14.4%	≥7%	≥7%	≥7%	≥7%	≥7%	RAMM/Annual Achievement Report/Annual Plan Report	
<b>Footpaths Assets Reports</b>	<b>Footpaths that fall within LoS Standard</b>	DIA measure	80%	80%	41.7%	62%	>82%	>70%	>72.5%	>75%	>77.5%	Footpath Condition Assessment Survey	
	<b>Response to service requests</b>	DIA measure	80%	80%	100%	100%	>86%	>88%	>88%	>88%	>88%	Annual Plan Report	
Customer Satisfaction	<b>Customer Satisfaction -</b>	Internal Measure											
	● Roading Networks				72%	75%	>76%	>80%	>80%	>80%	>80%	Responses from	

# Levels of Service Performance

Level of Service	Performance Measure	Outcome Category	Trend				Current	Target				How Measured
			2016/17	2017/18	2018/19	2019/20	2020/ 21	Year 1 2021/22	Year 2 2022/23	Year 3 2023/24	Years 4- 10 2024- 2031	
												Customer Satisfaction Survey
	• Footpaths				7%	73%	>77%	>80%	>80%	>80%	>80%	Responses from Customer Satisfaction Survey

## 5.5 LEVEL OF SERVICE STATEMENTS

The level of service which the Stratford District Council will provide our community will be in accordance with the following guiding principles for the various work categories,

### Level of Service Provision.

The summary table below outlines the level of service that Stratford District Council will provide for our community for the various work activities undertaken on the roading network:

**Table 29 - Summary of level of service statements**

Activity	Description	Level of Service Statement
111	Sealed Pavement Maintenance	Pavement repairs to reseal sites, HPMV routes, other ONRC road hierarchy roads as identified via inspections.
112	Unsealed Pavement Maintenance	Grading rounds to meet ONRC road classification, pavement defects
113	Routine Drainage Maintenance	Clearing water tables, repairing kerb and channel, clearing culverts, emptying roadside sumps twice per annum.
114	Structures Maintenance	Bridge deck cleaning, cleaning and painting wooden rail systems, replacing bridge end markers, removal of obstructions from waterways.
121	Environmental Maintenance	Management of Pest Plants, berm mowing, weed spraying around street furniture and invert of water tables, trimming high banks that obscure visibility.
122	Traffic Services Maintenance	Replacing edge marker posts where applicable, road markings, repairing signs, replacing wooden posts with steel poles, clean and paint 1400m of sight rails per annum.
125	Footpath Maintenance	Removal of trip hazards by grinding, replacement of damaged footpaths (<10m long sections).
140	Minor Events	Removal of large slips, retreating from underslips where practicable, clearing fallen trees following significant storms, eg ex Cyclone Gita
211	Unsealed Road Metalling	Metalling a minimum of 7% by length of the network, improvements to roads affected by logging traffic.
212	Sealed Road Resurfacing	Resurfacing a minimum of 5% by length of the sealed road network (20km).
213	Drainage Renewals	Reforming 90km of water tables per annum, replacing 1500m of kerb and channel per annum, replacing 400m of culverts per annum
214	Sealed Road Pavement Rehabilitation	Strengthening 1 km of sealed roads each year – HPMV routes and roads affected by logging.
215	Structures Component Replacement	Replacement of structural components as identified during annual routine inspections cycles.
222	Traffic Services Renewals	Replacement of damaged or faded signage, repairs to guardrails where identified, replacement of sight rails.
341	Low Cost Low Risk Improvements	Safety improvements, replacement of bridges, replacement of retaining walls, upgrade to Whangamomona Road, Walking and Cycling initiatives.

### 5.5.1 SEALED PAVEMENT MAINTENANCE

The Council's sealed road networks comprise of 394kms of sealed pavement across the district. The width of the road varies depending on the location. Urban roads vary between 8-12 meters between kerbs, whereas rural roads vary between 4-6 meters.

For the level of service that Stratford District Council will provide, will be primarily focused on:

- Pavement repairs to the known High Productivity Motor Vehicle routes

- Pavement repairs to annual reseal sites
- Pavement repairs to access and low volume roads as the need arises following routine inspections of the network
- Repairing pavement defects such as potholes, edgebreaks, crack sealing
- Water blasting to improve skid resistance of finished road surfaces. This will be very limited due to the cost of this specialised treatment,

### **5.5.2 UNSEALED PAVEMENT MAINTENANCE**

The Council's unsealed network comprises of 205kms of roads across the district. These roads vary in width from 3 meters to 6 meters. Many of these roads are "no exit" roads that service the rural farming community, as well as access to forestry blocks.

In general terms our maintenance strategy for these roads will be as follows:

- Roads with greater than 500vpd – 4 grading cycles per year
- Roads with less than 500vpd – 2 grading cycles per year
- Roads with less than 50vpd – 1 grading round per year.
- Pavement repairs such as potholes, removal of corrugations, removal of soft spots, dig-outs of failed areas
- The grading will be undertaken on an area by area basis. SDC's roading network is divided into 6 maintenance areas.

### **5.5.3 ROUTINE DRAINAGE MAINTENANCE**

Drainage maintenance provides a direct linkage to our problem statement number two. The purpose of providing good drainage is to protect the road edge and sub-structure from stormwater erosion and to direct stormwater run-off to defined discharge locations in a controlled way.

Typically the drainage maintained by SDC comprises of water tables, deep roadside drains, culverts, catchpits, sumps and kerb and channel.

The level of service which Stratford District Council will provide to its community will be as follows:

- Cleaning 90kms of watertables per annum
- Repairing broken or damaged kerb and channels as identified following monthly inspections
- Emptying roadside sumps twice per year
- Roadside sweeping of urban streets within Stratford that are lined with trees
- Clearing inlet and outlets of culverts
- Removing small slips from watertables

### **5.5.4 STRUCTURES MAINTENANCE**

Maintenance of our structural assets is in direct response to our problem statement number one. With the increasing numbers of HCV's and forestry activity, ensuring our structures remain functional is vital to ensure product can reach the market place.

The Council maintains 126 bridges, 3 tunnels, 34 large culverts ( $\geq 3.4m^2$  in area), numerous water drives and 251 retaining walls. All of these structures vary in construction, size and condition.

The level of service SDC will provide to our community will, in general terms, comprise of the following:

- Cleaning bridge decks
- Cleaning and replacing bridge end marker posts
- Cleaning and painting wooden handrail systems
- Cleaning drainage outlets in bridge decks
- Removing obstructions from waterways, culverts that impede water flow
- Undertake a programme of anti-rust protection (as identified through general inspection reports)

- Undertake general and detailed inspections of all the structural assets on two yearly and six yearly cycles
- Carry out concrete repairs, as identified through inspection reports and subject to funding being available. Depending on the condition of the structure this could take priority over some other minor maintenance work

### **5.5.5 ENVIRONMENTAL MAINTENANCE**

The assets to which this work category applies is the control of roadside vegetation. Whilst in the urban environment these assets provide an aesthetic benefit to residential dwellings, in the rural environment the issue is more focused on drainage control, visibility and reducing fire risk.

The levels of service which SDC will; provide to our community for this work category will be as follows:

- Control of plants that are designated as pest plants by the Taranaki Regional Council
- Mowing of roadside berms – twice per year
- Weed control of the invert of the watertables
- Weed control around roadside markers
- Vegetation control to remove obstructions from roadside signs
- Cutting of high banks to remove vegetation from impeding traffic
- Clearing vegetation which encroaches into a visibility envelope as detailed in the Maintenance Contract
- Removal of litter

### **5.5.6 TRAFFIC SERVICES MAINTENANCE**

The provision of good quality signage and road markings is key to wayfinding as well as road safety. Included in this asset group are signs, pavement markings, sight rails, roadside marker posts, traffic islands and streetlights.

During the previous Long Term Plan period the Stratford District Council has successfully completed the change over of the previous 70 watts Sodium Oxide streetlights to LEDs.

A worthwhile improvement to the safety of our community has been the painting of our pedestrian islands at pedestrian crossing facilities located at several intersections within Stratford.

The level of service which SDC will provide to our community is as follows:

- Replace damaged, leaning, broken roadside signs as identified through inspections or via customer responses
- Clean and paint 1400 meters of sight rails per annum
- Repaint all road markings annually. Some road markings may require more frequent painting such as Give Way or Stop markings
- Edge marker posts (EMP) will be replaced where there is a safety issue to be highlighted. EMP's on straight roads will be phased out as and when they are damaged
- Maintenance to streetlights will be generally associated with power supply faults

### **5.5.7 FOOTPATH MAINTENANCE AND RENEWALS**

The Stratford District Council has commenced on a 30 year replacement programme for our footpaths. During the last three years we have replaced old footpaths with new concrete footpaths that are now a minimum of 1.5 meters wide.

Many of the comments received from this year's Customer Satisfaction Survey comment on the narrow width of our footpaths.

To date there is 49.5 kms of footpaths which are less than 1.5 meters wide. Previously we commented this distance was 54kms, therefore some modest progress has been made. During the term of the last LTP, we have constructed 4.5 kms of new footpath. This is somewhat reduced from

our planned replacement target length due to the installation of Ultrafast Broadband throughout Stratford during the first two years of the previous LTP period.

The level of service which SDC will provide to our community will be:

- Replace the damaged sections of footpath which are less than 10 meters in length
- Remove or provide temporary repairs to trip hazards on footpaths
- When replacing footpaths (typically a block between adjoining streets) these will be a minimum of 1.5 meters wide
- Replace asphalt footpaths with concrete as this is a more cost effective long term solution, providing good value for money
- Completed annual condition surveys of our footpaths to identify priorities for replacement
- Upgrade pedestrian crossing points to be “barrier free” or mobility scooter friendly

### **5.5.8 MINOR EVENTS**

This activity provides the Stratford District Council the opportunity to remediate minor slips that occur on the roading network annually. Some see this as our “Business as Usual” storm event management budget. This budget will only be used to remove slips that partially or totally block the road.

For significant storm events, similar to June 2015, a separate application for funding to NZTA will be made following discussions with our Regional Investment Advisor.

Typically this funding category will cover the following:

- Removal of large slips which partially or totally block the carriageway – unplanned road closures
- A smaller minor events budget is available for winter maintenance, snow clearing on the two Special Purpose Roads – Pembroke Road and Manaia Road
- Removal of significant number of fallen trees following high winds, gales or ex-cyclones. For example ex-cyclone Gita closed the roading network in 54 different locations
- There will be situations where an underslip has occurred requiring remedial works. This could be in the form of a retaining wall or retreating into the opposite bank. In these situations the most cost effective, value for money option will be chosen

### **5.5.9 UNSEALED ROAD METALLING**

The Stratford District Council maintains 205kms of unsealed roads within our district, The district is split into six geographical areas for efficiency and also to recognise the diverse nature of the topography of the Stratford District. Within our maintenance contract we have scheduled an approximate volume of metal to be used within each area to provide the contractor the opportunity to price these separately, as the far reaches of Area 5 are 90 minutes travel time from Stratford. The following table is the rural unsealed roads maintenance schedule.

Figure 36 - Rural Unsealed Roads Schedule

Item	Description	Unit	Quantity
<b>9</b>	<b>Rural Unsealed Roads</b>		
<b>9.1</b>	<b>Potholes</b>	LS/mth	12
<b>9.2</b>	<b>Maintenance Metalling</b>		
9.2.1	Surfacing Reshaping	m <sup>2</sup>	1,500
9.2.2	Supply, spread, shape, & compact unsealed roading aggregate (loose measure)		
	Maintenance Metalling Area 1A	m <sup>3</sup>	535
	Maintenance Metalling Area 2B	m <sup>3</sup>	1070
	Maintenance Metalling Area 3A	m <sup>3</sup>	1070
	Maintenance Metalling Area 3B	m <sup>3</sup>	1600
	Maintenance Metalling Area 4	m <sup>3</sup>	2140
	Maintenance Metalling Area 5	m <sup>3</sup>	4300
	c) Basecourse AP40	m <sup>3</sup>	380
	d) Sub base AP65	m <sup>3</sup>	80
Item	Description	Unit	Quantity
<b>9.3</b>	<b>Maintenance Grading</b>		
9.3.1	Maintenance Grading Area 1A	km	5
9.3.2	Maintenance Grading Area 1B	km	9
9.3.3	Maintenance Grading Area 3A	km	14
9.3.4	Maintenance Grading Area 3B	km	44
9.3.5	Maintenance Grading Area 4	km	73
9.3.6	Maintenance Grading Area 5	km	69
<b>9.4</b>	<b>Deep Seated Failures</b>		
9.4.1	Digouts ≤ 150 mm deep	m <sup>2</sup>	1,600
9.4.2	Digouts 150 to 300 mm deep	m <sup>2</sup>	500
9.4.3	Digouts - Extra over for repair depth >300 mm	m <sup>3</sup>	150
9.4.4	Clean Rock 50-150 mm, place and roll into soft spots	m <sup>3</sup>	500
9.4.5	Subsoil Drainage	m	50
9.4.6	Geogrid	m <sup>2</sup>	10
9.4.7	Geotextile	m <sup>2</sup>	10

Each year our minimum re-metalling target is to re-metal 15kms of road. Over the last three years we have re-metalled more than this minimum requirement as shown below.

2016/17	13.7km
2017/18	51.6km
2018/19	51.7km
2019/20	29.5km

With an increase in forestry activity our primary focus will be to serve the roads that are affected by logging trucks, followed by re-metalling other roads as identified during inspections. We are aware that some of our roads with less than five residents living along them have suffered from not having a new layer of metal applied in previous contracts.

The cost of re-metalling roads, like Tahora Road and Raekohua Road is in order of \$120,000 each and with Tahora Road serving two residents and Raekohua Road serving four residents, this level of expenditure cannot be justified in one single financial year. In instances like this our plan is to re-metal these roads over a longer period of two or three financial years. This re-metalling can be undertaken in conjunction with other planned works, such as water tabling or replacement of culverts.

### **5.5.10 SEALED ROAD RESURFACING**

Within the Stratford District, the average age of our reseals is 13 years across the four road categories. It is our intention to “push the envelope” and extend this life by two to five years across the road categories. In some cases on the low volume sealed roads, we believe we can achieve at least 18 years life of our reseals.

The focus of our reseal programme for the next three years will be looking at HPMV routes, roads extensively used by HCV's, logging trucks, some urban sites and second seals on sealed pavement rehabilitation sites a year following the rehabilitation works.

As Stratford District Council has limited budgets for both reseals and pavement rehabilitation, we have taken the decision to reduce our reseal programme to 20kms per annum.

We have little call for more expensive surfacing treatments such as asphalts. If we do use asphalts then it will only be used at high stressed locations, such as intersections or in commercial zones.

### **5.5.11 DRAINAGE RENEWALS**

Following a change in our maintenance contractor, the length of water tables that we clean has been dramatically reduced.

Previously (2017-2020) we identified 200km of water to be cleaned annually. This is based on approximately 1000kms of water tables within the district.

As a result of the change in contractor, the unit rate per kilometre is significant, thereby cleaning 1000km would cost in the order of \$4,000,000. Such a high cost is unaffordable, when considering our drainage renewal budget for this LTP is \$616,000 per annum. This budget is also used for replacing culverts as well as kerb and channels on the urban network.

With this in mind our philosophy going forward will be:

- 50% of budget used for watertable renewals
- 25% of budget used for culvert renewals
- 25% of budget used for kerb and channel renewals

Based on the contract rates submitted by Fulton Hogan this equates to approximately:

- 90km of watertables per annum
- 450m of 375mm diameter culverts replaced annually
- 1200m of kerb and channel replacement per year

Should larger diameter culverts ( $\leq 3.40\text{m}^2$  in area) need to be replaced, the length above will reduce due to the increased cost of replacement.



### **5.5.12 SEALED ROAD PAVEMENT REHABILITATION**

Our current philosophy for identifying potential sealed pavement rehabilitation candidates comprise of some or all of the following defects:

- Excessive wheel tracking or rutting
- Pavement failures requiring dig outs
- Extensive surface cracking allowing water to penetrate into the foundation of the road
- Evidence of surface staining resulting from “pumping” of the granular layers beneath the seal
- Poor ride quality – road roughness
- General shape of the road – undulations, poor ride quality for HCV’s noise complaints
- High historical maintenance costs

During the 2019/2020 financial year (1 July to 30 June) Stratford District Council approved 475 HPMV permits. The majority of these permits were for travel along pre-determined/defined HPMV routes, predominately State Highway 3 – Monmouth Road, Cardiff Road, Opunake Road, Palmer Road or Manaia Road to access the South Taranaki district.

Just across the district boundary on Palmer Road is Balances’ Kapuni Fertiliser Plant, whilst on Manaia Road is Todd Energy’s Kupe oil/gas production station.

The other road of note is Beaconsfield Road which connects State Highway 43 to State Highway 3 at Midhirst. This road is extensively used as a short cut by logging trucks to avoid Stratford. Our programme for this work category will focus on these HPMV routes.

### **5.5.13 STRUCTURES COMPONENT REPLACEMENT**

The programme of replacements work activity is driven by our annual structural inspections. Given the diversity of our district we have split the inspections into “front country” and “back country”. The inspections alternate between the two areas each year.

Having undertaken two inspection cycles within the previous LTP period, we have established that there are no significant components of our bridges that require replacing. We have however identified seven bridges that will require complete replacement within the next 10 years.

We have inspected all of our known retaining walls, some of which do require some maintenance, which is primarily replacing timber boards. Again there are several walls that will require replacement.

Stratford District Council has recently completed significant repairs to “Buchanan’s Bridge” (photo below)



**Figure 37 - Buchanan's Bridge**

And the wooden swing bridge on Lower Kohuratahi Road (photo below)



**Figure 38 - Lower Kohuratahi Road Bridge**

The majority of work identified during the inspections can be undertaken via the structures maintenance work category.

## 5.5.14 TRAFFIC SERVICES RENEWALS

This activity relates to the various delineation and wayfinding assets on the Stratford Districts roading network. These are a vital component to provide a safe roading network for our community.

In general terms this work activity provides for the replacement of:

- Roadside signs
- Roadside edge marker posts in accordance with RTS-5
- Renewing old or damaged sight rails and hazard markers
- Replacement of spalling concrete or rusted steel streetlight columns/poles
- Replacement of underground streetlight power cables as determined through fault investigations

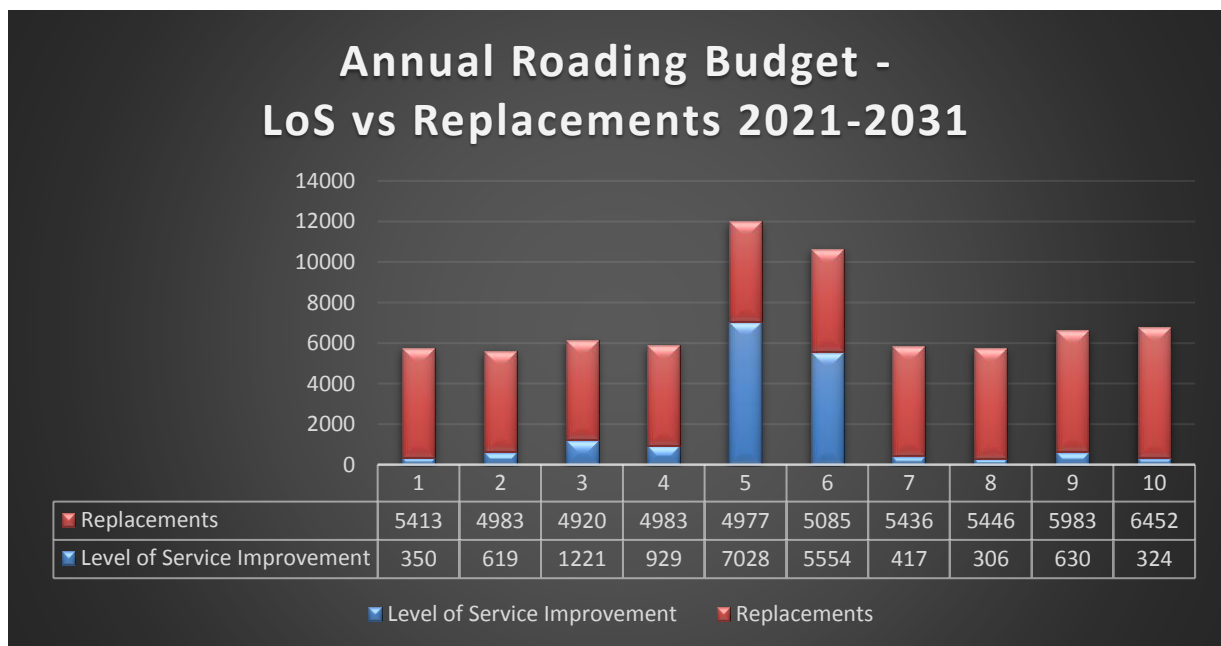
## 5.5.15 LOW COST/LOW RISK IMPROVEMENTS

This activity class is commonly used to fund significant improvements to the road corridor. These improvements in the case of Stratford District Council will comprise of the following:

- Replacement of bridges
- Replacement of retaining walls
- Safety improvement projects; such as minor geometrical re-alignment or intersection upgrades
- Walking and Cycling Strategy initiatives and projects
- The upgrade of Whangamomona Road from Whangamomona to Aotuhia Station

## 5.5.16 Levels of Service Vs Replacements 2021-2031

The following graphs are the next 10 years of LoS versus Replacement costs.



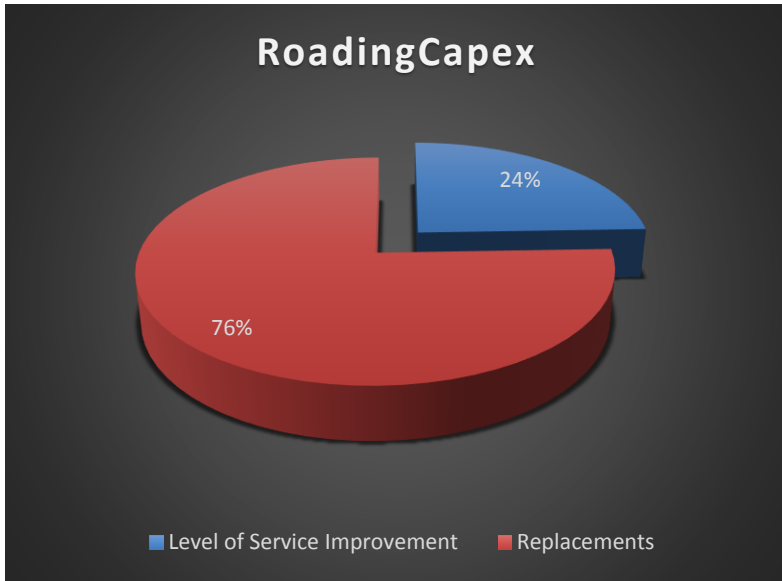


Figure 39 - LoS vs Replacement Costs

## **6.0**

# **Future Growth and Demand**

## 6.0: Future Growth and Demand

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## 6.1 OVERVIEW

This section provides a description of population; economic growth trends forecasts and the demand drivers for the provision; development and sustainability of the Roding services to the community. It also describes the Demand Management strategies to be employed in response to the forecast changes to ensure the continued delivery of the Roding services to the community at the agreed level of service.

The demand for the provision of Roding services is generally determined by the degree to which customers use the assets. The forecasting of future demand for services enables Stratford District Council to plan ahead and identify the best way to meet that demand.

Section 14 of the Local Government Act 2002 requires local authorities to take a sustainable development approach in conducting business. In doing this Stratford District Council must take into account;

- I. the social, economic, and cultural interests of people and communities; and
- II. the need to maintain and enhance the quality of the environment; and
- III. the reasonably foreseeable needs of future generations.

Stratford District Council is committed to planning for the changing needs of its community. As part of this commitment Council utilises demand forecasting in all asset management planning.

This section identifies the demand forecasting model used by the Council and highlights the factors that influence the demand for infrastructure and services and the associated impacts of each driver on the demand for the Roding services.

## 6.2 DEMAND FORECASTING

Demand forecasting enables Stratford District Council to identify areas that are likely to experience significant pressures, and plan accordingly. Currently, the Stratford District Council uses a “basic” model for demand forecasting. It is a combination of formal and informal techniques. Central to this is an understanding of how growth and future demand trends will impact on Levels of Service and desired community outcomes.

As part of the planning process Council considers:

- the Asset use, demand, and capacity;
- the implementation and planning for quality and process improvements; and
- environmental impacts

Key Information gathered during the forecasting process includes:

- Historical data;
- Observed patterns and trends – use, demand, and popularity;
- Statistical estimates and projections;
- Commercial activity and anticipated business migration
- Pending legislative changes.

From this assumptions are formed about what could happen; enabling Council to better plan for the future needs of the community.

### 6.2.1 DEMAND DRIVERS AND IMPACTS

Demand drivers are the factors that influence demand for services or the infrastructure that provides those services.

Future growth in the Stratford community can be attributed to a number of factors described in detail below, including:

- Population;
- Tourism;
- Changing Customer Needs and Expectations
- Regulatory Changes; and
- Land Use Changes

### 6.2.2 POPULATION

The Stratford District Council obtained the current population assumptions and projections from Infometrics which is an economics consultancy which specialises in the rigorous analysis and presentation of economic information. They measure the past, understand the current and forecast the future. From this we are able to obtain current population assumptions and projections.

Under the medium population growth scenario projected by the Infometrics Model, the Taranaki region’s population is expected to grow to over 145,100 by 2051. Under a high growth scenario, higher levels of net migration would lead to a regional population of 163,100 by 2051, while the low growth scenario results in the population growing to approximately 129,000 residents by 2035, and then remaining relatively static at that level until 2051.

For the Stratford District, the forecast under the High growth scenario is to increase from above 10,000 in 2021 to just under 12,000 in 2051. This is equivalent to just under 0.7% increase per annum, an estimated total increase of approximately 18% over these 30 years. Under the low growth scenario, the forecast is to decline from above 10,000 in 2030, to just above 9,000 in 2051

#### Population

Stratford District  
Infometrics projection

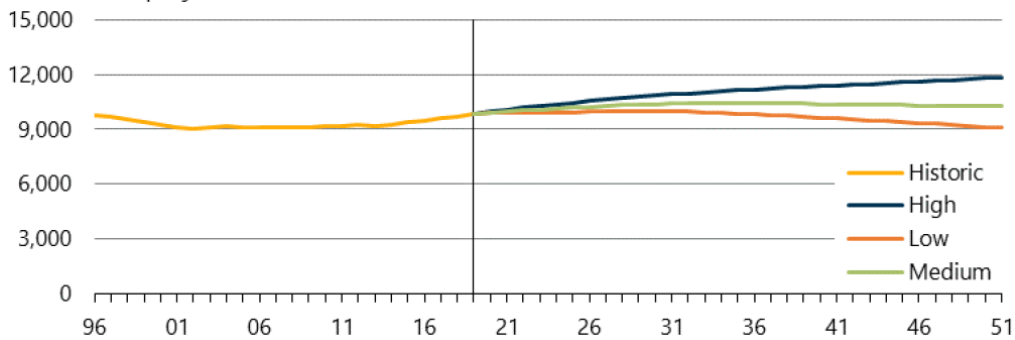


Figure 40 - Stratford District Total Population Projections 2017 – NJD

#### Population distribution

Currently, there are 1,250 Maori population – 48% are under 20. Maori make up 13% of district population. Population growth has averaged 0.2% in the last 20 years, and averaged 0.7% in the last 10 years, however, in the last 3 years population growth has increased annually by 0.8% on average.

Population 2019 Infometrics data shows that Stratford district is approximately 9,860 – a growth of 1.3% from previous year. The source of growth was 78% due to natural increase and 22% due to net migration. We are anticipating an annual average population growth of 0.5% over the next eight years, centered around the urban area and mostly as a result of births.



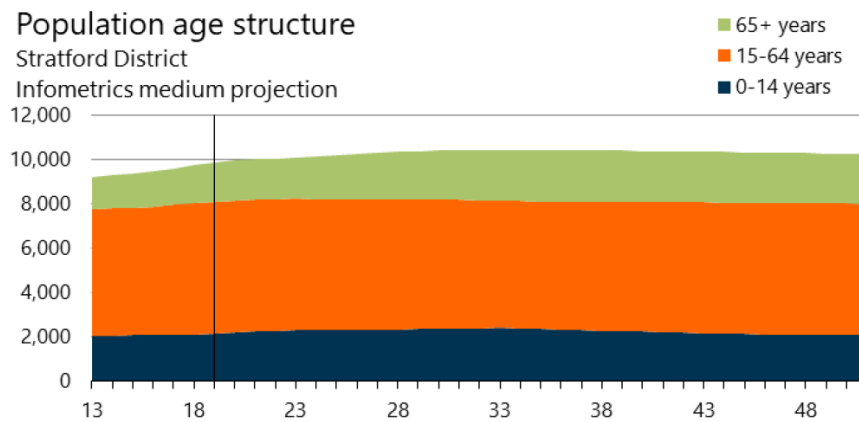
The district's Population Age Structure and Projection is shown in Figure 41; Components of Population Change in Figure 42 and the Population Geographic Distribution in Figure 43.

## Elderly Population

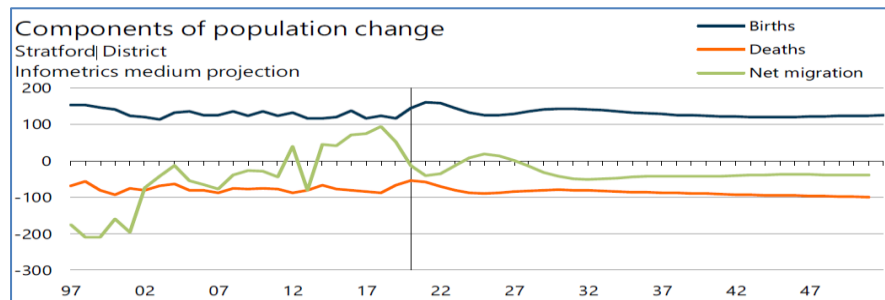
The average age of Stratford residents is expected to increase over the next 30 years from 40 to 42 years. 580 residents (5% of the district population) are aged 80+.

With a rising older population and a potentially declining older working population Stratford District Council and the Rounding activity will need to consider the services it delivers and the infrastructure required to deliver these services. One key aspect of this is affordability, i.e. with more residents on a fixed income (pension) will the Council fund services we offer.

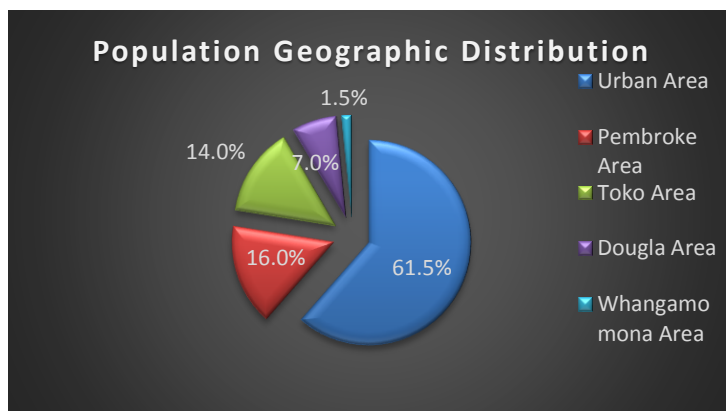
For a clearer picture of the impacts on infrastructure and the demand for services, further assessment is necessary. The cost of this assessment will need to be weighed against the benefits of embarking on the project. In any case, the implementation will be prioritized and it is likely that roads that support vehicle movements >2000 vpd will be considered first.



**Figure 41 - Stratford District Population Projections by Age Group 2017**



**Figure 42 - Components of Population Change**



**Figure 43 - Current Population Geographic Distribution**

### 6.2.3 TOURISM

The 'Visitor Sector Action Plan' is one of six action plans developed as part of the "Make Way for Taranaki" Regional Development Strategy. The action plan describes the current regional sector dynamic, growth objectives, challenges, opportunities and the actions required to achieve sector growth. It is anticipated that the Visitor Sector Action Plan will enable and support growth in the Stratford District Visitor Sector.

In making the Stratford District a visitor destination, there is the likelihood for an increasing demand for limited transportation resources as traffic flows and traffic volumes increase.

Increased traffic volumes and traffic flows will lead to increased wear and tear on the network. This in turn will potentially result in increased maintenance and renewal costs.

At this time the anticipated growth in tourism for the Stratford District cannot be easily quantified. We have the benefits of local visitor offerings like Mt Taranaki, the Stratford Mountain House, the ski fields and Dawson Falls. Further afield other attractions such as the Forgotten World Adventures using the Stratford to Ohura rail line has attracted over 20,000 in the last three years.

Located in the east of the district are Whangamomona, Aotuhia Sheep Station and the Bridge to Somewhere. Linking the two is the Whangamomona Road, which was previously maintained by council and is currently maintained by the Whanga Road Action Group. The road has national recognition as a '4 x 4' owners club route. It is also widely used by mountain bike riders and trampers who stay at the Whangamomona Hotel. As a sign of the expected increase in tourism for the Whangamomona area the hotel owner has submitted a building consent application for an additional eight self contained units to be built in the grounds of the hotel, which have subsequently been constructed.

In order to verify the increase in traffic we believe will be generated through tourism SDC will need to increase our traffic counts. In recent years we have done less than ten traffic counts per year which does not reflect accurately the traffic volume on our local roads.

Development of an increased traffic count programme has been added to our improvement plan. Our target is to undertake 100 traffic counts per year. At this time we expect to undertake a minimum of 30 traffic counts per year (summer and winter) on key tourist routes such as Mangaehu Road (Aotuhia Station – Bridge to Somewhere) and Mangapapa Road (Mt Damper Falls), Douglas Road (Forgotten World Adventures start point), Whangamomona Road, Pembroke and Mania Roads (Mt Taranaki). These traffic counts will complement our routine traffic counts to monitor growth and need for developing traffic models for many of the low volume roads.

This information can then be used to pro-actively target specific routes to optimise our maintenance and renewal programmes.

### 6.2.4 THE (DRAFT) STRUCTURE PLAN FOR STRATFORD

The SDC is currently undertaking a Structure Plan of the Stratford District, which is in response to an increased demand for residential development sites in Stratford. This 30 year Plan long term Strategy Plan will feed into the District Plan review and the Infrastructure Strategy, to ensure that the growth areas identified herein are duly catered for as and when required.

The Plan will identify key growth areas in Stratford, in addition to areas that lend themselves to in-filling. Rooding, Water and Wastewater infrastructure will be planned to service these areas accordingly. Given its proximity and centrality to key employment generators and tourist areas in the New Plymouth and South Taranaki District, the creation of new and affordable residential lots is expected to support the growth forecast for the Town. To facilitate this strategy, the Stratford District Council is leading the creation of a quality and affordable subdivision in one of the identified growth areas. The subdivision will supply up to 35 Residential lots aiming to jumpstart the growth process and facilitate the development of quality affordable homes to the community. The uptake of the newly created lots is expected to be quick and attract homeowners from all parts of the Taranaki region.

## 6.2.5 CHANGING CUSTOMER NEEDS AND EXPECTATIONS

The Stratford District is experiencing a change in customer needs and expectations. Changes are primarily driven by an increase in the older resident population and people moving to Stratford from larger metropolitan areas. Customers are expecting a higher level of service in terms of unsealed roads; footpaths; Structures; Traffic Services, vegetation, and so forth.

### Roads

The Council continues to receive request to seal roads and/or to apply dust suppression agents to unsealed roads, particularly in areas of increased HCV activities. Stratford District is not different in many respects to other rural Territorial Local Authorities. The urban residents want good quality sealed roads which are free from potholes and major pavement defects, whereas our rural customers want unsealed roads free of potholes and corrugations. The majority of the rural community are very vocal regarding the land transport infrastructure. Some of these residents consider the unsealed road as the only service council provide, which of course is not true, as their view is that SDC does not provide them with water supply, mains waste water system or refuse collection.

### Footpaths

There is roughly 70km of footpath in the Stratford District. Approximately 81% of these are equal to or less than 1.4m wide with the remainder being equal to or wider than 1.5m wide. Many of these footpaths were constructed in the mid twentieth century and at that time footpath users were predominantly people walking to and from places.

There have been a lot of changes since then and now the needs and expectations of our footpath users are changing too.

Today our footpaths must cater for cyclists, skateboarders, scooter riders, wheelchair users and mobility scooter riders as well as the traditional pedestrian. They must also cater for the increased size and numbers of modern vehicles that use them such as vehicle crossing to enter properties and they must deal with the impacts of extreme weather events linked to climate change.

Observations noted by Council, concerns raised by the community and a notification from the Shared Footpath Working Group informing Council of a possible rule change in relation to cycles on footpaths has prompted Stratford District Council to consider if our footpaths will meet the changing needs of users now and in the future.

Footpath maintenance and renewal budgets are based on an assumed useful life expectancy of 20-80 years. With changes in how our footpaths are being used and the increased demand placed on them Council is concerned that:

- public health and safety will be put at risk due to shared use.
- footpath useful life will be reduced due to pressure from the different types of users.
- maintenance and renewal budgets will be set too low impacting on Council's ability to intervene at the right time..
- footpaths will fall below Levels of Service performance targets.

To address these concerns and ensure our footpaths are fit for purpose Stratford District Council is acutely aware it needs to increase the width of footpaths in the District to between 2 and 2.5 metres. At an estimated \$100 per square metre for concrete it will cost around \$10.8 million to replace all 70km of footpaths within the District.

The current budget for footpath maintenance and renewal is \$230,000 per year. On this budget Council estimates it will take around 47 years to complete this work which would make replacement of the footpaths, in essence, a continued cycle of improvements. To reduce this timeframe down to 40 years an estimated \$40,000 extra per year is needed. This will require the annual budget to be increased. To increase this budget Council has three possible options:

- Increase rates by approximately 0.5%;
- Borrow from an external lending agency; or
- Divert funds from other activity budgets such as co-investment works activities.

## **Bridges**

In order to preserve and grow our district's economy maintaining the bridges throughout the district is pivotal, as not only do these bridges provide access to arable productive farmland and forestry blocks, these are a key link to providing access to rural residents. These residents will expect the Stratford District Council to keep the roads maintained to a reasonable standard and the bridges to remain intact. At present we are not receiving requests for the single lane bridges to be widened to two lane bridges.

In November 2009, the Council passed a resolution to continue to maintain bridges that provide access to individual land owners. These bridges are:

- Lower Kohuratahi Road – Swingbridge
- Buchanan's Access
- McBride's Bridge
- Matau North Road
- Tapuni Road
- Brewer Road (Curtis's Access)
- Lower Kohuratahi Road (Gower's Access)
- Wingrove Road (Maruarau Road)
- Murcott Road (Hopkirk's Access)
- Upper Mangaehu Road (Ford's Access)
- Pukeko Road

Our customers would expect Council to continue to maintain these bridges, as it is highly unlikely that the landowners in question would take on the responsibility for on-going maintenance and the eventual replacement of the bridges.

## **Streetlights**

Following the completion of the conversion of the streetlights from high pressure sodium to light emitting diodes, our customers may raise some concerns about personal safety and the "dark patches" in the road. This is primarily due to the width of the road reserve in Stratford, (on several streets it is in the order of 30m wide), and the spacing of the streetlights do not meet the NZS1158 standard.

A way to address these concerns would be to embark on an improvement programme to install additional lights where necessary. At this point in time, Stratford District Council has not budgeted for the installation of additional lighting columns. Our next project relating to streetlights will be to replace the severely corroded lighting columns. This will be our focus during the term of this AMP.

## **Drainage**

As with Roads, urban and rural customers have deferring views on the levels of service SDC provides. Urban customers require the roadside channels to be kept clear of debris and the sump tops kept clear of detritus. This is more prevalent in the autumn during the leaf fall from the street trees within Stratford Township. We receive numerous complaints from customers at this time of year, regarding leaves blocking drains causing localised flooding and fouling footpaths, making them slippery.

Rural customers require the watertables to be cleared, culverts to function properly so that water does not run across the road or scour out the roadside shoulders. During autumn and winter, we do receive calls regarding localised flooding caused by blocked culverts or roadside drains which have not been cleaned. As drainage is a vital activity to keep the road pavements dry to prolong their life, we have recognised this and increased the funding for drainage maintenance and renewals throughout the term of this AMP.

## **Vegetation**

Some of our community/customers have taken the view that SDC should take responsibility and cut urban roadside frontages. This has resulted in 3 hectares of urban roadside berms not being cut by the individual property owners. In order to reduce the risk of fire in the summer and complaints from residents and councillors, SDC does carry out an urban roadside berm mowing programme, of three cuts per year. This is funded entirely by SDC.

In the rural areas, SDC undertakes two rounds of roadside berm mowing per year, along with any additional isolated mowing at intersections for road safety purposes. Requests from residents for extra rounds of berm mowing would lead to an increase in the level of service and put pressure on the Environmental Maintenance budget.

### 6.2.6 REGULATORY CHANGES

Changes to regulatory requirements and funding allocations (i.e. ONRC and FAR) are resulting in uncertainty around funding for maintenance, renewal and improvement of the network. Where there is an increased demand for Roding services. A key change driver is the NZTA Arataki, which sets out the Transport Agency's perspective on the future demands and pressures that are likely to shape the issues and opportunities facing the land transport system. It identifies the material impacts they will create, and sets out how NZTA believe they will need to respond over the near and longer term.

These areas of strategic focus for NZTA relevant to the Stratford District are:

Inter-regional Journeys	These are nationally significant journeys connecting regions that sustain our economy. They link major urban areas and production centres to international ports and other gateways. A safe, reliable and resilient network is needed to support economic growth and to provide confidence for investment. SH3 runs through the Stratford District and connects the Taranaki region with the Waitomo to the north and Whanganui to the south.
Regional Economic Development Areas	Through the Regional Growth Programme the Government has partnered with a number of regions to identify potential growth opportunities and help increase jobs, income and investment in regional New Zealand. The View considers the opportunities for transport to support and enable economic growth and productivity in these regions.

### 6.2.7 LAND USE CHANGES

One of our key problem is the change in land use around the Stratford district, particularly forestry, agricultural growth, and oil and gas. Each of these industries has an impact on the Roding network to varying degrees.

#### **Forestry**

Internal analysis undertaken by Council in 2016 identified 13 roads likely to be most affected by forestry harvesting in the Puniwhakau and Matau areas as shown on the map in Figure 39. Harvesting of forests will increase usage on these roads increasing the rate of deterioration and the amount of maintenance/renewal required. This will drive up maintenance and renewal/replacement costs but without a clear indication of haul rates, the frequency number of trucks and period of harvesting it is difficult to forecast budget requirements or plan forward works.

The total accumulated area of pine forestry linked to these 13 roads is estimated to be 9,700 hectares producing around 13,337,500 tonnes of timber. Since the 2018-2021 AMP was written, forestry activity has commenced in earnest. We estimate approximately 460ha have already been harvested. Using an estimated payload of 30 tonnes per logging truck, this equates to 445,000 loaded trucks. This does not include the empty truck accessing the forest or trucks carrying metal to the forest block to form the road within the forestry block.

#### **Table 30 - Forestry Harvest Figures**

## Future Growth and Demand

---

	Year		
	2008	2016	2020
<b>Hectares of Forest</b>	2,920	10,160	9,700
<b>Produced Tonnage of Timber</b>	4,015,000	13,970,000	13,337,500

### **Oil and Gas and Agriculture**

At present the oil and gas industry is going through a quiet period and agriculture is reasonably stable, although we are seeing planning consents for the building of chicken farms. However Council has concerns that a combination of these industries and expected increases in forestry harvesting will lead to an increase in HPMV movement on our local roads. As evidence of this increase, during the 2016 calendar year, SDC issued 63 HPMV permits, yet in the corresponding time period for 2017 this number has increased to over 200 HPMV permits being issued. In 2018/2019 this grew to 475 permits.

The Council is aware that it needs to continue road strengthening works on identified roads during the 2021-2031 planning period to ensure affected roads remain fit for purpose and meet ONRC Levels of Service requirements.

# Future Growth and Demand

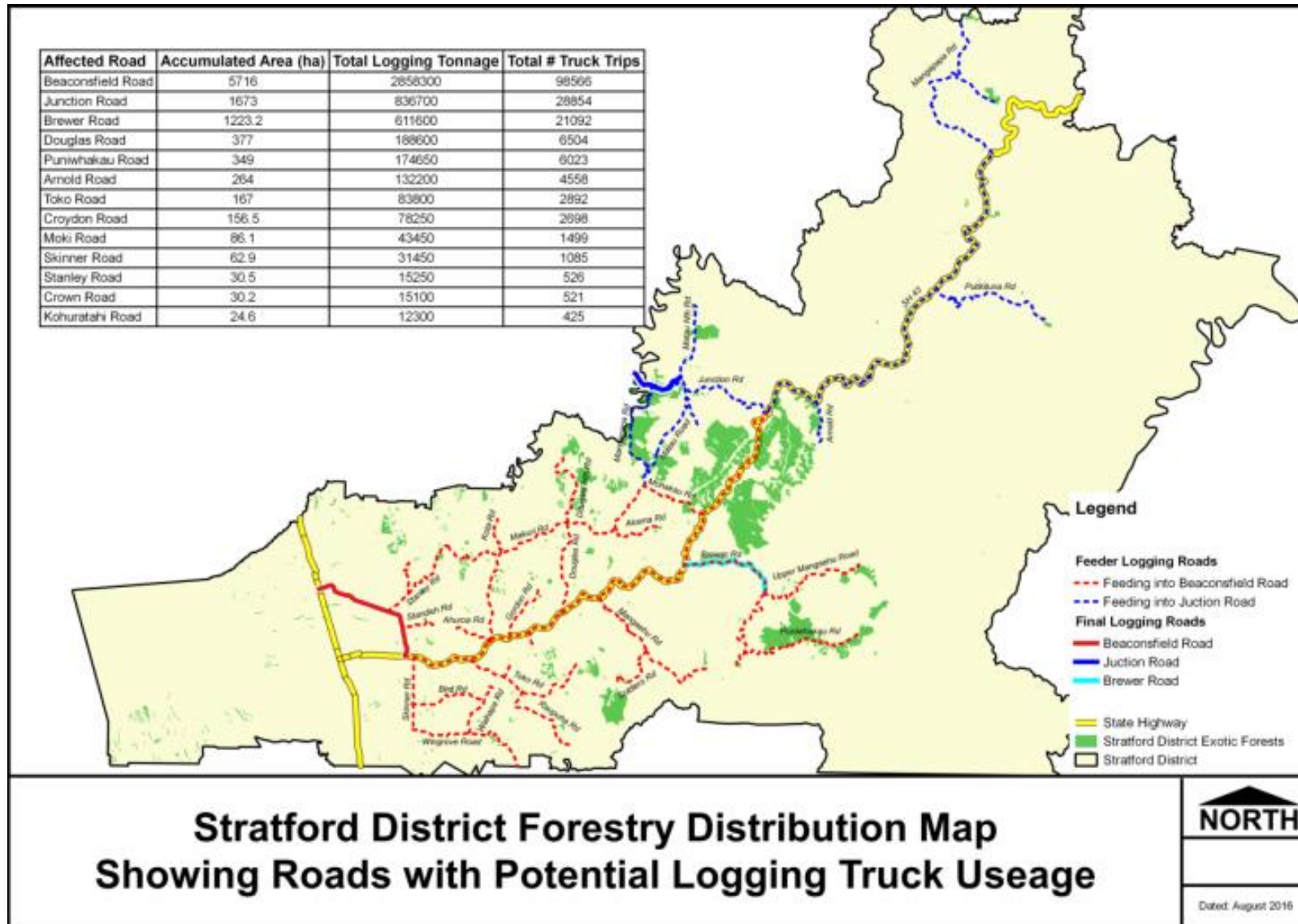


Figure 44 - Stratford Forestry Distribution Map as at 30 June 2016

# **7.0**

## **Risk Management**



## 7.0: Risk Management

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## 7.1 OVERVIEW

Risk is the effect of uncertainty on objectives. Risk events are events which may compromise the delivery of the organisation's strategic objectives.

The main risk to asset management planning is the inability to deliver on agreed Levels of Service due to unplanned events and situations.

The Risk Management section highlights the Stratford District Council's risk management framework and process. It identifies significant negative effects and hazards linked to the Activity and infrastructure assets. The section also identifies critical assets and our approach to emergency response.

## 7.2 RISK MANAGEMENT FRAMEWORK

The Stratford District Council has prepared a *Corporate Risk Management Framework June 2018* which includes processes that identify, evaluate and manage all risks that may impact on the agreed Levels of Service to the Community. The purpose of this framework is to promote consistency and to describe the components of Stratford District Council's risk management system. The Council wide risk register allocates all council risks into the following 6 categories:

- Compliance and Legislation Risks;
- Data Information Risks;
- Financial
- Health and Safety Wellbeing
- Operational Risks
- Reputational and Conduct Risks;

The potential risks identified for the Roading assets under these six broad categories are described in detail in this section.

The Council's risk management approach is underpinned by principles that will ensure the minimisation of risks for the principal asset systems through the non-achievement of critical business objectives and impact of system failure. The risk management principles are:

- Adds value by contributing to the achievement of Stratford District Council's objectives and improving performance;
- An integral part of the Stratford District Council's planning, processes, and decision making;
- Structured approach that is well-defined, transparent, and aligned with good practice;
- Responsive to change by monitoring, reviewing, and responding to the changing environment;
- Pragmatic by focusing on the most important risks and allowing informed risk taking;
- Explicitly addresses uncertainty based on best available information; and
- Continuous improvement as we get better at identifying and managing risks and opportunities.

The objectives of the Council's Risk Management framework are to establish a systematic and structured approach to managing risks across the Stratford District Council and to embed risk management practices into business strategy, planning and core operations to ensure that key risks are proactively identified, managed and communicated. Benefits from applying effective risk management include:

- Improved achievement of the Council's strategic direction, objectives and priorities;
- Reduced risks – significant risks are identified and managed and early warning of problems and emerging risks are addressed, with appropriate design and operation of internal controls;
- Improved decisions – decisions are made after analysis of risk;
- Improved planning and resource allocation – risks are prioritised and included in business planning so that resources are better managed; and

- Increased accountability and transparency – clarity of key risks and the responsibility and accountability for their management.

### 7.3 RISK ASSESSMENT PROCESS

The Stratford District Council’s Risk Management Process in Figure 45 identifies risk management strategies to minimise risks associated with the provision of services. It is designed to ensure that:

- All significant operational and organisational risks are understood and identified;
- The highest risks that should be addressed within a ten year planning horizon are identified;
- Risk reduction treatments which best meet business needs are applied; and
- Responsibilities for managing risks are allocated to specific staff and reporting regimes are specified.

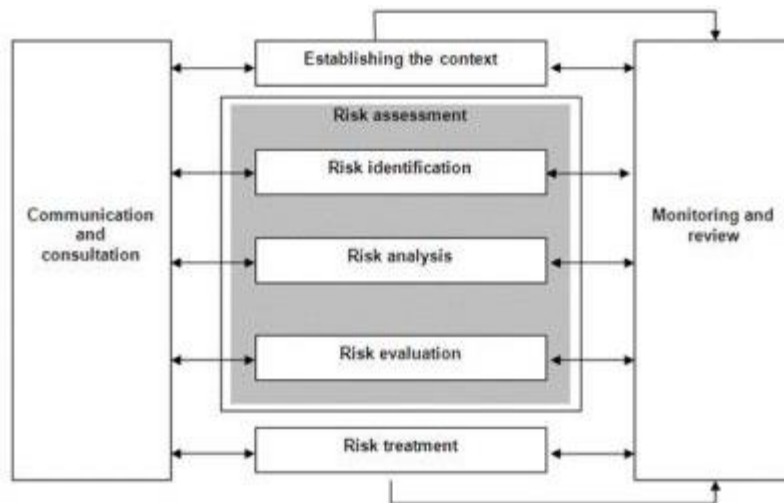


Figure 45 - Risk Management Process

A Risk Matrix allows for easy identification for the highest risks in the Council enabling appropriate resources to be allocated.

		Consequences				
		Minor	Important	Serious	Major	Catastrophic
Likelihood	Almost Certain	2- Moderate	5- High	7- High	20-Extreme	25-Extreme
	Likely	2- Moderate	4- Moderate	6- High	16-Very High	20-Extreme
	Possible	1-Low	3- Moderate	4- High	12-Very High	15-Very High
	Unlikely	1-Low	2- Moderate	3- Moderate	8- High	10-Very High
	Rare	1-Low	1-Low	1-Low	4- Moderate	5- High

Figure 46 - The Risk Matrix

### 7.4 POTENTIAL RISKS

The Stratford District Council has made a number of risk assumptions<sup>1</sup> under the six broad risk areas of Compliance and Legislation, Data Information, Financial, Health and Safety Wellbeing, Operational, & Reputational and Conduct. These are presented in [Appendix 2](#).

<sup>1</sup> statements that are presumed to be true without concrete evidence to support them

### 7.4.1 TOP TEN RISKS

The Stratford District Council has identified the top ten Roading risks from the 6 categories in the Risk Management Framework ([Appendix 2](#)), in Table 31.

While *Compliance and Legislation, Financial and Reputation and Conduct Risks* impact on the achievement of the Organisation's high-level objectives and actions in the Long Term Plan, *Operational Risks* impact people, processes and technologies that support the business-as usual delivery of activities. The *Control Description* is a set of management intervention/ mitigation measures applied in response to risks, while *Residual Risk* is the resulting risk following the application of the mitigation measures.

**Table 31 - Top Ten Identified Roading Risks**

	Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
1.	<b>Activity Management Plans</b>	If AMPs are incomplete then capital programmes, condition of assets, life cycle management will not be realised	6 High	AMPs are reviewed every 3 years to address current problems and issues at the time in order to develop work programmes for the next 3 years	4 High
2.	<b>Heavy/Extreme Rainfall incidents</b>	If the Stratford District experiences heavy rainfall continually over a period then roads may flood, restricting accessibility, landslips and mudslides may restrict road access and cause property damage, productive land areas may flood reducing functions,	8 High	Activity Management Plans and Roading Incident Response Plan to document critical asset areas and response timeframes in the event of heavy rainfall incidents.	3 Moderate
3.	<b>Maintenance Contractor fails to deliver</b>	If a maintenance contractor fails to deliver contractual service necessitating termination of contract and re-tendering, then assets may become under threat, unreliable, or unable to meet community needs.	4 High	Careful assessment of tender to ensure contract price viable for contractor to deliver level of service. Regular liaison with contractor to monitor performance and ensure compliance. Contractor pre-approval process must not be bypassed.	3 Moderate
4.	<b>Government Policy or Legislation Impacting on Local Government TOP 10 RISK</b>	If Government Policy or Legislation significantly changes the services Council delivers or the way they are delivered, then this could put financial pressure on the district to fund investment in changes, or it may mean previous investment has	12 Very High	Where a policy change may have a significant impact Council can make a submission regarding the change. Council officers and elected members need to keep up to date with policy, and anticipate potential	8 High

	Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
		become redundant. Any changes in rules around Overweight Permits means there is increased likelihood of on-going damage to the roading network, and a reduced life expectancy resulting in increased maintenance costs.		impacts of legislative changes and respond strategically, This could include joint collaboration with business and other councils, accessing alternative funding sources, or obtaining legal or professional advice.	
5.	<b>Natural Disaster - Response preparedness</b>	If a Natural Disaster causes significant damage to infrastructure then community welfare may be severely compromised, putting peoples lives at risk, and staff may be unable to access systems to carry out their day to day duties and functions.	15 Very High	Civil Defence Emergency Management plans, Roothing Incident Response Plan are in place. Procedures following an emergency event are widely known by a number of staff due to Civil Defence Foundational training being rolled out to majority of council staff. Business Continuity Plans need to be in place and practiced regularly for all activities.	12 Very High
6.	<b>Revenue</b> <b>Increasing age demographic on fixed income, how does SDC meet the cost of providing the level of services into the future?</b>	High number of elderly on fixed income pensions. Could affect future levels of service for roading due to cost fluctuations within contractual arrangements	2 Moderate	Factor in to budgets reasonable and sustainable rates increases. Or seek further financial assistance from NZTA.  Review fees and charges.	3 Moderate
7.	<b>Road Closures - unplanned</b>	If there are un-planned road closures due to collapse of culvert/bridges/landslides and so forth e.g. Wingrove Rd culvert collapse then access in/out of district could be lost and people could be injured as a result.	4 High	Asset criticality review to identify critical roading assets and increase monitoring activities. Ensure quality workmanship and contractors are aware of their obligations to report and repair any damages to roads. Resources diverted from other planned projects to remediate repairs to enable the road to be re-opened. Maintain a regular	3 Moderate

	Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
				inspection regime of structures within road reserve.	
8.	<b>Attracting Qualified Staff</b>	If Council is unable to attract suitably qualified personnel, then services may become under threat and may cease.	4 High	Internal training and succession planning programs. Ensure market wages are offered for all high demand positions. Recruit off shore option should be available for high-demand positions. Make greater use of consultants if necessary and/or shared services with neighbouring Councils.	2 Moderate
9.	<b>Elected Members - Decision Making</b>	Elected members make significant decisions in relation to the Long Term Plan budget setting. This has an impact on the Rooding Activity Management Plan and the work programmes that are developed throughout the 3 year period. This could have an impact on the levels of service for the community.	12 Very High	Relies on the accuracy and quality of the advice given by staff to elected members -	4 High
10.	<b>Solvency of Contractor</b>	If Council engage a contractor that could potentially be insolvent the risk to Council is that they abandon the contract.	12 Very High	Conduct the due diligence process for all contractors.	3 Moderate

## 7.5 RISK RESPONSE

The Stratford District Council has a suite of response strategies for the potential risks identified above; they include avoiding, exploiting, transferring/sharing, reducing or accepting the risk. These response strategies are summarised in Table 32 below.

**Table 32 - Risk Response Strategies and Definitions**

Response	Definitions
Avoid	To terminate exposure to a potential risk, generally the organisation needs to exit the activity which gives rise to the risk, or not start an activity which would give rise to the risk
Exploit	For risks which present an opportunity for Stratford District Council, a legitimate approach is to increase Stratford District Council's exposure to the risk; generally this would represent a situation where Stratford District Council can gain an advantage through their management of this risk.
Transfer/Share	Risk transfer is getting another party to undertake the activity generating the risk, or getting another party to take on all or part of the risk itself.
Reduce	For risks which present a threat to Stratford District Council, but which cannot be avoided, the development of additional controls or mitigation strategies will reduce the likelihood or impact of the risk.
Accept	Accepting the risk by informed decision. This means continuing with the business activity/project as currently defined, aware of how much risk is being carried, monitoring changes in overall risk, and ensuring appropriate levels of contingency at the Stratford District Council level.

## 7.6 SIGNIFICANT NEGATIVE EFFECTS

The Rooding activity can have negative effects on the social, economic, environmental and cultural wellbeing of the District. The potential adverse effects from Rooding Activity include Traffic Hazards/Accidents; Noise; Dust; Road Closures; and Environment.

The Council is actively involved in implementing regional road safety strategies such as 'Roadsafe Taranaki', and the 'Community Road Safety Programme'. Minor safety improvement programmes include regionally co-ordinated activities such as road safety education in addition to improvements in signage, pavement marking, safety structures and speed limiting. Where necessary, the Council investigates injury accidents in conjunction with the Police.

The State Highways are subject to the largest traffic volumes and a high percentage of heavy vehicles, particularly in Central Broadway where the impact of noise is most obvious. The rural roads also carry a high percentage of heavy traffic, but generally the noise impact is not significant because of the low traffic volumes.

The District has a large proportion of unsealed roads. Council is working with the rural community, and has a seal extension programme to mitigate the effects of dust. Consideration for seal extensions and dust coat seals will be given to this problem in future LTPs.

Unscheduled road closures, usually as the result of flood damage, can be of concern, particularly for isolated rural communities. When this happens, every effort is made to have the road or alternative routes open as soon as possible. Planned closures are always well notified to affected parties and usually these are not a significant problem, except for some organised motor sports that tended to target the same sections of roads on a regular basis. Council has discussed this with event organisers and it no longer appears to be such an issue.

All major project works are carried out under resource consents. General works are undertaken to avoid major impacts on stormwater run-off and drainage management.

## 7.7 CRITICALITY

Critical assets are defined as those assets that are likely to have more significant consequences than other assets if they fail. Failure of critical assets has the potential to have significant economic, social and environmental impacts for the community and Council.

Roading assets are considered critical by Stratford District Council because they enable access to critical customers, lifeline utilities and/or lifeline evacuation routes.

### 7.7.1 CRITICALITY EVALUATION

The Stratford District Council establishes criticality by using two rating levels - activity level and corporate level. **Activity level criticality** is based on the criticality criteria shown in Table 33; Table 34 provides the Activity Level Criticality Rating with examples. **Corporate level criticality** ranks activities based on the criticality of the service the activity provides at the corporate level as illustrated in Table 35 below.

The table below outlines the criteria we have used to assess critical assets.

**Table 33 - Activity Level Criticality Criteria**

Customers affected	Number of customers affected by asset failure.
Redundancy	Ability to replace or circumvent the failed asset.
Health and Safety	Direct or indirect impact of asset failure on the health of safety of individuals or the community.
Cost of failure	Cost to repair/ replace the asset including cost of temporary service provision.

**Table 34 - Activity Level Criticality Rating and Examples**

Rating	Rating	Description	Roads	Example
1	<b>Very High</b>	<p><b>Critical, no redundancy</b> - Failure of equipment compromises H&amp;S directly (impact, explosion) or indirectly (failure to supply drinking water to hospital).</p> <p>Note: In Civil Defence Emergencies, all roads leading to the critical lifelines – as identified in the Critical Assets GIS layer by the <i>Taranaki Lifelines Vulnerability Study (2018)</i>, escalates to Criticality 1 – Very High</p>	<p>Access to key facilities such as:</p> <ul style="list-style-type: none"> <li>• Water Treatment Plant (WTP) and Stratford Trunk Water Main (375 mm) from the Reservoirs to the Hunt Rd connection;</li> <li>• Wastewater Treatment Plant and pipe main with no redundancy – leading to the Oxidation Pond;</li> <li>• Police Station;</li> <li>• Fire Service;</li> <li>• Health Centres;</li> </ul>	<p>Swansea Road bridge</p> <p>Cardiff Road bridges</p>
2	<b>High</b>	<p><b>Critical, no redundancy</b> - Failure of equipment does not compromise H&amp;S but affects production or Level of Service</p>	<p>Secure access to rescue vulnerable people/assets including:</p> <ul style="list-style-type: none"> <li>• Rest Homes; Schools;</li> <li>• Evacuation/Refuge Centres including Memorial Hall, churches;</li> <li>• Escape/Detour routes, e.g. Pembroke to Mountain Road; Skinner Road;</li> <li>• Parks used as Helicopter landing bases, e.g. cricket pitch;</li> <li>• Bridges over Patea River;</li> <li>• Collector Roads;</li> <li>• As per 3-Waters Criticality Rating</li> </ul>	<p>Juliet Street Bridge</p>



Rating	Rating	Description	Roads	Example
3	<b>Medium</b>	<b>Critical with redundancy</b> - Failure of equipment does not compromise H&S but affects production or Level of Service	<ul style="list-style-type: none"> <li>Secure Evacuation routes;</li> <li>Secondary Collector Roads;</li> <li>Junction Road;</li> <li>As per 3-Waters Criticality Rating</li> </ul>	Regan Street (West of Brecon Road)
4	<b>Low</b>	<b>Not critical, no redundancy</b> - Failure of equipment has no effects on H&S and/or production/Level of Service but cost of repair/replacement is above \$100k	<ul style="list-style-type: none"> <li>All Access Roads</li> </ul>	Hamlet Street
5	<b>Very Low</b>	<b>Not critical, no redundancy</b> - Failure of equipment has no effects on H&S and/or production/LoS and cost of repair/replacement is below \$100k	<ul style="list-style-type: none"> <li>All Local Roads including cul-de-sacs</li> </ul>	Margaret Street

## 7.7.2 CRITICAL ASSETS

The Road Assessment and Maintenance Management (RAMM) database holds a record of the critical Roading assets. The assets are shown in Table 35. The identified critical assets are ranked according to their functional criticality.

**Functional Criticality** is a product of the Activity Criticality and Corporate Criticality (i.e. Functional Criticality = Activity Criticality x Corporate Criticality). The functional criticality ranking ranks assets from 1 to 5, with 1 being the highest score (the most critical) and 5 being the lowest (least critical).

In 2017, Stratford District Council undertook an internal review of its critical assets. The review identified that there was a need to:

- Document the formula used for identifying criticality in the Activity Management Plans;
- Link criticality and critical assets to incident response; and
- Prioritise critical assets at the Activity level.

Following the review we have undertaken the following:

- Identified the formula used for identifying functional criticality. This formula is shown in the above paragraph in brackets.
- The linking of criticality and critical assets to incident response is currently being considered as part of reviewing our Incident Response Plans. *Refer: Section 7.8.4.*

**Table 35 - Critical Urban Rooding Assets**

Activity Priority	Criticality Rating			Asset Description	Criticality Description
	Functional Criticality	Activity Criticality	Corporate Level		
1	1	1	1	Swansea Road Bridge	High vehicle count road bridge, servicing high school and heavy traffic; Redundancy via Juliet Street bridge and Broadway.
2	1	1	1	Juliet Street Bridge	Road bridge. Redundancy via Swansea Street bridge and Broadway (SH3).
3	1	1	1	Regan Street	Dead end, serves approximately 100 houses.
4	2	2	1	Hathaway Street	Dead end, serves approximately 50 houses.
3	2	2	1	Elizabeth Grove	Dead end, serves a Rest home and maternity unit plus less than 100 houses.
4	2	2	1	Brecon Road	Dead end, serves a Rest home and less than 20 houses.
5	2	2	1	Pembroke Road	Dead end, serves approximately 30 houses plus approximately 30 more in new subdivision.
5	2	2	1	Ferdinand Street	Dead end, serves approx. 40 houses.
5	2	2	1	Craig Street	Dead end, serves approx. 35 houses.

## 7.8 EMERGENCY RESPONSE

### 7.8.1 CIVIL DEFENCE

The Taranaki Region operates a CDEM (Civil Defence Emergency Management) Group Office, called the Taranaki Emergency Management Office (TEMO). TEMO is a shared service between all four councils in Taranaki. In 2017 The Taranaki CDEM group agreed to a constituting agreement that outlined the separate roles of the Group Office (TEMO), Taranaki Regional Council, and the three district councils. Funding for this arrangement comes from the *'Uniform Annual General Charge; (UAGC) Rates*.

The Stratford District Council has plans and resources in place to ensure it can;

- Reduce the risk of emergencies occurring;
- Be ready for an emergency;
- Respond to any emergency; and
- Recover from any emergency.

### 7.8.2 FIRE

From 1 July 2017, Fire and Emergency New Zealand (FENZ), a single, unified fire services organisation, was formed for New Zealand's rural, urban, paid and volunteer firefighters. FENZ is an amalgamation of more than 40 rural fire authorities, including the former Taranaki Rural Fire Authority, along with the New Zealand Fire Service, the National Fire Authority and rural fire districts.

The FENZ Bill 2017 repeals the two Acts governing fire services, the Fire Service Act 1975 and the Forest and Rural Fires Act 1977. This Bill marks the most significant change to New Zealand’s fire legislation in 70 years, with full integration expected to take four years.

### 7.8.3 LIFELINES

Lifeline utilities are entities that provide essential infrastructure services to the community such as water, wastewater, transport, energy and telecommunications. These services support communities, enable business, and underpin the provision of public services. The Roding activity is a lifeline service as described in Part B of Schedule 1 of the Civil Defence Emergency Management Act (CDEMA) 2002.

### 7.8.4 INCIDENT RESPONSE PLANS

Stratford District Council has an Incident Response Plan<sup>2</sup> for the Roding activity. The plan contains schedules and procedures for managing incidents and escalating events that affect the delivery of services. Incidents are ranked on a scale of 1 – 5 to determine response and control level. See Figure 47.



Figure 47 - Incident Response Plan

<sup>2</sup> D19/23226

## 7.9 RISK INSURANCE

The Local Government Act 2002 requires that from 2014 details of insurance of assets be included. This information is included in the following table. Insurance Arrangements as at 30 June 2020 are as follows:

**Figure 48 - Asset Insurance Valuations**

	<b>CARRYING VALUE</b> (as at 30 June 2020) <b>\$000</b>
<b>ASSETS FROM STATEMENT OF FINANCIAL POSITION</b>	
Property, plant and equipment	328,554
Investment property	168
<b>Total</b>	<b>328,722</b>
<b>LESS</b>	
Land component of operational assets	-8,998
Land under roads	-54,384
Land – restricted assets	-8912
<b>Total</b>	<b>-72,294</b>
<b>NET NON-FINANCIAL ASSETS (EXCLUDING LAND)</b>	<b>256,428</b>

	<b>INSURED VALUE</b> (as at 30 June 2020) <b>\$000</b>	
<b>INSURANCE ARRANGEMENTS</b>		
Material damage cover for buildings, plant, contents	-51,317	Subject to various deductibles including \$5k for most claims except for earthquake or volcanic eruption where deductible is 5% of sum insured or 10% for pre 1935 buildings.
Motor vehicle insurance cover (including leased vehicles)	-183	Insured for market value – carrying value assumed for this purpose.
<b>RISK SHARING ARRANGEMENTS</b>		
Cover for infrastructure assets as a member of LAPP Central Government assistance	-22,100	Sum equates 40% of the ORV value of scheduled assets. A deductible of \$150,000 applied. It is anticipated (though cannot be guaranteed) that under the terms contained in the Guide to Civil Defence Emergency Management Plan central government may fund 60% of the qualifying cost of reinstating essential infrastructure with a deductible of \$150,000
<b>Council arrangements for covering deductibles and/or uninsured assets</b>	<b>73,600</b>	
<b>SUM NOT SPECIALLY INSURED</b>	<b>182,828</b>	Note the 60% of the ORV of infrastructure assets which may be funded by central government equates \$33.1m.

The Council has no insurances relating to financial or intangible assets. The uninsured assets consist of the Roding Network, \$202m, which NZTA may assist with in the event of an emergency.

## 7.10 SAFETY OF OUR COMMUNITY

### 7.10.1 ROAD SAFETY

Road safety is integrated across the infrastructure, education and enforcement activities of Council. It is a key element across all Roothing activities including:

- Road maintenance and renewal programmes;
- Minor improvements;
- Community road safety; and
- Corridor management activities.

**Road to Zero** is New Zealand’s Road Safety Strategy for 2020-2030. It establishes a vision of “Developing a road transport system where no one is killed or seriously injured.” This strategy applies the ‘*Safe System*’ approach which looks beyond the road user and examines the entire road system to improve road safety by creating:

- Safer road use;
- Safe roads and roadsides;
- Safer speeds; and
- Safer vehicles.

**Tackling Unsafe Speeds Programme** is about improving the way road controlling authorities plan and implement speed limit changes. This includes a framework to improve how councils and Waka Kotahi plan for, consult on and implement speed management changes. SDC will be required to develop a 10 year State Highway Speed Management Plan on the local road network which will be formally reviewed every 3 years. Speed Management Plans will:

- Improve the way road controlling authorities plan and implement speed limit changes;
- Transition to lower speed limits around schools.

### 7.10.2 ROADS SAFE TARANAKI

The three District Councils in the Taranaki region work together to deliver road safety education programmes under the banner of “**Roadsafe Taranaki**”. The programme is managed under a Memorandum of Understanding by the South Taranaki District Council. Previous Roadsafe Taranaki (RST) Strategies have noted “*Areas of concern*” or “*High Risk*” within individual TLA’s; however, Roadsafe Taranaki delivers road safety as a cluster. Refer: [Appendix 3 - 2021-2024 Roadsafe Taranaki Strategic Plan](#)

# 8.0 Lifecycle Management

## 8.0: Lifecycle Management

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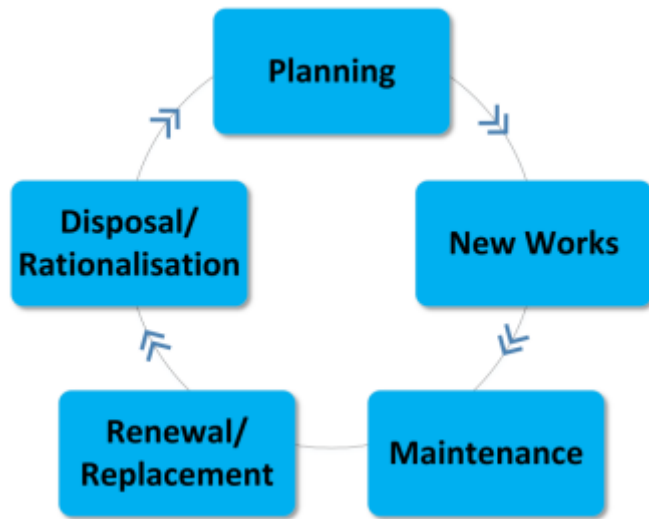
## 8.1 OVERVIEW

Lifecycle Asset Management focuses on management of options and strategies to minimise risks to assets and any potential failure of assets.

It considers all relevant consequences from initial planning through to renewal, replacement, disposal or rationalisation of assets.

Lifecycle Asset Management acknowledges that assets are always in a state of decay and their useful life is primarily influenced by;

- Physical characteristics;
- Operating environment; and
- Customer requirements.



Lifecycle Asset Management enables Stratford District Council to identify issues, determine appropriate response options and identify strategies and programmes for response to identified issues/opportunities in order to deliver Levels of Service and achieve both asset and organisational goals and objectives.

The Lifecycle Asset Management section contains current Stratford District Council procurement and contractual arrangements and the prioritisation of works:

- That meets the short and long term needs of our community;
- That offers value for money; and
- In a sustainable manner to the least whole-of-life cost.

This section presents a detailed plan of prioritised work over a 10-year planning period in response to the problem and benefit statements highlighted in Section 4.2 of this plan.

## 8.2 PROCUREMENT

The Stratford District Council procures various products and services across all aspects of our business. Such procurement is undertaken in accordance with the Council's Procurement Policy New Zealand Transport Agency's Procurement Manual as well as the Roding Procurement Strategy.

### 8.2.1 THE PROCUREMENT POLICY

This Procurement Policy has been developed for use by council officers, current and potential suppliers, elected members, ratepayers and government funding agencies, and applies to all procurement, regardless of the value.

The purpose of this policy is to ensure Council, when procuring goods, works or services:

- achieves the right outcomes and value for money;
- manages risk effectively;
- allows council officers to exercise business judgement by enabling flexibility and fluid, innovative approaches to procurement;
- demonstrates fairness; and
- has health and safety risk management at the forefront.

This policy shall not be applied to invalidate New Zealand Transport Agency's Competitive Pricing Procedure when applied to roads maintenance and construction. All personnel involved in procurement procedures are required to maintain the confidentiality of the process. The Council, as a public entity, must act fairly and consistently, in accordance with relevant legislation.



## 8.2.2 ROADING PROCUREMENT STRATEGY

The Roothing Procurement Strategy 2019-2022 will require a rewrite during the term of this Long Term Plan period. This full Strategy is attached as [Appendix 4](#)

Version three of the strategy will take into account changes to the local contracting environment and the models of contracts being used.

The current Road Network Procurement Strategy notes the general maintenance contract is let under NZS 3917:2013 with a term of three years with the possibility of two, two year extensions (3+2+2).

The Strategy also makes reference to Section 10.21 of NZTA's Procurement Manual where a variation to the term of a professional services contract for inspection of structures has been sought. The term of this contract is two years with two, two year extensions, making a total of six years maximum (2+2+2).

## 8.3 CONTRACTUAL ARRANGEMENTS

The Stratford District Council has in place contractual agreements for the delivery of the agreed levels of service. Service is delivered by three main contractual agreements:

- Professional Services;
- Physical Works; and
- Maintenance Contracts

Professional services are generally provided for through Short Term Agreements with local consultancy companies. This is dependent on the nature of the commission/engagement as this will draw on the particular skill set of the consultancy firm.

Currently the consultants that Stratford District Council use for technical design are as follows:

- Revolution Civil Engineering – Pavement design, sealed pavement rehabilitation projects, geometric designs.
- Red Jacket Consultants – Structural inspections, overweight permit assessments.
- Calibre Consultants Limited – Replacement of large diameter culverts, retaining wall replacement programme.
- All Civil Engineering (ACE) Consultants Ltd – Safety audits, bridge repairs
- AMTANZ – Bridge inspection contract, traffic counts, forestry study.

Physical Works, which do not form part of the Roothing General Maintenance Contract are procured in accordance with Stratford District Council's Procurement Policy and Procedures. Typically, these projects are:

- Replacement of bridges and retaining walls
- Replacement of large culverts  $\geq 3.40\text{m}^2$  in area
- Road safety projects  $\geq \$100,000$
- Works in a technical nature that cannot be undertaken by our maintenance contractor

Maintenance Contracts covering Roothing and Streetlights currently in place are described below.

- **Road General Maintenance**

This contract includes all routine maintenance and renewal work categories for roading assets. In order to ensure the contract is attractive to the market, the contract includes Sealed Pavement Rehabilitation and Roadmarking. The commencement date for the contract was 1 July 2019, expiring on 30 June 2022. There is an option of two further extensions of two years each, providing the contractor with either a five year or seven year term. These extensions are based on the performance of the contractor and the discretion of Stratford District Council.

- **Streetlight Maintenance Contract**

This contract is currently in its fifth year and will expire on 31 March 2021.

A new contract will be drafted to include inspections, reporting, maintenance and renewal of all streetlights owned by Stratford District Council.

The current contract includes the routine maintenance of State Highway streetlights. However NZTA have indicated it is their intention to manage all state highway streetlights themselves. Between 2016 and 30 June 2018, all of Stratford District Council's 70 watt sodium oxide streetlights were changed to 24 watt LEDs.

The new contract will focus on replacing corroded or spalling concrete streetlight columns as part of the Traffic Services Renewals work category.

The Streetlight Maintenance Contract 2021-2024 will be a three year contract with two 12 months extensions with completion dates of 31 March 2024, 31 March 2025 and 31 March 2026.





Table 35 provides a snapshot of how the Council's delivery models for operational, maintenance and renewal works for the transport network. A 3+2+2 means that the maintenance contract covers an initial period of 3 years with the option of two 24 month extensions on satisfactory completion of the initial period.



**Table 36 - Operational, Maintenance and Renewal Delivery Model**

Work Type	Asset Group	Delivery Form	Terms of Contract
General Maintenance, operations and renewals	<b>Sealed pavement:</b> Maintenance repairs; Drainage maintenance; Environmental maintenance. Limited structural maintenance and Traffic services.	Measure and Value Contract. Programme currently delivered by Fulton Hogan.	3+2+2
	<b>Unsealed pavement:</b> Maintenance and renewal; Vegetation control; Drainage and Traffic Services		
	<b>Emergency Works:</b> Business as usual events ≤10% approved allocation value.		
Structures Maintenance	Minor repairs, cleaning, removing obstructions, replacing bridge ends markers, Bridge signs.	Measure and Value Contract. Programme currently delivered by Fulton Hogan.	3+2+2
	Specific repairs including guard rails, parapets, painting – Goldseal, replacement of components, Concrete repairs .	Specific one off contracts detailing specialised repairs.	As required following inspections
Street Lighting	Maintenance and renewal of streetlights (including state highways).	Measure and Value Contract.	3+1+1
	Maintenance and renewal of under veranda lighting.		
Street Cleaning	Routine cleaning of CBD and sweeping of urban streets.	Measure and Value Contract. Included in Roding General Maintenance Contract.	3+2+2
	Annual clean of all roadside drainage sumps.		
Reseals	Sealed pavement resurfacing.	Included in General Roding Maintenance Contract. Programme currently delivered by Fulton Hogan.	3+2+2
Pavement Rehabilitation	Sealed and unsealed pavement rehabilitation projects.	Included in General Roding Maintenance Contract. Programme currently delivered by Fulton Hogan.	3+2+2

Work Type	Asset Group	Delivery Form	Terms of Contract
Structural Component Replacement	Replacement of components of bridges, large diameter culverts and retaining walls.	As required. Specific contract for the bridge, culvert or retaining wall to be replaced or components renewed.	As required
Low Cost Low Risk Improvements	Minor safety improvements across the transport network.	Small projects included in the General Rooding Maintenance Contract. Typically < \$75,000.	3+2+2
		Large scale >\$100,000 contract documents prepared for the specific project.	As required
Minor Events and Emergency Works	Minor events deemed to be business as usual. ≤10% of approved allocation.	Measure and Value Contract. Programme currently delivered by Fulton Hogan	3+2+2
	Significant event ≥10% of approved allocation requiring specific approval from NZTA.	Measure and Value Contracts. Depending on the scope of the repairs these could be tendered and/or issued to Fulton Hogan	As required
Footpaths	Maintenance and renewal of footpaths	Measure and Value Contract. Included in roading contract currently delivered by Fulton Hogan.	3+2+2
Roadmarking	Maintenance of existing roadmarking	Measure and Value Contract. Included in General Maintenance Contract currently delivered by Fulton Hogan	3+2+2
Professional Services	Pavement designs, geometric designs, safety improvement designs	Short form agreement	As required
	Structural asset replacements, inspection of structural assets	Measure and value. To be tendered	2+2+2

Table 37 - Programmed Works to Address Our Problem Statements

Problem Statement	Planned Works	Benefits	Consequences of Not Undertaking the Works
<p>No: 1 – Increasing HCVs and forestry activity</p>  	<p>Pavement rehabilitation to:</p> <ul style="list-style-type: none"> <li>• Monmonth Rd</li> <li>• Beaconsfield Rd</li> <li>• York Rd</li> <li>• Opunake Rd</li> </ul> <p>Heavy maintenance and metaling of unsealed roads:</p> <ul style="list-style-type: none"> <li>• Puniwhakau Rd</li> <li>• Mangaehu Rd</li> <li>• Upper Mangaehu Rd</li> <li>• Mangaoupa Rd</li> <li>• Junction Rd</li> </ul> <p>Increase in reseal programme</p>	<p>Maintains the structural integrity of key HPMV routes to provide a reasonable level of service for our community.</p> <p>Prevents further deterioration of the road pavements.</p> <p>Maintain the waterproofing of the sealed network.</p> <p>Reduced number of faults generated by the ingress of water into the pavement.</p>	<p>Large maintenance costs to continue in order to provide a level of service to the community.</p> <p>Excessive number of pavement failures, potholes and corrugations that will affect our performance targets for ONRC technical KPIs</p> <p>Potholes, poor skid resistance, loss of control crashes, increased seal pavement maintenance costs</p>
<p>No: 2 – Poor drainage and water tables</p>  	<p>Through routine inspections, identify 90km of watertables to be cleaned or re-constructed per year.</p> <p>Replace 500m of culverts per year.</p> <p>Replace 1500m of kerb and channel per year.</p> <p>Address underslips.</p>	<p>Improves the ability for the network to cope with intensive rainfall events.</p> <p>Reduces the likelihood of underslips occurring.</p> <p>Ensures the road pavement is dry to maximise road pavement lifestyles.</p> <p>Provides a level of service in the urban environment for stormwater control.</p> <p>Replacement of culverts to cater for climate change and remove flooding hazards.</p>	<p>Poor pavement condition leading to reduced pavement life.</p> <p>Pavement failures, both sealed and unsealed networks.</p> <p>Flooding occurs more frequently.</p> <p>Loss of amenity value for urban streetscape.</p> <p>Blocked or damaged culverts could result in underslips occurring thus putting the road at risk and higher repair costs.</p>
<p>No: 3 – Footpaths and safe and resilient roading networks</p>	<p>Replacement of footpaths throughout the urban areas based on the following criteria:</p> <ul style="list-style-type: none"> <li>• Use = highly used footpaths identified from surveys with the community.</li> <li>• Condition = Annual condition rating</li> </ul>	<p>Good quality footpaths to cater for multi-modal transport options.</p> <p>Support our Walking and Cycling Strategy.</p> <p>Encourages increased use for active modes</p>	<p>Deteriorating footpaths leading to trip hazards and an increase in personal injury through falls</p> <p>Poor ride quality for mobility scooter users.</p>

	<p>survey to identify the footpaths in the poorest condition.</p> <ul style="list-style-type: none"> <li>• Key corridors leading to community services eg: Medical Centre, doctors, CBD, schools.</li> </ul>	<p>of transport.</p> <p>High quality amenity value for streetscapes</p>	<p>Reduced uptake of active modes throughout Stratford.</p> <p>Increasing number of customer complaints.</p> <p>Poor results from customer satisfaction surveys for footpaths.</p>
<p><b>Problem Statement</b></p>	<p><b>Planned Works</b></p>	<p><b>Benefits</b></p>	<p><b>Consequences of Not Undertaking the Works</b></p>
<p>No: 4 – Poor driver behaviour and challenging road conditions</p> 	<p>Safety improvements to be undertaken on Opunake Road, our Primary Collector that is also in our top 10% high risk roads.</p> <p>Other minor safety improvements across the network as they are identified.</p> <p>Geometrical improvements undertaken in conjunction with pavement rehabilitation projects.</p>	<p>Reducing the road toll on Stratford's roads to assist in meeting the GPS Strategic priority of "Road to Zero".</p> <p>Reduced social costs associated with Death and Serious Injury crashes.</p> <p>ONRC KPIs for safety will improve.</p>	<p>We will not achieve our DIA targets for reducing DSI crashes annually.</p> <p>We will not meet the Safety KPIs for ONRC.</p>

## 8.4 PROGRAMME BUSINESS CASE

This section covers how the problems identified in [Section 4.2](#) will be addressed through our planned works programme for the 2021-2024 period.

Table 38 shows how the proposed work programmes or renewal projects deliver on the ONRC Customer Outcomes.

**Table 38 - Addressing Problems**

Problem Statement	Planned Projects	Timeframe	Benefits	Customer Level of Service Addressed
Increasing Heavy Commercial Vehicles (HCV) and forestry activity along with the current standard of the asset is resulting in an increase in reactive investment and inefficient use of resources.	Beaconsfield Rd pavement rehabilitation RP6.1 – RP7.1 Monmouth Rd pavement rehabilitation RP1.1 – RP1.8 Monmouth Rd pavement rehabilitation RP2.4 – RP4.2 Beaconsfield Rd pavement rehabilitation (Standish Rd) Beaconsfield Rd pavement rehabilitation RP7.1 – RP8.1 Opunake Rd pavement rehabilitation – sites to be confirmed Puniwhakau Rd – heavy maintenance on unsealed road Mangaehu Rd – heavy maintenance of unsealed road Junction Rd – heavy maintenance on unsealed road Mangaoapa Rd – heavy maintenance on unsealed road	2020 2021 2022 2023 2024 2025 2020 – 2024 2020 - 2024 2020 – 2022 2020 - 2022	HPMV defined route, pavement failures. Commencement of forestry activity likely to last four years.	Accessibility, Amenity, Resilience
The geography and environmental conditions have led to poor damage controls and the inability of the roading network to cope with intense weather events. This restricts access to road communities and economic impacts	Clearing 90km of water table per year. Replacing culverts as identified through regular inspections. Replacing urban kerb and channel	2020-2024	Improvements to roadside drainage. Replacing misaligned or blocked culverts. Replacement of old kerb and channel to improve drainage.	Resilience

## Lifecycle Management

Problem Statement	Planned Projects	Timeframe	Benefits	Customer Level of Service Addressed
There is misalignment between Council and Community regarding the appropriate level of service to meet the expectations for a safe and resilient roading network	Continue with footpath replacement programme. Target length is 1500 meters per annum. Sites to be confirmed through inspections and customer surveys.		Improvement to customer satisfaction survey results. Improvement in the level of service provided. Removal of narrow footpaths	Access, Amenity
Poor driver behaviour, challenging road conditions and unforgiving roads and roadsides is resulting in death and serious injury crashes to our community.	Speed limit review. Installation of active warning signs at crash hotspots Minor geometric improvements. Installation of road signs and road markings.		Assist in the Road to Zero vision	Road Safety

REG Worksheet for Strategic Case Bottom-Up Test

Figure 49 - REG Strategic Case Bottom Up Test

**ALT 2020-F1 – Factsheet for Strategic Case Bottom-Up Test**

**Name of Council/RCA: Stratford District Council**



<b>Problem Statement 1: Increasing Heavy Commercial Vehicles (HCV) and forestry activity along with the current standard of the asset is resulting in an increase in reactive investment and inefficient use of resources.– 40%</b>		
<b>Key responses outlined in Strategic Case:</b> Structural integrity of road pavement HPMV Routes Structural condition of bridge stock to meet demand		
<b>Current Work that is addressing the problem and delivering the benefits:</b> Pavement maintenance – Isolated repairs Pavement rehabilitation, granular overlays (unsealed roads), logging routes		
<b>Aspects of the problem not being addressed and benefits not being delivered?</b> Insufficient funds for the rehabilitation programme Slight increase in funds for metalling		
<b>Is the Problem Statement still relevant?</b> (Yes)	If “No” what are the deficiencies?	If “Yes” has priority changed? Increase in HPMV’s in forestry activity
<b>If Problem not justified by required work what is the strategic response?</b>		
<b>Strategic response</b>	<b>Y/N Rank</b>	<b>Detail</b>
1 Programme adjustment eg, Remove/reduce projects/activities	Y	Spread out over 6 years to stay within budgets
2 Policy approach eg, Adjust level of Service	Y	Review pavement strategies for sealed and unsealed
3 Demand management eg, Manage use – up/down	N	Driven by markets (timber) haulage companies
4 Funding adjustment. eg, Increase/decrease	Y	Increase funds to rehabilitation
5 Risk based eg, Hold Assets longer	Y	Will have to undertake “holding” treatments on failing roads
<b>How effective are the options? – Use the simple Multi Criteria Analysis tool (Excel – see printout on last page) to help select preferred approach(s) to modifying the strategic response.</b>		
<b>Draft an updated problem statement (if applicable)</b>		

**Problem Statement 2:** The geography and environmental conditions have led to poor damage controls and the inability of the roading network to cope with intense weather events. This restricts access to road communities and economic impacts– 35%

**Key responses outlined in Strategic Case:**

Poor roadside drainage  
 Improved outlet controls – prevents slips  
 Community have reasonable expectation for access – unplanned road closures

**Current Work that is addressing the problem and delivering the benefits:**

Drainage maintenance and renewals  
 Minor events – storm damage repairs  
 Response times for clearing slips  
 Looking at outlet controls when renewing culverts

**Aspects of the problem not being addressed and benefits not being delivered?**

Funding for drainage renewal cannot meet the needs of the network

**Is the Problem Statement still relevant?**  
 (Yes)

If “No” what are the deficiencies?

If “Yes” has priority changed?  
 Increased importance  
 Falling behind with drainage

**If Problem not justified by required work what is the strategic response?**

Strategic response	Y/N Rank		Detail
1 Programme adjustment eg, Remove/reduce projects/activities	Y		Increase in drainage maintenance and renewals
2 Policy approach eg, Adjust level of Service	N		Not required
3 Demand management eg, Manage use – up/down	Y		Increase in activity
4 Funding adjustment. eg, Increase/decrease	Y		Seek more funds or take from other activities
5 Risk based eg, Hold Assets longer	N		High risk approach to date and time, to address it

**How effective are the options?** – Use the simple Multi Criteria Analysis tool (Excel – see printout on last page) to help select preferred approach(s) to modifying the strategic response.

**Draft an updated problem statement (if applicable)**

<b>Problem Statement 3:</b> There is misalignment between Council and Community regarding the appropriate level of service to meet the expectations for a safe and resilient roading networks – 15%		
<b>Key responses outlined in Strategic Case:</b> Improvements to footpaths (width)		
<b>Current Work that is addressing the problem and delivering the benefits:</b> Sorted a 30 year footpath replacement programme Delivered 4.5kms of footpath improvements in three years		
<b>Aspects of the problem not being addressed and benefits not being delivered?</b> Large programme to complete Funding is limited to accelerate the delivery		
<b>Is the Problem Statement still relevant?</b> (Yes)	If “No” what are the deficiencies?	If “Yes” has priority changed? The community is still requesting wider footpaths
<b>If Problem not justified by required work what is the strategic response?</b>		
<b>Strategic response</b>	<b>Y/N Rank</b>	<b>Detail</b>
1 Programme adjustment eg, Remove/reduce projects/activities	Y	We have increased SDC’s share to increase the programme
2 Policy approach eg, Adjust level of Service	Y	The policy to replace footpaths has been discussed with Elected Members at workshops and been given approval
3 Demand management eg, Manage use – up/down	Y	Increased number of elderly and micro-mobility users
4 Funding adjustment. eg, Increase/decrease	Y	Increased by using additional SDC funds
5 Risk based eg, Hold Assets longer	N	Many of the footpaths are in poor condition as well as not being wide enough
<b>How effective are the options?</b> – Use the simple Multi Criteria Analysis tool (Excel – see printout on last page) to help select preferred approach(s) to modifying the strategic response.		
<b>Draft an updated problem statement (if applicable)</b>		

<b>Problem Statement 4:</b> Poor driver behaviour, challenging road conditions and unforgiving roads and roadsides is resulting in death and serious injury crashes to our community – 10%		
<b>Key responses outlined in Strategic Case:</b> Safety of the roading network, in particular, Opunake Road		
<b>Current Work that is addressing the problem and delivering the benefits:</b> Safety improvements along the route Early discussions regarding the reduced speed limit Planning for installation of a RIAWS sign at Cardiff Road/Climie Road intersection		
<b>Aspects of the problem not being addressed and benefits not being delivered?</b> The length of treatment required is over 23kms Funding constraints used as on HPMV routes		
<b>Is the Problem Statement still relevant?</b> (Yes)	If “No” what are the deficiencies?	If “Yes” has priority changed? Opunake Road is our high risk rural road
<b>If Problem not justified by required work what is the strategic response?</b>		
<b>Strategic response</b>	<b>Y/N Rank</b>	<b>Detail</b>
1 Programme adjustment eg, Remove/reduce projects/activities	Y	Pavement repairs and safety improvements specifically for Opunake Road Crash investigation for crash sites around the district
2 Policy approach eg, Adjust level of Service	Y	Review speed limits
3 Demand management eg, Manage use – up/down	N	Growth will increase traffic volumes
4 Funding adjustment. eg, Increase/decrease	Y	Increase funding to safety improvements across the district
5 Risk based eg, Hold Assets longer	N	Focus on crash sites with a higher number of crashes
<b>How effective are the options?</b> – Use the simple Multi Criteria Analysis tool (Excel – see printout on last page) to help select preferred approach(s) to modifying the strategic response.		
<b>Draft an updated problem statement (if applicable)</b>		

Table 39 - Relationship Between Works Categories and the ONRC Performance Measures

Work Category	Description	ONRC Customer Outcomes					
		Safety	Resilience	Amenity	Accessibility	Cost Efficiency	
Operations/Maintenance	111	Sealed Pavement Maintenance	✓		✓		✓
	112	Unsealed Pavement Maintenance	✓	✓	✓		✓
	113	Routine Drainage Maintenance	✓	✓			✓
	114	Structures Maintenance	✓	✓		✓	
	121	Environmental Maintenance	✓		✓	✓	✓
	122	Traffic Service Maintenance	✓			✓	
	125	Footpath Maintenance	✓		✓	✓	
	131	Level Crossing Warning Devices	✓				
	140	Minor Events	✓	✓		✓	
	151	Network and Asset Management	✓	✓	✓	✓	
Renewal/Replacement	211	Unsealed Road Metalling	✓				✓
	212	Sealed Road Resurfacing	✓				✓
	213	Drainage Renewals	✓	✓			
	214	Sealed Road Pavement Rehabilitation	✓			✓	✓
	215	Structures Component Replacement	✓			✓	
	222	Traffic Services Renewals	✓			✓	
Level of Service Improvements	341	Low Cost/Low Risk Improvements	✓	✓	✓		✓

## 8.4.1 DELIVERING COST EFFECTIVE ROADING INFRASTRUCTURE

The draft Government Policy Statement (GPS) on Land Transport 2021/2022 – 2030/2031 does not have a strategic goal relating to “Value for Money” as did the previous GPS. However it goes without saying that Stratford District Council operate with “value for money” very much in mind, considering the value of our approved allocation request.

In order to deliver a cost effective level of service to our community, Stratford District Council uses the following principles:

- Robust planning to identify forward work programmes through regular inspections of the network.
- Appropriate selection procedure for projects that do not form part of the General Roding Maintenance Contract.
- Maintaining the local supply chain market using local contractors and suppliers.
- Delivery of the works at the right time, with the right outcome and within the approved budgeting allocations.
- Packaging or bundling similar work types together to provide a greater opportunity to be more cost effective and time efficient.
- Staged approach to large projects that cannot be afforded during a single financial year. An example of this is the pavement rehabilitation of Monmouth Road. The length identified as 2.60kms long with an estimated value of \$1,000,000.00.

Whilst we have an eye on the costs, our emphasis is on a good quality “product” that will stand the test of time.

## 8.4.2 OPTIONS FOR DELIVERING THE PROGRAMME

There are three options available for delivering the programme. These being:

- Response to customer calls → Reactive approach
- Prioritised programme focussed on known strategic problems
- Enhanced programme

### **Option 1: Reactive Approach**

This methodology will only provide a maintenance programme that is solely customer driven following customer calls and complaints. The programme will not take a “whole of network” approach. This will not be a cost effective model for maintaining the road network.

### **Option 2: A Prioritised Programme**

This is a pro-active approach to maintaining the network based on regular inspections that develop a rolling three month programme of work.

This programme can be directly targeted to strategic problems affecting the roading network, for example roads used by logging industry.

Within this methodology there is the flexibility to react to customer requests, depending on the urgency of the request.

### **Option 3: Enhanced Programme**

This will require a significant increase in the investment for roading, one which the Stratford District Council is unlikely to pursue due to the likely increase in household rates.

Table 40 - Option 1 Reactive Approach

Transport Activity	How Desired Outcomes Will Be Delivered	Level of Investment	Risk Impact	Key ONRC Customer LoS (CLoS) Impact
Movement of passenger vehicles and freight management within the Stratford District.	The programme will be the same as previous Long Term Plans based on average expenditure for all asset groups.	As previous years with a modest increase in investment in line with inflation or contract escalations.	High risk due to the impacts of increasing traffic flows.	Accessibility levels of service will reduce as the maintenance programme cannot meet the demands.
	SDC will take a higher risk approach to the low volume roads and access roads.	No allowance for improvements to the road network.	Increase in HCV permits being issued for overweight loads.	Amenity CLoS will reduce due to the lack of investment
	Reactive approach to customer requests providing a good service to customers.	Does not keep pace with the level of deterioration of the assets.	High risk on rural roads affected by the forestry industry.	Potential for an increase in crashes where the road is a contributing factor.
	In-efficient and does not offer value for money.			
Walking and Cycling	Programme to repair and renew footpaths remain as previous years,	Same as previous years with an allowance for inflation.	Poor quality footpaths.	Amenity and accessibility levels of service will deteriorate.
	Footpath repairs would be driven by customer requests.	No funds for improvements or new footpaths	Reduction in the CLoS for footpaths.	
	No provision to develop cycleways or develop cycling initiatives.		Poor customer satisfaction survey results.	No increase in active modes throughout Stratford.
			Potential for increased tripping hazards for the elderly population.	
			Poor ride quality for mobility scooter users.	

Table 41 - Option 2 - A Prioritised Programme

Transport Activity	How Desired Outcomes Will Be Delivered	Level of Investment	Risk Impact	Key ONRC CLoS Impact
<b>Movement of passenger vehicles and freight management within the Stratford District.</b>	Sealed pavement maintenance increases on roads affected by HCVs	Increase of \$55,000.00 per annum	Reduces the risk of pavement failures. Pro-active approach to maintenance.	Improved STE and roughness prior to sealing
	Pavement strengthening projects to known HPMV routes	Increase of \$100,000.00 per annum	Reduces the risk of pavement failures to known HPMV routes. Development of a continual work programme can be achieved.	Keeps pace with deterioration of roads used by HPMV's
	Increase to structures maintenance to reduce the backlog of maintenance works identified during inspections. Estimated to be in the order of \$650,000-\$700,000.00	Increase of \$42,000.00 per annum	Increase to address backlog of maintenance to bridges and retaining walls	Provides for specific maintenance repairs and corrosion treatments
	Unsealed pavement maintenance on roads affected by forestry	Increase of \$100,000.00 per annum	Increase in contract rates for this work category	Addresses issues on roads used by logging traffic eg: Puniwhakau Road – soft spots. Pavement repairs.
	Bridge replacement of old structures	Included in low cost low risk improvements as outlined in 30 year bridge replacement programme	Reduces the risk by virtue of replacing old buildings Provides greater access for HCVs	Improved accessibility to HCVs across the network Improved connectivity for the community
	Retaining wall replacements	Included in low cost low risk improvements as outlined in 10 year retaining wall replacement programme and has been site specific developed	Reduces the risk of a road failure due to collapse of the structure	Improved route resilience across the network
	Traffic Services	LED Conversion to streetlights has been completed. Replacement of damaged and corroded streetlight columns to commence in 2021-24 LTP	Reduced streetlight maintenance and power changes have been achieved	Improved value for money for operating the streetlight network



Transport Activity	How Desired Outcomes Will Be Delivered	Level of Investment	Risk Impact	Key ONRC CLoS Impact
	Walking and Cycling	Increase in budget to replace and maintain footpaths. Additional \$20,000 per annum	Reduces the total length of footpaths that are less than 1.5 meter wide.	Improved CLoS for all user groups

Table 42 - Option 3 - An Enhanced Programme

Transport Activity	How Desired Outcomes Will Be Delivered	Level of Investment	Risk Impact	Ley ONRC CLoS Impact
Movement of passenger vehicles and freight management within the Stratford District	Sealed pavement maintenance increased to ensure smoother roads and to retain pavement integrity	50% increase or \$190,000 per annum	Reduces pavement failures Improves serviceability of the sealed road network Improved roughness and STE percentages	Significant increase in Amenity CLoS.
	Pavement renewal and rehabilitation. Double the length of the pavement rehabilitation undertaken each year	100% increase or \$750,000 per annum	Keeps pace with pavement deterioration on specific HPMV routes	Significant increase in Amenity and Accessibility CLoS
	Unsealed pavement maintenance and renewals. Increase in funding to prevent damage to unsealed roads used by forestry industry	25% increase or \$210,000 per annum	Keeps pace with pavement repairs and additional metalling on roads extensively used by forestry traffic	Significant increase in Amenity and Accessibility CLoS
	Increase in structures maintenance to address backlog of maintenance works on bridges	50% increase or \$80,000 per annum	Reduces the risk of further deterioration of bridges due to the lack of maintenance	Improved resilience, connectivity and accessibility for the community
	Traffic services to provide safety improvements through better signage	50% increase or \$100,000 per annum	Ensures the network is fully compliant with MOTSAM and RTS 5  Provides funds to clean, paint and renew sight rails  Reduces the risk to road users due to poor wayfinding or obscured signage	Increased Safety and Accessibility CLoS.

Transport Activity	How Desired Outcomes Will Be Delivered	Level of Investment	Risk Impact	Ley ONRC CLoS Impact
<b>Walking and Cycling</b>	Significant increase in footpath maintenance and renewal budgets	50% increase or \$115,000 per annum	This will accelerate our 30 year footpath replacement programme Based on current rates this will be reduced to 20 years.	Increased Accessibility, Connectivity and Amenity CLoS for all user groups.
	Developed cycling education programmes and infrastructure	\$350,000 per annum	New budget provision for this activity	Increased Accessibility, Connectivity and Amenity CLoS for all user groups.  Reduced carbon emissions  More travel choices

## 8.5 ROAD MANAGEMENT STRATEGIES

The overall management of infrastructure will be driven through strategies aimed at:

- Complying with the legislative and strategic requirements;
- Meeting customer expectations and agreed levels of service; and
- Delivering value for money for ratepayers, funding partners and the Council.

These strategies presented in Figure 50 are either under review or currently being prepared and include:

- Unsealed Roads Strategy;
- Bridge Strategy; and
- Footpath Strategy

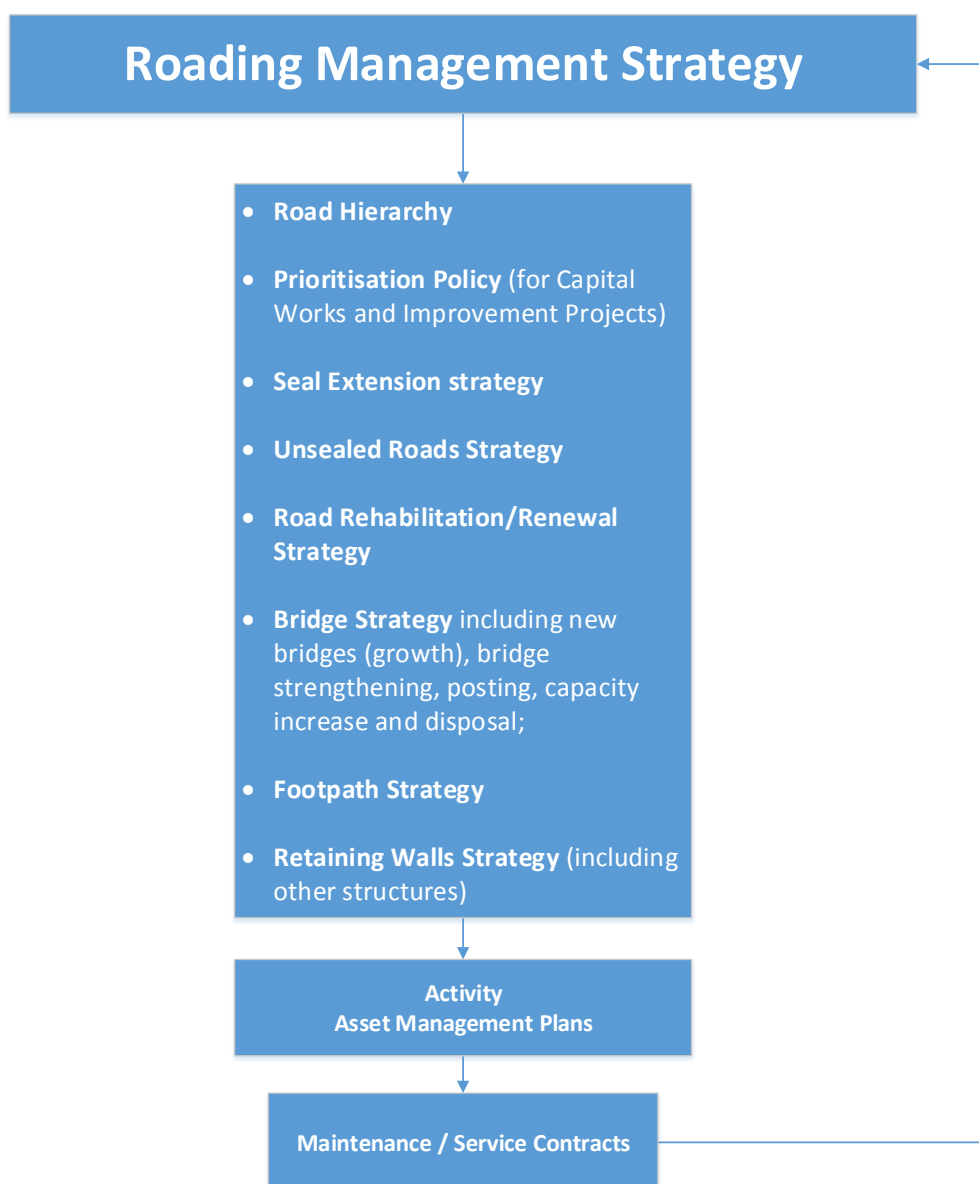


Figure 50 - Roding Management Strategies

## 8.6 PRIORITISATION AND COST EFFICIENCY

An important factor in delivery of the operation, maintenance and renewal programmes will be ensuring these activities are prioritised to where the needs are required across the various categories of the ONRC road hierarchy, for example, road strengthening on a main transport route rather than a residential cul-de-sac.

By targeting works programmes where the work is required cost savings will be generated and efficiency savings on the level of service will automatically be adjusted over time. At present these operate at similar level of service across the entire transport network.

In order to achieve cost and efficiency savings we plan to:

- Ensure funding requests are prioritised by ONRC where appropriate. In some cases this may not hold true due to increased activity on a low volume unsealed road i.e. forestry harvesting
- Determining the optimal timing of renewal activities by increasing the life or longevity of the asset, for example, our current reseal cycle is 13 year intervals. This, over time, may increase to 15 - 18 years and in some cases to 20 years for low volume sealed roads
- Risks are pro-actively managed for higher road classifications and opportunities identified where SDC is willing to accept more risk.

## 8.7 DETAILED BUSINESS CASE

### 8.7.1 OPERATION AND MAINTENANCE

During the term of this Activity Management Plan it is our intention to develop a Maintenance Intervention Plan.

The development of this plan will be undertaken in conjunction with our maintenance contractor, Fulton Hogan. We will call on their expertise as well using our own local knowledge to develop maintenance strategies which are long lasting “best for the network” and cost effective.

There will always be the “unknowns” or “unplanned” events, but with proactive maintenance programmes which utilise the efficiencies of the contracts resources, we endeavour to minimise these as much as possible.

As indicated in Section 4.2, the biggest issue facing the Stratford District is the impact of forestry on many of our low volume roads. An example of this has been the commencement of forestry work on Puniwhakau Road, where approximately 620 ha of forest is currently being harvested. Within three weeks of commencing the harvesting, (August 2020) the road has numerous soft spots and pavement failures requiring repairs. The cost of these repairs is likely to be hundreds of thousands of dollars. We have estimated repairs could cost in the order of \$600,000-\$750,000. Having spoken to local residents at the time of preparing the AMP, Stratford District Council has some information that further forestry blocks will commence harvesting later in 2020 and early 2021.

The following photos are of Puniwhakau Road’s pavement failures and soft spots created as a result of increased logging activity.



**Figure 51 Puniwhakau Road**

The table below provides an overview of our proposed allocation for each of the work categories for the period 2021-2031. The level of funding requested is to keep pace with the level of deterioration of parts of the network. This expenditure for unsealed pavements reflects the anticipated increase in forestry activity during the term of this Long Term Plan period.

**Please note that all figures are not inflated.**

**Table 43 - Lifecycle Management Costs**

Activity	2021/22	2022/23	2023/24	2024-31	Total
Sealed Pavement Maintenance	\$380,000	\$380,000	\$380,000	\$2,460,400	\$3,600,400
Unsealed Pavement Maintenance	\$240,000	\$240,000	\$240,000	\$1,829,000	\$2,549,000
Routine Drainage Maintenance	\$360,000	\$360,000	\$360,000	\$2,742,000	\$3,822,000
Structures Maintenance	\$162,600	\$162,600	\$162,600	\$1,242,000	\$1,729,800
Environmental Maintenance	\$185,000	\$185,000	\$185,000	\$1,408,000	\$1,963,000
Traffic Services Maintenance	\$210,000	\$210,000	\$210,000	\$1,603,000	\$2,233,000
Footpath Maintenance	\$230,000	\$230,000	\$230,000	\$1,751,600	\$2,441,600
Level Crossing Warning Devices	\$28,400	\$28,400	\$28,400	\$217,500	\$302,700
Minor Events	\$354,000	\$354,000	\$354,000	\$2,699,500	\$3,761,500
Network and Asset Management	\$355,500	\$355,500	\$355,500	\$2,707,500	\$3,774,000
Unsealed Road Metalling	\$840,000	\$840,000	\$840,000	\$6,396,000	\$8,916,000
Sealed Road Resurfacing	\$870,000	\$870,000	\$870,000	\$6,625,300	\$9,235,300
Drainage Renewals	\$616,000	\$616,000	\$616,000	\$4,691,000	\$6,539,000
Sealed Road Pavement Rehabilitation	\$826,000	\$826,000	\$826,000	\$6,290,200	\$8,768,200
Structures Component Replacement	\$135,000	\$135,000	\$135,000	\$1,029,500	\$1,434,500
Traffic Services Renewals	\$113,000	\$113,000	\$113,000	\$863,000	\$1,202,000
Low Cost Low Risk Improvements	\$1,190,000	\$1,042,000	\$1,930,000	\$7,080,500	\$11,242,500
<b>Overall Totals</b>	<b>\$7,095,500</b>	<b>\$6,947,500</b>	<b>\$7,835,500</b>	<b>\$51,636,000</b>	<b>\$73,514,500</b>

Notes:

1. An escalation percentage of 5% has been applied for each three year block allocation beyond 2024.
2. Low Cost Low Risk Improvements includes bridge and retaining wall replacements.

## **Road Pavement**

Our number one problem is the increasing numbers of heavy commercial vehicles using the districts roading network.

In the 12 months ending 30 June 2020, the Stratford District Council issued 475 HPMV permits to road haulage companies. These permits are over and above normal class 1 or 44 tonne vehicles.

It should also be noted that none of the permits issued relate to logging haulage contractors, for the daily cartage of logs.



**Figure 52 - Photo of Opunake Road**

The maintenance and renewal of road pavements is a direct response to the strategic problem statement one. Pavement maintenance plays a vital role to address safety issues, amenity levels of service and accessibility levels of service.

Pavement maintenance is critical in terms of the response to connectivity and resilience issues to meet the expectations of the community and CLoS.

### **Sealed Pavement Maintenance**

Council's sealed road network consists of 392km of sealed pavements across the district. These vary in width and are typically 4.5-6m wide in the rural area and 10-12m wide in urban areas. The surface type is predominantly chipseal.

Repairs are carried out as a result of routine inspections, or as a result of customer service requests which both feed into planned works that cover planned maintenance and any pre-reseal repairs ahead of the sealed road resurfacing programme.

General maintenance of roads includes:

- Repair of potholes;
- Repair of edge breaks;
- Repairing failed pavement by rip and remake or dig outs depending on the severity of the pavement failure;
- Crack sealing to keep the top surface waterproof;
- Adjusting service covers;
- Water blasting to remove excessive bitumen;
- Maintenance of unsealed shoulders;
- Emergency and call centre responses including out of hours; and
- Maintenance of roadside shoulders.

## **Unsealed Roads**

Council's unsealed road network consists of 205.8km of roads across the district. These unsealed roads vary in width and are typically 4.5m wide. Mangaehu Road provides access to forestry and dairy/beef farming. The road also provides access to a tourist destination, that being 'The Bridge to Somewhere' at Aotuhia Station.

Many of the unsealed roads serve farmland as well as forestry blocks. There are three unsealed roads that form loop roads for other roads to connect to them. These roads are Mangaehu Road, Kohuratahi Road and Whitianga Road.

An important inter-district road is Junction Road. This unsealed road connects State Highway 43 at the Pohukura Saddle to New Plymouth District at Purangi. As well as being an important connecting route between districts, this road is also part of the National Cycle Trails network.

Repairs are carried out as a result of routine inspections, or as a result of customer service requests. The general maintenance of unsealed roads includes:

- Removal of potholes;
- Grading;
- Removal of corrugations;
- Removal of soft spots; and
- Dig outs in failed areas.

Aggregate used for the maintenance of our unsealed roads is sourced from local quarries; Vickers Quarry located on York Road, Midhirst and Awakino Quarry located in Waitomo. This quarry is owned and operated by Fulton Hogan. It is used to provide metal for the most eastern roads on our network.

## **Structural Assets**

Structures include all bridges maintained by Council, culverts, retaining walls and road tunnels. Maintenance and renewal of bridges, retaining walls and large scale culverts or tunnels provide a direct response to the strategic core problems of land use changes and connectivity resilience as well as meeting the ONRC outcomes of:

- Accessibility – Ensuring that heavy commercial vehicles have access to all areas of the land transport network that require it; and
- Resilience – Providing support to lifeline routes and the impact of unplanned events on journeys is minimised and access to properties is available

The Council maintains 157 bridges, 5 tunnels and 251 retaining walls. These structures vary in construction from high standard concrete to railway iron and timber boards used for retaining walls.

The delivery of the lifecycle management for structures is provided by external consultants. This includes the preparation of bridge maintenance work packages that are beyond the scope of works confirmed in the Roading General Maintenance Contract. These works tend to be more specific or require a technical specialist, for example anti-corrosion treatments or parapet wall repairs.

The issues that face the Stratford District Council in relation to the structural assets we are the custodians for, are outlined in table 44.

**Table 44 - Key Issues and Risks - Structures**

Key Issue	Strategy to Address Issue
Maintain bridge at road ends	The 14 bridges that serve single properties located at the end of a maintained or unmaintained road, which Council have agreed to maintain via a Council resolution. The legal opinion is that SDC is still liable for repairs and any personal injury should maintenance cease.  Consider divesting bridge to property owner.  Demolish bridge – may cause issues with access to property, e.g. Lower Kohuratahi Road swingbridge.
Aging bridge stock	Aging bridge stock is going to require a renewal programme to address weight restrictions and bridges that are in poor structural condition.
Earth drives	These hard excavated tunnels in Taranaki ash or papa sedimentary rock are not engineered and we do not know how strong the ash or rock is. Some have started to fail or partially collapse. These earth drives are included in the annual inspection programme.
ARMCO Culverts	ARMCO Culverts have a limited life. Due to the acidic nature of the water (papa rock) this life has been foreshortened, thus the invert of these culverts have corroded. The life can be extended by lining the invert with concrete. Our bridge replacement programme for the next three years is to replace three of this type of structure.
Replacement funding for low traffic volume bridges.	SDC has identified which bridges require replacing over the next 30 years. Four of these bridges provide access to single land owners. Eleven other bridges are located on low volume roads. Replacement will be based on condition, freight load, traffic, availability of alternative routes. Some of these bridges may not meet these criteria which may result in weight restrictions being applied.
HPMV and 50MAX	There has been an increase in the number of HPMV permits issued in 2020. We are currently reviewing the capacity of 32 restricted bridges which could result in “posting” weight limits or a strengthening programme.
Resilience	All bridges fall within an inspection regime. Faults are identified and prioritised as budgets allow. Further seismic assessment of our bridges will be required. This will be included in our Improvement Plan.
Retaining Structures	We have identified and recorded the condition of 251 retaining walls. These have been recorded in RAMM. We are aware of the possible existence of more retaining structures that have become overgrown with native bush or vegetation. SDC is currently clearing this vegetation to determine if a retaining wall exists. If so an inspection will be undertaken and the retaining wall will be added to the asset register in RAMM.

The condition and estimated replacement dates for our bridge stock is based on regular two yearly inspections of the bridges. These inspections are the general inspections with a more detailed inspection undertaken as required or recommended in the general inspection report.

The table below provides a list of the number of bridges that are to be replaced within the next 30 year period.



**Table 45 - Bridge replacements in the next 30 years**

Time for Replacement	Number of Bridges to Replace	Estimated Cost for Replacement
0-10 years	7	\$1.90m
11-20 years	14	\$3.10m
21-30 years	36	\$9.50m

The Stratford District Council has identified 14 bridges which we consider to be “critical” in accordance with our Criticality Risk Profile. During the term of the next two long term plan periods it is our intention to investigate these 14 bridges for their seismic strength . Further work is also required to evaluate the 32 bridges which are considered unsuitable for 50 max or High Productivity Motor Vehicles (HPMV) loading capacity. This will be ongoing throughout the next long term plan periods.

**Retaining Walls**

To date SDC has recorded/inspected 251 retaining walls. We believe there are more retaining walls on the Roding network, but are obscured by vegetation. Retaining walls include and are not limited to the following structure types:

- Crib walls.
- Gabion walls.
- Rock walls.
- Steel columns and timber boards.
- Timber pile and boards.
- Railway iron and timber boards.
- Railway iron and concrete power poles.
- Willow bush walls.

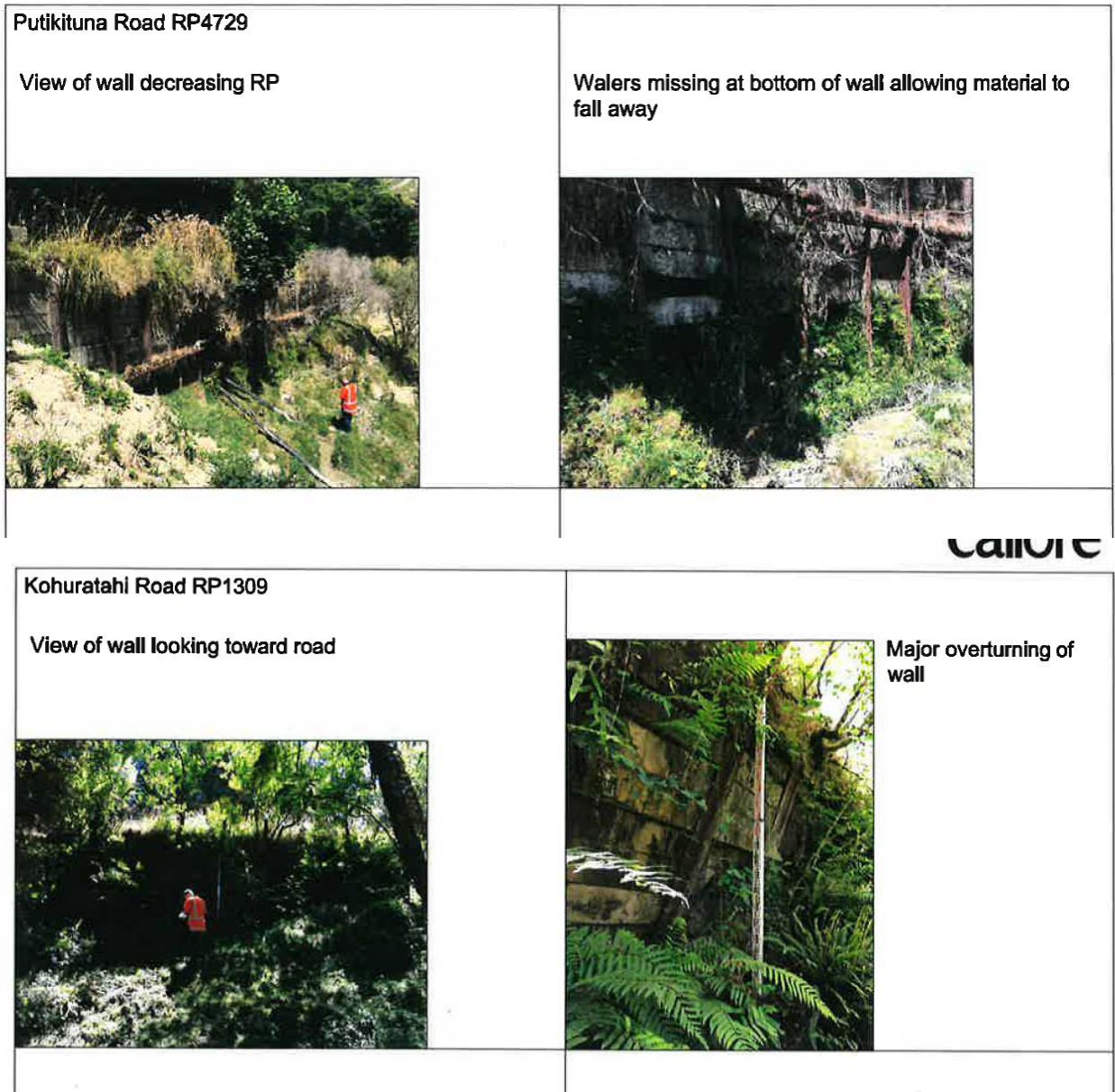
As with our bridge inspections, retaining walls are inspected every two years, split into “front country” and “back country”. Based on a report received in April 2020. 124 retaining walls have been considered to be “average to very poor” structural condition. Of this, 124, 58 are considered to be either “poor” or “very poor” and will require replacing. The estimated cost to replace these walls during the next 10 years is shown in the table below.

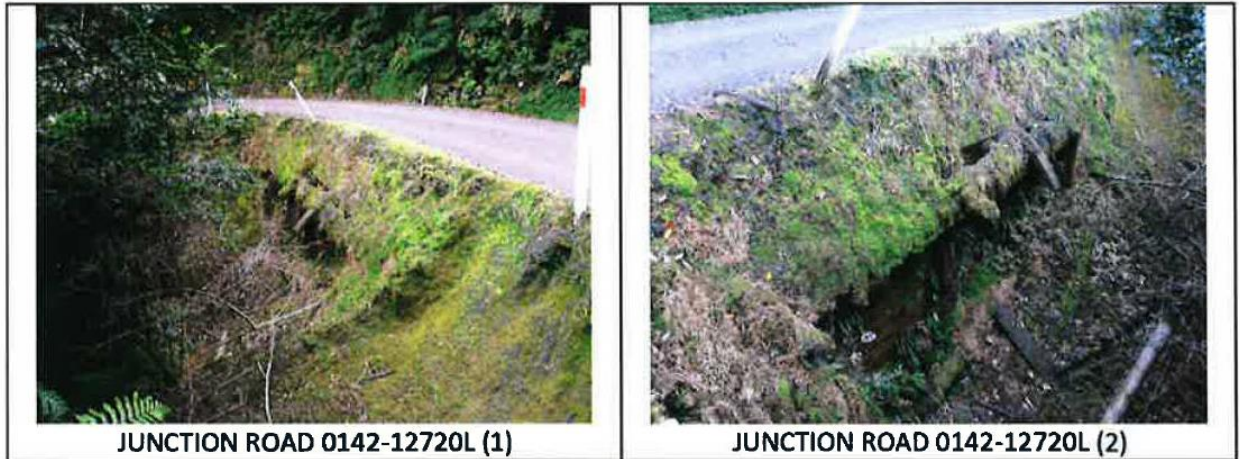
**Table 46 - Estimated Costs for Replacement Retaining Walls**

	Year	Maintenance Cost	Replacement Cost	Total
<b>1</b>	2021	\$17,500	\$120,000	\$137,500
<b>2</b>	2022	\$12,000	\$152,000	\$164,000
<b>3</b>	2023	\$2,500	\$210,000	\$212,500
<b>4</b>	2024	\$11,000	\$135,000	\$146,000
<b>5</b>	2025	\$6,300	\$175,000	\$181,300
<b>6</b>	2026	\$9,500	\$165,000	\$174,500
<b>7</b>	2027	\$8,000	\$155,000	\$163,000
<b>8</b>	2028	\$8,000	\$87,500	\$95,500
<b>9</b>	2029	\$7,500	\$93,000	\$100,500
<b>10</b>	2030	\$5,000	\$70,000	\$75,000

The inspections of these retaining walls has identified the requirements for some general maintenance to be undertaken. The value of this maintenance is indicated in the table above and has been included in the funding submission for the 2021-2031 Long Term Plan.

Figure 53 - Examples of retaining walls to be replaced





JUNCTION ROAD 0142-12720L (1)

JUNCTION ROAD 0142-12720L (2)

## Mohakau Road retaining walls



### Drainage

Maintenance and renewals of drainage provides a direct line of sight to our problem statement number two. By addressing the drainage problem you will increase its life of your road pavement thereby continuing to provide a resilient road network that supports the connectivity the community requires.

The drainage managed by Stratford District Council includes shallow and deep drains, kerb and channel, culverts, catchpits, roadside sumps, connecting laterals to stormwater systems or nearby streams. The asset information including valuation is provided in Table 9 of this RAMP.

Some of the key lifecycle management issues that affect drainage facilities are described in Table 47.

**Table 47 -Key Management Issues - Drainage**

Key Issue	Strategy to Address Issue
Undersized culverts	Increased capacity as part of renewal programme.
Deep drain adjacent to road edge	Reposition in conjunction with pavement rehabilitation projects when these are undertaken. It will take a long time to relocate these drains. Fill with rock rip rap as an interim measure or if drain cannot be repositioned.
Global warming	Increase the size of culverts to take into account the effects of global warming, for example our policy is to replace 225mm diameter culverts with 375mm diameter culverts.
Blocked culverts	Cleared as part of the routine cycle of soned maintenance undertaken two times a year.

The Council approach to the delivery of drainage works is “basic”; however, we are working to improve certain aspects of the activity. Investment in drainage assets is essential because these assets:

- Provide an essential service to the integrity of the pavement network whether sealed or unsealed.
- Provide a level of protection to property and road infrastructure from flooding.
- Provides good drainage to areas with steep topography such as the eastern hill country which requires good drainage to reduce the risk of washouts occurring.

Drainage maintenance is delivered through the General Road Maintenance Contract. This includes road sweeping of all urban streets, sump clearing, cleaning 200km or roadside watertables, clearing inlet/outlet of rural culverts.

With the recent change in our maintenance contractor, we have adopted a different approach to the management of our drainage assets. This is purely driven by contract rates and the budgets available.

The level of funding requested (\$976,000pa) provides for maintenance and renewal of drainage assets, split in the following proportions.

- 25% Kerb and channel maintenance and renewals
- 25% Culvert maintenance and renewals
- 50% Watertable maintenance and renewals

We see this activity as a key component to keep our road pavements dry, thereby reducing maintenance costs associated with pavement repairs.

**Traffic Services**

Safety is the primary problem for Traffic Services. These assets are designed to assist road users to use the road safely. Included in this asset group are signs, pavement markings, sight rails, roadside marker posts, traffic islands and streetlights. Some of the key lifecycle management issues that affect traffic services are:

**Table 48 - Strategies to Address Traffic Services Issues**

Key Issue	Strategy to Address Issue
Signs in poor condition due to age and lichen growth.	Renew as required. Cleaning of signs is included in cyclic maintenance activity.
Inconsistent use of curve warning signs.	Address this through interrogation of CAS to identify crash stats. Include in low cost/low risk improvements as funds permit.
Condition of edge marker posts – broken or lichen growth.	Many are damaged by locals on their quad bikes or tractors. Where this is occurring remove, but highlight particular hazards. Replace EMP's that are in poor condition as required via cyclic maintenance

Key Issue	Strategy to Address Issue
	activity.
Sight rails in poor condition.	Replace as funding permits. Re-paint those that are in good condition as part of the cyclic maintenance activity.
Traffic islands not very visible	These need to be painted to highlight their presence at night. Embark on re-painting programme.

Investment in traffic services assets is required because it meets the following ONRC Customer Outcomes:

Safety: Technical Output 1 – Permanent hazards are marked in accordance with RTS-5 and MOTSAM.

Accessibility: Technical Output 1 – Signage is fit for purpose in providing direction and guidance to road users and complies with RTS-2 and MOTSAM.

**Delivery**

Currently traffic services is delivered through two maintenance and renewal contracts.

**Table 49 - Current Contracts for Delivery of Traffic Services**

Contract Name	Activites
General Roding Maintenance	<ul style="list-style-type: none"> <li>• Sight rail cleaning and paint</li> <li>• Repairs and replacement of road signs</li> <li>• Annual roadmarking</li> <li>• Painting of pedestrian refuges</li> <li>• Replacement of roadside markers</li> <li>• Painting wooden sign posts</li> </ul>
Streetlight Maintenance and Renewals	<ul style="list-style-type: none"> <li>• Replacement of streetlight columns</li> <li>• Replacement of streetlight cabling</li> <li>• Maintenance of under veranda lighting</li> <li>• Maintenance of LED streetlights</li> </ul>

**Streetlighting**

During the previous long term plan period 2018-2028, the Stratford District Council completed the conversion of 755 Sodium Oxide streetlights to LED's, This conversion provided a saving in the order of \$22,000 per annum for power charges.

During the next long term plan period 2021-2031, our focus will be to undertake a complete inventory of the condition of the free standing streetlight columns, in order to assess their condition and to develop a replacement programme as required.

Currently, under an MOU with NZTA, Stratford District Council manages the maintenance of the streetlights along State Highway 3 and State Highway 43. We are to believe the NZTA have expressed a desire to take this role back in-house however, this is still to be confirmed.

**Road Signs and Road Markings**

The Council owns and maintains road signs and road markings on the local road network. Since changing our contract model from Lump Sum to Measure and Value, we have now captured all of the road markings by virtue of the annual remarking component of the maintenance contract.

All road markings are renewed annually, whilst some intersection controls may have successive remarks during the summer months due to “flushing” of the pavement surface. Obsolete, damaged, sub-standard and non-conforming signs are recorded during monthly inspections and entered into the “routine maintenance pool” held in RAMM Contractor. These signs are repaired or replaced as budgets allow. All regulatory signs are repaired within 24 hours.

## **Environmental Services**

The assets to which this work category applies are, in the main, the roadside berms. While these assets do have more of an aesthetic function (urban roadside berms in front of residential dwellings) they do have an important role in that, the roadside drainage is located within the berm.

The maintenance and management of these assets has a direct connection to our problem statement number two, in that poor maintained roadside berms will cause blockages in the watertables and drainage structures.

The other aspect of this activity is the removal of small slips from watertables. These instances tend to occur in the eastern hill country of our network and can have an adverse effect of backing up stormwater runoff or falling on to the road, causing a hazard for unwary motorists.

This work activity is also used for cleaning roadside litter, resulting from “fly tipping” by some of our community.

In general terms Stratford District Council undertakes two berm mowing rounds per year, approximately six months apart. The timing of these mowing rounds is left to the expertise of the vegetation control contractor, rather than being pre-described in the maintenance contract.

Another aspect of this activity is the management and eradication of nominated “pest plants” as designated in the Taranaki’s Regional Council’s “Pest Plant Management Strategy”. These species of plants are sprayed as part of the routine spraying rounds of the invert of the watertables.

## **Level Crossing Warning Devices**

The management of railway crossings are the responsibility of Kiwi Rail to maintain within 4m either side of the centre line of the railroad tracks. The black on white “railway crossing” sign RG31 to RG33 inclusive and poles are also the responsibility of Kiwi Rail.

Advance warning signs and road markings are Council’s and are maintained as part of traffic services maintenance.

Within the Stratford District, there are 17 level crossings on local roads that cross the railway line from New Plymouth to Hawera (parallel to State Highway 3). There are a further 11 level crossings on the disused rail line which connects Stratford to Ohura. This former railway line has been leased by Kiwi Rail to the Forgotten World Adventures Company for 30 years. The Forgotten World Adventures operate a tourist attraction for visitors who can travel this abandoned rail line on modified golf carts. Maintenance of these 11 level crossings is Forgotten World Adventure’s responsibility by virtue of a condition of their lease.

## **Minor Events**

Management of minor events contributes to the resilience of the network, providing access to our community and road safety.

These events do have an effect on the drainage and functionality of the road network, depending on the severity of the event. For example in June 2015, Stratford District Council experienced a significant storm event that caused \$5.25m of damage /remedial works.

This work category has a direct relationship to the ONRC Customer Outcomes:

Resilience: Customer Outcome 1 – The number of journeys impacted by unplanned events requiring roads to be closed.

Customer Outcome 2 – The number of instances where access is lost due to unplanned road closures.

To a degree this activity also deals with the ONRC accessibility customer outcome, as in some instances the road may not be closed but access by HCVs could be restricted for safety reasons.

The funding level requested for this activity is in line with previous years for our “business as usual” storm events.

### **Network and Asset Management**

This activity covers the business system that operates within the Stratford District Council to manage our roading assets. In brief this covers:

- The funding of the in-house business unit
- The hosting fees for RAMM
- Condition rating surveys for sealed roads and footpaths
- Inspections of structural assets
- Approving overweight permit applications
- Inspections, reporting and programming of works by our maintenance contractors
- Payment of fees associated with GHD’s Max Quality data management software

### **Managing the Asset through ONRC**

Stratford District Council takes a more risk based approach to managing our assets. Whilst in the spirit of the ONRC, the philosophy could be targeted maintenance to the roads with a higher hierarchy.

However, in Stratford District Council’s case, this cannot be used entirely as the problems we are facing are occurring on selected sealed access roads (HPMV routes) and low volume unsealed roads (used by forestry activity). The latter is where our focus will be over the term of this long term plan due to the volume of timber that is being harvested or planned to be harvested over the next six years.

We will use the tools such as roughness surveys, Performance Measure Reporting Tool reports to target sealed roads with high roughness counts. This can be undertaken prior to annual resealing programmes.

We have to have a balanced view of life, in many cases reacting to the issues we find before us, irrespective of ONRC.

Our community do not ask for much, roads that are pot-hole free, drains that are not blocked, streets swept of litter and leaves. ONRC is a foreign language to them, so we will not overly complicate the basic routine maintenance of the roading network. Below is a copy of a letter from a disgruntled rural resident regarding the state of Putikituna Road which services 5 households. This highlights the issues the Council has with allocating budget for repairs and maintenance to low low volume roads.

Stratford District Council

20.8.20

P.O. Box 320

Stratford.

Dear Stratford District Council

Thank you for your letter 13 Aug 2020. In my first letter is said THIS YEAR not since last Aug. I saw Steve Bowden in January and told him about the non waterable/drains and as I said nothing has been done.

I did say there had been a grading where the grades driver drove around the slips/slumps on the Putikituna Rd. Why didn't who ever is suppose to look ~~over~~ after the roads put a digger down first and removed the slips/slumps then, they are still there.

Now to your other points,

Replacement of marker posts - when & where.

Removal of fallen trees - when & where.

Removal of dangerous poplar tree - when & where

Clearing the inlet and outlet of culvert pipes - when & where.

Then you go onto works programmed

Replacing the 1500mm culvert can't be on the Putikituna Rd because you would have to get Horizon consent not T.R.C.

Replacement of numerous culverts. there are really

only 2 to replace and I have grizzled about them for years. As for the rest, the water can't get to them because of blocked waterable & pipe inlets.

Metalling of road - that is debatable.

Clearing the roadside waterables/drains - please don't make the sound a big deal. They haven't been done since before January, as I said I saw Steve Bowden in January & nothing has been done, this is the most important part of road maintenance.

Figure 54 - Letter from disgruntled rural resident



Stratford District Council has a very small budget compared to others, our philosophy is to manage this budget based on the condition and needs of the network and good old engineering know-how, working collaboratively with our maintenance contractors, Fulton Hogan.

## Footpaths

This asset has a direct connection to our strategic problem statement number 3 – Customer Expectations.

The purpose of footpaths is to promote a safe, healthy, convenient corridor for active modes of transport which connects local amenities for the enjoyment of the community.

Some of the lifecycle management issues associated with footpaths are outlined in the table below:

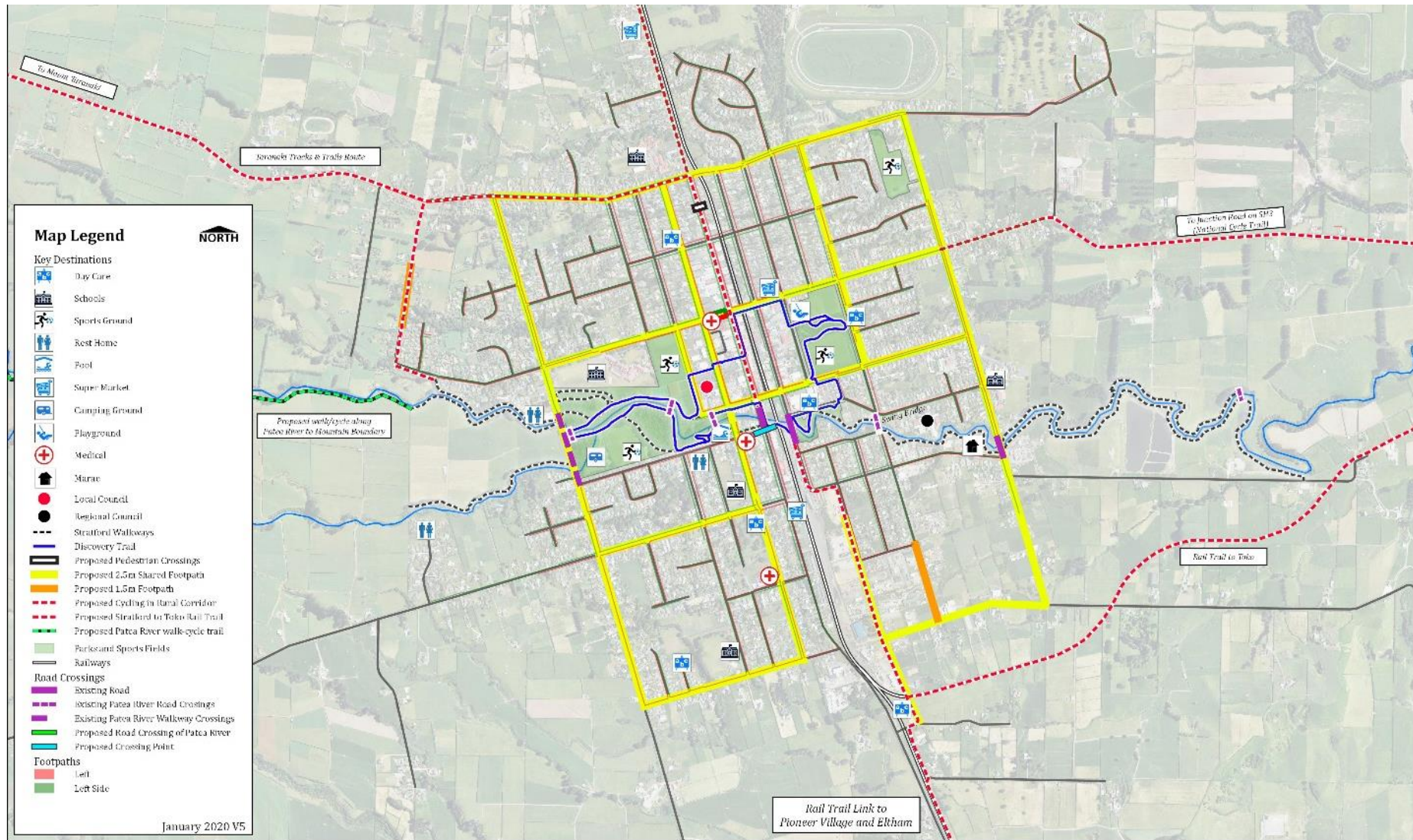
## Key Issues

**Figure 55 - Strategies to Address Footpath Issues**

Key Issue	Strategy to Address Issue
Current width of footpaths does not meet best practice.	49.5km of Stratford footpaths are less than 1.5m wide. As footpaths are renewed there is the opportunity to increase the level of service and widen footpaths.
Funding levels have remained at similar levels over the last six years.	Small increase in funding to accelerate the renewal of footpaths.
Footpath inspections	We undertake an annual inspection of our footpaths and report the overall condition to Council. This inspection identifies the number of defects per block.  Customer satisfaction surveys provide feedback regarding the condition of our footpaths.

Investing in our footpaths is one of Stratford's core assets to provide a safe corridor for multi-model transport. Development of our Walking and Cycling Strategy identifies key footpaths throughout Stratford which will form shared use pathways. These key pathways will connect the local amenities, CBD, schools and recreational facilities together.

Figure 56 - Walking and Cycling Strategy Map – Stratford Town



The results of the 2020 Customer Satisfaction Survey are shown in the table below:

**Table 50** - 2020 Customer Satisfaction Survey Footpath Results

<b>Responses Received = 492</b>	
Good, Very Good, Excellent	73.6%
Fair	21.7%
Poor	4.7%

## 8.8 RENEWAL/REPLACEMENT

### 8.8.1 PAVEMENT RENEWALS

Pavement renewals include the following activities:

- Sealed road surfacing including chipseal.
- Pavement rehabilitation – sealed and unsealed pavements.
- Unsealed road metaling, including the application of base course material to strengthen the road.

### 8.8.2 RESEALS

The Treatment Selection Algorithm (TSA) (RAMM) identifies the length of the sealed network which is to be resurfaced based on age and condition of the current surface treatment.

The TSA is a tool to identify an initial list of suitable sites nominated for resealing. Over and above this, nominated sites can be derived from:

- Customer complaints – scabbing, flushing
- Roughness – rating surveys (bi-annual)
- Low skid resistance – SCRIM test results
- Previously sealed sections of road – 1<sup>st</sup> coat seals on pavement rehabilitation sites
- Overdue reseal sites. Approximately 25% of our sealed network is more than 2 years overdue for another reseal.
- Other sites as identified during routine inspections

At present the average age of our seal is approximately 13 years, which is similar to the average age for the region, rural districts and national trends. In order to address this and to increase the life of our reseals, we are promoting two coat seals where the design suggests is beneficial, along with reducing the quantity of resealing that we undertake.

At present one of our strategic problems is the increasing number of HPMV permit vehicles using defined routes within Stratford. This has led to an accelerated deterioration in the pavement on those routes, thus requiring strengthening or rehabilitating.

Moving forward for the term of this Long Term Plan, the recent technical audit identified an issue with overdue reseals. The concern is, should this continue, we will have further deterioration of our pavements. The auditors have suggested we increase our reseal length. In order to keep rate increases manageable we plan to reseal 30kms per annum. As pressures on other budgets reduce, this length could increase in successive LTP periods.

Chipseals will remain the most predominant resurfacing type used in Stratford District Council, as we have little call for asphaltic surfacing. If we do use asphaltic concrete, these will be specific sites, such as high stress intersections or commercial areas.

### 8.8.3 SEALED PAVEMENT REHABILITATION

Pavement rehabilitation is carried out when this provides the minimum whole-of-life cost to strengthen a road pavement for a period of 25 years, compared to traditional maintenance activities, including reseals.

Our current philosophy is to identify candidates for pavement rehabilitation that are exhibiting the following defects:

- Excessive wheel trenching/rutting.
- Pavement failures that will require dig outs.
- Surface cracking that allows water to permeate the foundation of the road.
- Evidence of surface straining from the pumping action of base course through the failed road surface.
- Poor ride quality – road roughness.
- General shape of the road surface – undulation, poor ride quality for HCVs.
- Previous maintenance historical costs/expenditure for the section of road to be rehabilitated.

Where possible and at a reasonable cost we review the condition of any culverts with the intention of replacing them as part of the rehabilitation project. Similarly, we take the opportunity to improve the road's geometry, both vertically and horizontally so that we improve the safety of the road corridor.

In some instances we will combine pavement rehabilitation with low cost/low risk improvements to provide localised safety improvements, such as road widening, or horizontal and vertical curve adjustments.

Based on the current knowledge of our network, future pavement rehabilitation projects will focus on defined HPMV routes. These routes are:

- |    |                               |   |
|----|-------------------------------|---|
| A. | State Highway 3               | Monmouth Road, Cardiff Road, Opunake Road<br>- Palmer Road<br>- Manaia Road |
| B. | State Highway 43              | Beaconsfield Road - State Highway 3 (Midhirst)                              |
| C. | State Highway 3<br>(Inframax) | Hills Road - Orlando Street - Warwick Road - Cordelia Street                |
| D. | State Highway 3               | Hills Road - Orlando Street (Allied Concrete)                               |
| E. | State Highway 3<br>Hogan)     | Swansea Road - Cloten Road - Claudius Street (Fulton                        |
| F. | State Highway 3               | York Road (Vickers Quarry)  |
| G. | State Highway 3               | Cheal Road - Skinner Road - State Highway 43                                |
| H. | State Highway 3               | Climie Road (entire length)   |

### 8.8.4 UNSEALED ROAD METALING

With an unsealed road length of 207km, assuming an average width of 4.50mtrs, applying a 100mm layer of metal to the roads we aim to complete 24kms of re-metalling each year. This equates to 11,000m<sup>3</sup> of metal used.

This activity is part of our routine maintenance and renewal programme, to maintain the shape and integrity of the unsealed road network.

Many of these unsealed roads serve as access roads to forestry blocks. With the recent increase in forestry activity, partly driven by the price of timber, as well as the age profile of the forests, this work category is under increasing demands.

The map below shows graphically the location of exotic pines planted through the district. We have estimated this is a total area in the order of 10,000ha of timber to be harvested during the next five to ten years.

At the present time, we have active forestry harvesting on Junction Road, Mangaoapa Road and Puniwhakau Road. All three of these roads are unsealed.



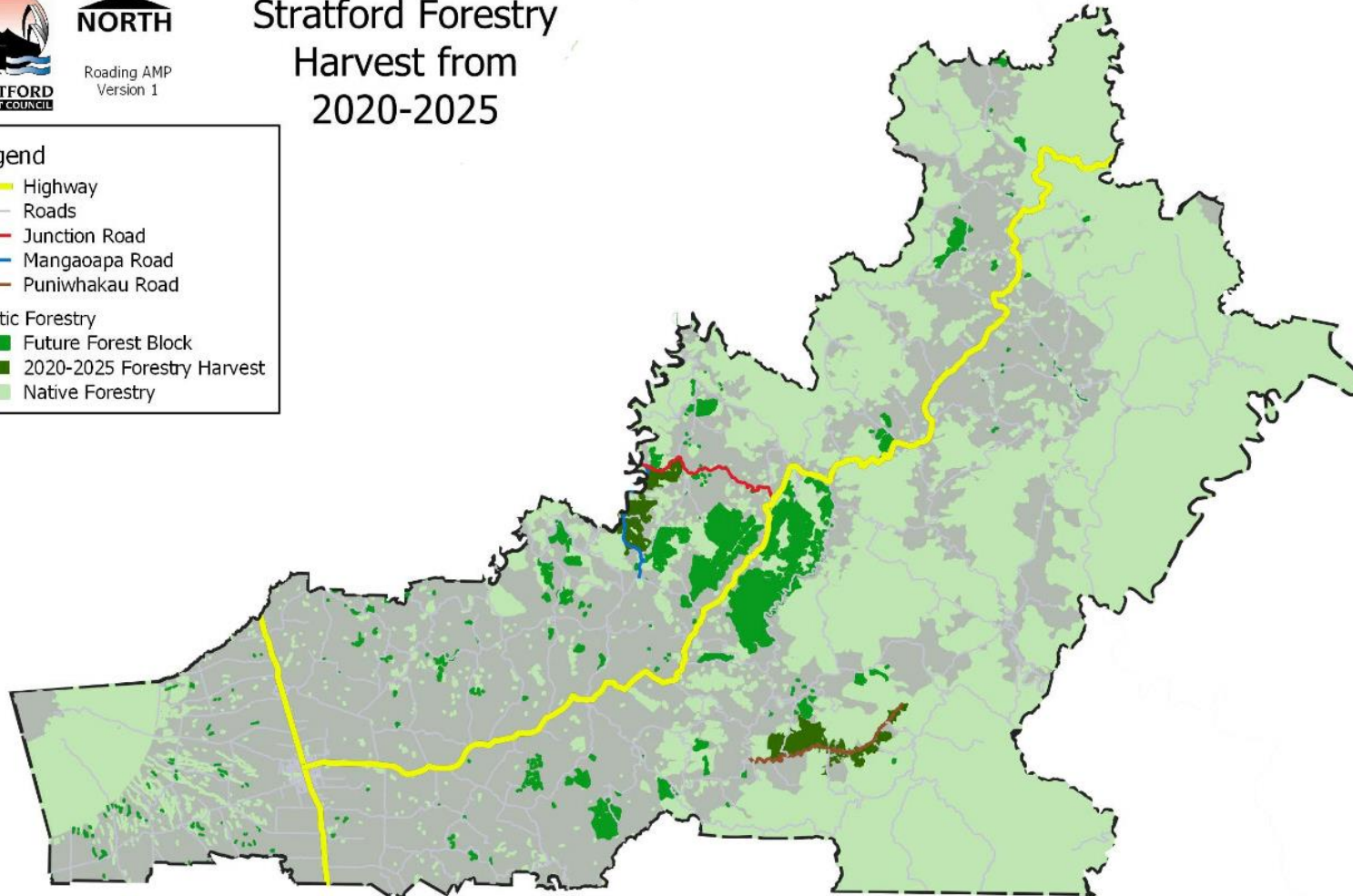
**NORTH**

Roading AMP  
Version 1

### Stratford Forestry Harvest from 2020-2025

**Legend**

- Highway
- Roads
- Junction Road
- Mangaopa Road
- Puniwhakau Road
- Exotic Forestry**
- Future Forest Block
- 2020-2025 Forestry Harvest
- Native Forestry



The information provided is an indication only and needs to be validated in the field. Stratford District Council accepts no responsibility for errors or omissions for loss or damage resulting from the reliance or use of this information. Cadastral information is derived from LINZ's Digital Cadastral Record System (CRS) CROWN COPYRIGHT RESERVED.

**Figure 57 - Map of Roads with Forestry Blocks Being Harvested in the Next 5 Years**

### 8.8.5 DRAINAGE RENEWALS

This activity allows for the renewal of Stratford District Council drainage structures, such as roadside watertable, deep open drains, kerb and channel and culverts.

With the change in maintenance contractor in 2019, the unit rate for these renewals have changed. The most notable change is the unit rate per kilometre for renewing roadside watertables. This significant increase has resulted in a change of approach undertaken by Stratford District Council. Previously we had identified 200kms of watertable to be cleaned annually. However this has been reduced to 90kms to take into account the level of funding available and other needs on the network.

### 8.8.6 KERB AND CHANNEL REPLACEMENT

As shown in [Appendix 5](#), we have undertaken a visual inspection of all our urban kerb and channel assets. These have been given a ranking between 1 and 5, with 1 being excellent and 5 very poor. The purpose of this exercise is to develop a five year replacement programme for our maintenance contractor. Based on this assessment we have identified 20kms of kerb and channel in a very poor to average condition.

Based on current funding levels and contract rates, this will take in the order of eight (8) years to replace.

### 8.8.7 CULVERTS

The Stratford District Council is responsible for the upkeep of 2950 culverts of various sizes, it is our intention to replace 720m of culverts annually. This quantity will vary depending on the size and complexity of the replacement, along with the adherence to resource consent conditions from the Taranaki Regional Council or Horizons Regional Council. This includes the water drives throughout the district. Below is an example of a water drive on Beaconsfield Road.



### 8.8.8 STRUCTURES

Following the inspection of our “back country” bridges in 2020, we have established a bridge replacement programme for zero to 10 years.

Of the seven bridges nominated, six of them are located in the back county of our network. The bridges nominated for replacement are shown in the table below:

**Table 51 - Bridges nominated for replacement**

Bridge Number	Road Name	Date Constructed	Cost of Replacement
0065/0570	Mangaehu Road	1950	\$400,000
0149/0014	Tapuni Road	1915	\$300,000
0139/0012	Mountain Road	1945	\$200,000
0013/0497	Brewer Road *Galvanised Armco Culvert	1985	\$300,000
0064/1764	Upper Mangaehu Road *Galvanised Armco Culvert	1982	\$300,000
0147/1016	Matau North Road	1953	\$200,000
0019/0198	Climie Road *Galvanised Armco Culvert	1975	\$300,000

With regard to replacing components of these bridges, nothing of significance was noted in the inspection reports. The majority of the items noted are general maintenance issues, such as cleaning, replacing rotten timber handrails and painting the end of the bridges for better visibility.

### 8.8.9 TRAFFIC SERVICES

This activity relates to the replacement of road signs, sight rails and streetlights.

Stratford District Council has completed the conversion of the 70 watt SON streetlights to LEDs. We will not focus on inspecting the streetlight columns to develop a replacement programme, based on the level of funding available.

Road signs and sight rails are replaced as and when noted by the routine inspections of the network.

### 8.8.10 FOOTPATHS

Footpath renewals are defined as the replacement of continuous sections exceeding 20m in length. Where possible, Stratford methodology is to consider replacing the footpath along an entire block if the condition of the footpath can justify that decision. In many cases this will not be the case, so the minimum length of 20m will apply.

The types of renewal work undertaken to restore footpaths to the required condition are:

- Overlaying with similar material: Careful consideration of threshold levels of private properties is required before this method is used.
- Overlaying the surface with an alternative material such as slurry seal.
- Replacement of the surface by removing it and replacing it with either concrete or asphaltic concrete.

Reconstruction of new footpaths is generally undertaken when:

- It is not practical to overlay the existing surface due to its condition or issues with levels and crossfalls.
- Where the footpath is to be widened.
- Where the footpath is to be re-designed.
- Where different materials are being used.
- Where it is more cost effective to remove a longer length rather than remove small lengths that are a few metres apart.

The required level of renewals will vary depending on:

- The age of the footpath.
- The condition of the footpath.
- Proximity of street trees.
- The cost of on-going maintenance.
- The differing economic lives of various materials used for footpaths.

- Upgrades undertaken by utility companies, for example ultra fast fibre broadband is currently being installed throughout Stratford. Our renewal programme will follow behind the UFFB installation programme.

## 8.9 LOW COST LOW RISK IMPROVEMENTS

As part of our discussions with Councillors for the 2018-2028 Long Term Plan, the Council elected not to fund for new kerb and channel or new footpaths where none previously existed, This decision was taken in order to reduce the impact on household rate increases.

This work category will be used to undertake the following work streams:

- Road Safety Improvements
- Walking and Cycling Initiatives
- Upgrade to the Whangamomona Road

With regard to bridge and retaining wall renewals, these have been included in a new funding work category, 216.

### Bridge Strengthening Programme

From the initial desk top undertaken in 2014/15, we have identified 33 bridges that do not meet the requirements of 50Max. In 2016 we replaced one of these structures on Ahuroa Road. The remaining 32 bridges are being assessed for 50Max with an outcome of either:

1. Suitable for 50Max.
2. Unsuitable, therefore “posting” with an acceptable weight restriction.
3. Possible bridge strengthening programme in successive LTP periods, depending on the location of the bridge in question.

At the present time we have not allowed in our forecasting or budget provision for strengthening the bridges which are incapable of meeting the 50Max or HPMV provisions.

**Table 52 - Bridges and Estimate Replacement Dates**

Bridge Location ID Number	Road Name	Replacement Date
0002/0033	Ahuroa Road	2016
0006/0071	Barclay Road	2042
0010/0915	Bird Road	2040
0447/0004	Mangaehu Road - Buchanan's Access 10,000 kg (Axle); 10 km/hr (Speed limit)	2052
0446/0002	Upper Mangaehu Road - Curtis's Access	2053
0024/0017	Denbigh Road	2048
0149/0014	Tapuni Rd Bridge – Will Hopkirk (not posted but assessed to 30T capacity)	2022
0147/1016	Matau North Rd No. 5 - Jensen's Bridge – 3,000 kg (Axle); 10 km/hr (Speed limit)	2028
0033/0266	Finnerty Road	2069
0154/0005	Upper Mangaehu Road – Ford's Access	2053
0155/0010	Lower Kohuratahi Road – Gower's Access	2037
0048/0002	Jury Road	2052
0056/0026	Kota Road	2062
0133/0203	Lower Kohuratahi Road – Bellringer's Access 1,500 kg (Axle); 10 km/hr (Speed limit)	2033
0146/0011	Matau Road	2045
0153/0017	Mangaehu Road – McBride's Access 4 Tonne (Axle); 10 km/hr (Speed limit)	2034
0134/0375	Mt Damper Road 4,000 kg (Axle); 10 km/hr (Speed limit)	2035
0078/1118	Opunake Road	2060
0078/1566	Opunake Road	2055
0088/0025	Prospect Road - Culvert	2055

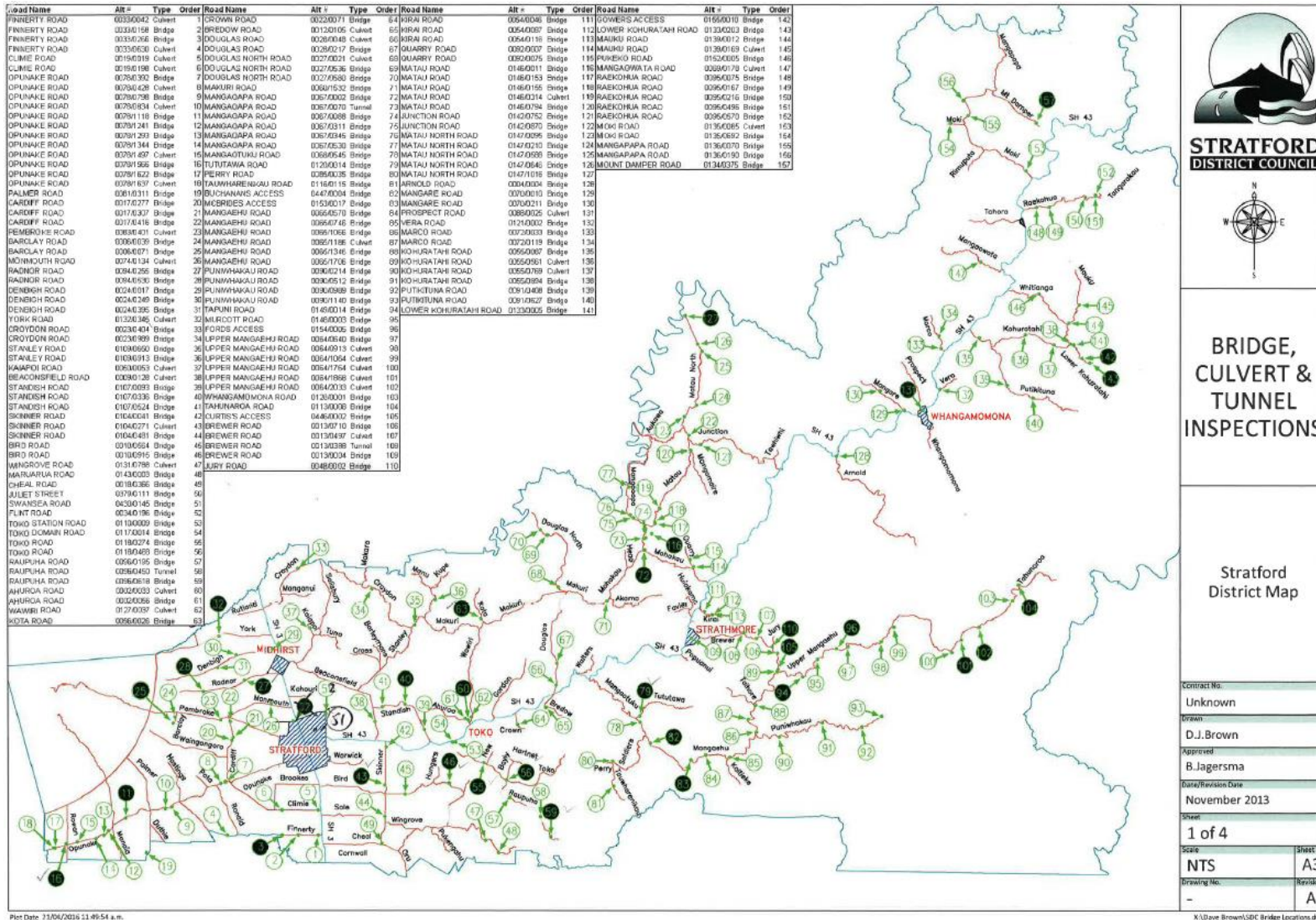


Bridge Location ID Number	Road Name	Replacement Date
0094/0255	Radnor Road	2045
0094/0530	Radnor Road	2045
0096/0618	Raupuha Road	2062
0104/0271	Skinner Road - Culvert	2035
0107/0336	Standish Road	2049
0113/0008	Tahunaroa Road	2035
0118/0274	Toko Road	2060
0118/0468	Toko Road	2060
0120/0014	Tututawa Road	2046
0064/1868	Upper Mangaehu Road - Culvert	2035
0064/2033	Upper Mangaehu Road - Culvert	2040

Upon completion of the assessment of the bridges in table 52 above, any strengthening works will be funded in the future long term plans under work category 216. The analysis for those structures will be funded through work category 151, Network and Asset Management.

The following is the map of the locations of the bridges incapable of meeting the 50max or HPMV provisions.

Figure 58 – Stratford District Bridge Map



## Footpaths

Stratford District Council has identified 16km of urban streets where no footpaths exist. Given Councillors decision not to fund new footpaths, this will remain the case for this long term plan period.

## Walking and Cycling Strategy

The purpose of the Walking and Cycling Strategy 2020-2050 ('the Strategy') is to provide a framework to increase walking and cycling participation and safety in the Stratford District and to develop walking and (in particular) cycling opportunities for tourism. This 30-year Strategy focuses on walking and cycling to work and school, for recreation and increasing tourism opportunities.

The strategy will provide a framework to guide Stratford District to:

- 1) Develop a safe, convenient, attractive and integrated network for walking and cycling;
- 2) Encourage and support people to choose walking and cycling for an active healthy lifestyle and an improved environment; and
- 3) Ensure that strategies, policies, plans and practices for Stratford include and support walking and cycling.

The social, environmental, economic and health benefits of walking and cycling are well understood, and there is increasing support and investment for the development of walking and cycling infrastructure.

There are two main aspects to the strategy. The first is providing community infrastructure to ensure safe and attractive cycling and walking opportunities as a transport choice in Stratford and the district's smaller towns. The second is an identified desire for the district to take advantage of tourism opportunities, particularly for cycling.

Providing safe and connected community walking and cycling networks will take time and money, and this strategy provides Stratford with priorities for investment over the next 30 years. This district also needs to position itself to take advantage of existing opportunities and partnerships and create new opportunities as they arise, to maximise the benefits from the investment in the strategy and infrastructure.

Subsequently, an action plan will be developed which provides a framework that can be applied to achieve the objectives as set out in this strategy.

This Strategy links to numerous strategies and plans, such as:

- The Rooding Activity Management Plan (3 year cycles) – This signals to NZTA the potential funding requirement from the Agency to develop the infrastructure and associated educational programmes.
- The Long Term Plan (10 year cycles) – This is the District Council's plan for the following 10 year period. This plan is Council's vision for the next 10 year period, which covers subjects such as; the services Council provides, proposed rate increases, budgets for each service, any projects, maintenance and renewals of council's assets along with revenue generation.
- Infrastructure Strategy – A look into the future (30 years) for all planned capital works and associated costs. The information in the Strategy will be drawn into the Council's Long Term Plan for the purposes of funding the projects within the Strategy.
- Regional Land Transport Plan (5 year cycle) – This reflects the maintenance and renewals programmes from the three territorial authorities Activity Management Plans, as well as the State Highway programme for the period. This plan also incorporates any strategic projects which are important to the region, for example Awakino Tunnel Bypass, Mt Messenger Bypass and State Highway safety projects.
- National Land Transport Plan (10 year plan) – This is the Government's land transport plan for the country, which collates all of the regional authorities plans.

In summary the table below outlines the estimated cost of the project over the next thirty years:

**Table 53 - Indicative Costs over 30 years for Walking and Cycling Strategy**

Activity	Year 0-10 Costs	Year 11 – 20 Costs	Year 21 – 30 Costs
Safe Walking and Cycling Networks	\$2,000,000	\$1,000,000	\$800,000
Provision of storage facilities	\$50,000	\$50,000	\$50,000
Providing initiatives to encourage walking and cycling	\$750,000	\$500,000	\$500,000
New or improved crossings to Patea River and State Highways	\$300,000	\$150,000	\$150,000
<b>TOTALS</b>	<b>\$3,100,000</b>	<b>\$1,700,000</b>	<b>\$1,500,000</b>

The table above indicates a high level of investment for the first 10 year period. The reason for that is this is a new strategy for Stratford District, therefore in order to achieve the desired result of a significant update in walking and cycling, the Council has to show leadership to promote this alternative mode of transport.

This strategy will meet one of the Government’s strategic goals in the draft Government Policy Statement for Land Transport 2021/31 namely Better Travel Options and Climate Change.

**Upgrade of Whangamomona Road**

The Whangamomona Road from RP1.90 to RP 18.35 has been maintained over the last 20 years by WRAG, since the Council ceased maintenance over 77 years ago. Legal advice received is that, given that it is a public road that was once maintained by the Whangamomona County Council up to 1942, the Council retains legal obligation and must take responsibility for the future of this unmaintained section of Whangamomona Road.

With the Republic of Whangamomona attracting a unique tourist opportunity for overseas visitors, the “Whanga” Road is an important link to Aotuhia Station and the Bridge to Somewhere. This complements the “Realising the Republic” and “Stratford 2035 Making it Real” projects.

Prior to 1942 the “Whanga Road” was maintained by the then Whangamomona County Council from State Highway 43 (adjacent to the Whangamomona Hotel) to the sheep station at Aotuhia covering a distance of 18.35 km. The reason why 1942 is so significant in the history of Whanga Road, is that this was the year when a major storm occurred in this part of Eastern Taranaki. As a result there was significant damage to the road from the resulting flood waters. The Government closed the road at the time, as the Government considered the cost of repairs were too high. The flood waters were so high, a tree trunk carried by the flood waters, became lodged in the superstructure, just under the deck, of the Bridge to Somewhere.

It was not until 1980 that the Government gave permission for the Upper Mangaehu Road to be extended to provide an alternative access to the Aotuhia sheep station. The extension of this road was subsequently undertaken by the Stratford District Council.

As an alternative route to Aotuhia had been approved and constructed, the Stratford District Council stopped maintaining the Whanga Road from a point 1.90km south of State Highway 43 to the Aotuhia sheep station, or a distance of nearly 16.5km.

Concerned about the lack of maintenance and the fact that the road would fall into disrepair, in 2001 a local group of enthusiasts wanted to keep the Whanga Road open for public access. This resulted in an Incorporated Society being formed, called the Whangamomona Road Action Group or WRAG for short.

In February 2019, WRAG were invited to a Council workshop on the subject of the Whanga Road, to explain their origins, what WRAG believed in and their purpose and to seek the support from the Stratford District Council to continue with the maintenance of this public road. During this workshop WRAG put forward several points that related to the importance of the road. These were:

- WRAG cannot obtain grants from TSB or TET for maintenance activities.
- There is approximately \$2000 collected in the donations box annually at the Whangamomona Hotel.
- There have not been any serious or major H&S incidents on the road in the last 20 years since their inception.
- Lots of cycling and walking groups use the road.
- The road is nationally recognised as a 4x4 track/trail.
- Provides access for bee keepers and local farmers.
- Provides access to a Department of Conservation reserve which covers approximately 9.50km or just over 50% of the total length of the road.
- The road is unofficially closed through the winter months and it is not used by the recognised 4x4 club members.

## Optioneering

At a further workshop in March 2019, Council officers discussed the legal obligations of the Stratford District Council with specific bearing on the Whanga Road, along with various other options for elected members to consider. The options discussed at this workshop were:

- Close the road;
- Change the status of the road to an esplanade reserve;
- Do nothing, WRAG continue to maintain, raising funds were they can;
- Take back the maintenance of the road, but at a reduced level of service to retain the character of the road; and
- Take back the maintenance of the road, along with significant financial investment to upgrade the road to an unsealed road standard.

On the 24 September 2019 a report was put before the Policy and Services Committee to decide the future of the Whangamomona Road. The options considered in the report covered:

- Do nothing, WRAG continue to maintain the road;
- SDC imitates a Road Stopping process;
- SDC takes over the maintenance of the road;
- SDC creates a Bylaw specific to the Whanga Rd that restricts use and times the road is open for use.

The purpose of the discussion, early in the LTP time frame is to ask elected members for direction regarding what options they would like to see further investigated. The scope and scale is as follows.

At this stage, 3 Options have been considered. Further discussion may highlight other intermediate options for consideration. Option one, whilst it is an option, this is not recommended as SDC has a legal obligation to maintain the Whangamomona Road.

Of the four options listed above, Council recommended the creation of the Bylaw to take effect from 1 July 2021.

**Table 54 - Options for Upgrade of Whangamomona Road**

	Option	Description	Capital Cost (\$)
1	Option 1	Do Nothing. This not a recommended option.	0
2	Option 2	Upgrade the Whangamomona Road by improving drainage, pavement, removing soft spots and repairing structures.	\$500,000 over the next 3- 5 years
3	Option 3	As option 2 above but over a longer time period.	\$500,000 over the next 10 years.

**Note:** Discussions with the Planning and Investment team at NZTA in September 2018 clearly indicated the requirement for NZTA to co-invest in any potential improvements required the following:

- *The economic wealth generated through tourism, farming, recreational activities that make use of the road, should be greater than the cost to improve the road;*
- *Annual maintenance costs can be charged to existing maintenance work categories;*
- *It would be preferable if the improvements were undertaken in one year rather than over several years;*
- *If the improvement costs are less than \$1,000,000 the improvements can be assigned to the Low Cost Low Risk Improvements work category, thereby negating any the need for a Business Case and national moderation;*
- *The above dollars are total amounts, therefore this would be co-funded by NZTA by 61% or \$305,000.*

### **Current Issues**

Current issues include the following:

- This road is a tourist attraction in its own right.
- Nationally recognised as an off road 4x4 route by registered 4x4 clubs.
- Good walking and mountain bike route.
- Used locally by farmers and bee keepers.
- Provides access to Department of Conservation land.
- There are five bridges and two tunnels located on the road. Some of the structures do require some extensive maintenance.
- Walter Pease has recently undertaken some maintenance on the road. This was funded by WRAG, the National 4x4 club and the Toko 4x4 club.
- SDC preference is for a local contractor to undertake the upgrade works as well as the annual maintenance due to his knowledge of the road, topography and passion for the Republic.
- Review the bridge carrying capacity for two bridges (Arnold and Miro Streams) to strengthen them. They are currently posted to a limit of 5 tonne gross. This will restrict routine maintenance operations.
- Backlog of routine maintenance work required on the road and bridges, which can be addressed as part of the upgrade project.

### **Future Improvement and Maintenance Requirements**

As this road has been un-maintained by the Council since the 1940's, it would be prudent to have an assessment of the structures located on the Whanga Rd.

In 2017 SDC commissioned Redjacket Consultants to undertake an Engineering Assessment of the Whanga Road. The Stratford District Council identified the potential growth in the use of the Whanga Rd through tourism, 4x4 clubs, tramping, mountain bike clubs and for general recreational purposes. This report identified numerous improvements that would be necessary to upgrade the road in order for it to be used for light vehicles. Within the body of the report, a schedule of quantities listed earthworks, drainage improvements, and pavement construction, along with an engineer's estimate of \$1,361,500. Over and above this estimate was a further \$170,000 to repair the structures along the road, making a total cost of \$1,531,000.

In September 2018 a council officer was invited to attend the Whanga Road Action Group AGM. At this meeting there was a discussion concerning the costs to upgrade the road. The sum above was mentioned at the surprise to the members of WRAG and also the some of the residents of Whangamomona that attended the meeting. In their view, this cost was un-necessary, in their view costs in the order of \$500,000 would be more appropriate.

Once the initial investment of \$500,000 has been completed over the term of this LTP, we are suggesting an annual maintenance cost of \$40,000 - \$50,000 to be included in our routine roading maintenance budgets that are co-funded by NZTA at 61%. SDC share of this would be in the order of \$15,600 - \$19,500 as a maximum amount.

Should any saving be made on the maintenance of the Whanga Rd, these savings can be re-invested in the remainder of the roading network of the Stratford district.

## Future Proofing

This is an opportunity to plan for the future and assess which of these options can deliver on wider benefits to the District while achieving the community outcomes in the LTP. Wider benefits include:

- Regional benefit;
- Higher level of service to the community;
- Stimulus for growth;
- Attracts Stratford as a destination, either to live, work and play
- Increase in tourism to the Whangamomona area of the district.

## Recommendation

With council's Stratford 2035 project and "Realising the Republic" in order to grow the tourism industry locally, I would recommend the Council approves option 2. With the knowledge that SH43 will be sealed as result of Government funding, there is likely to be a significant increase in the number of tourists, which will visit the district travelling SH43 through the Tangarakau Gorge. With this increase, it is reasonable to presume, a fair percentage will stop off at Whangamomona for a rest break, or stay overnight in the Hotel/local Airbnb's and visit the Whangamomona Road. To seize on this opportunity to upgrade the road, providing a "story" along the old Whangamomona Road would embellish the visitor's experience of the Republic.

When considering the comments from the Planning and Investment advisor from NZTA, the preference is to undertake the improvement works in one financial year.

SDC can contact local tour operators, farmers and bee keepers to determine the potential economic wealth that is generated by using the Whanga Rd. When a council officer undertook this exercise in September 2018, following the WRAG AGM, there was the potential for \$500,000 per annum to be generated.

On-going maintenance costs would be capped and incorporated into proposed new maintenance budgets for 2021-2031 and beyond.

## 8.10 DISPOSALS

Assets may need to be disposed of for a number of reasons, particularly if they fall under some criteria, including those identified below:

- Underutilisation;
- Obsolescence;
- Cost Inefficiency;
- Policy change;
- Provision exceeds required Levels of Service;
- Service provided by other means (e.g. private sector involvement); and
- Potential risk of ownership (financial, environmental, legal, social).

As part of the lifecycle asset management process, Council considers the costs of asset disposal in the long-term financial forecasts. These costs are generally incorporated in the capital cost of Level of Service increases or asset renewals.

While there are assets that fit under one or more of the above criteria, the Local Government Act provides clear instances when assets can be disposed of. At this time, the Stratford District Council has no plans to dispose of any Roding assets other than those that become obsolete as a result of renewal or upgrading works.

## **9.0**

# **Investment Funding Strategy**



**9.0: Investment Funding Strategy**

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## 9.1 OVERVIEW

Our Investment Funding Strategy (IFS) incorporates our *Funding Impact Statement* and sets out how the Stratford District Council plans to finance its overall operations to meet its objectives now and in the future. A key objective of the strategy is the future-proofing of delivery of the Roothing Activities.

This IFS provides the long term financial forecasting for all Roothing Activities and projects described in this RAMP. The IFS presents the funding sources determined for each of these to ensure a sustainable long-term approach to planning and asset management.

This section presents the Council's Investment Strategy for the Roothing Activity for the next ten years and the financial standards and policies used in developing the strategy.

## 9.2 FINANCIAL STANDARDS

All prospective Financial Statements (financial statements) within this plan comply with the requirements of FRS 42 issued by the New Zealand Accounting Standards Board of the External Reporting Board (XRB), and the New Zealand equivalent of International Reporting Standard for Public Benefit Entities (NZ IFRS PEB), with Council designating itself as a Tier 2 public benefit entity for the purposes of compliance with these standards.

## 9.3 FUNDING AND FINANCIAL POLICIES

The Local Government Act in Section 102 requires that the Stratford District Council '*must, in order to provide predictability and certainty about sources and levels of funding, adopt the funding and financial policies listed*' below:

- A *Revenue and Financing Policy*; and
- A *Liability Management Policy*; and
- An *Investment Policy*; and
- A policy on *Development Contributions (CD) or Financial Contributions (FC)*; and
- A policy on the *Remission and Postponement of Rates on Maori freehold land*.

The Council may also adopt either or both the *Rates Remission Policy* and a *Rates Postponement Policy*.

The Council has adopted all the relevant funding and financial policies described below. These policies guide the funding and financial decisions relating to the management of the Council's Roothing Assets.

### 9.3.1 REVENUE AND FINANCING POLICY

The *Revenue and Financing Policy* sets out Stratford District Council's policies in respect of the funding for capital and operating expenditure. The current policy was reviewed 2015/16 and is due for its next review in 2018, prior to the adoption of the Long Term Plan 2021-2031. The funding sources are detailed in the LTP 2021-2031 and include general and targeted rates, borrowing, grants and subsidies, etc.

### 9.3.2 TREASURY MANAGEMENT POLICY

The Council's Treasury Management Policy incorporates the *Liability Management Policy* and the *Investment Policy* requirements of the LGA. It guides the Council to prudently manage its revenue, expenditure, assets, liabilities, reserves and investments, in the interest of the Council and district ratepayers.

## 9.3.3 DEVELOPMENT AND FINANCIAL POLICY

The Council's *Development and Financial Contribution Policy* is consistent with the purpose as set out in Section 106 of the LGA. The Council does not require *Development Contributions*, however, the *Financial Contributions Policy* meet the requirement as set out in Section 108 (9) of the *Resource Management Act* (RMA) 1991.

## 9.4 FUNDING OUR INVESTMENT STRATEGY

Capital projects and activities carried out on the land transport network, including Renewal or Replacement projects and Level of Service Improvements for the next 10 years will be funded as per the Revenue and Financing Policy, through one or a combination of the following sources:

- Loans;
- Reserves; and/or
- Subsidies/ Grants by other Partners.

Given the present funding regime, the Council anticipates that the Roothing Activity projects will continue to be 100 % funded through NZTA Subsidies and Reserves. Presently, the NZTA *Financial Assistance Rate (FAR)* is 57%. NZTA has indicated that our FAR will increase to 61% for the next three year period. The remaining 39% is funded by the Council through rates and other revenue streams such as fees and charges. The only exception to the base FAR rate is the '*Special Purpose Roads*' maintenance and renewal which is currently 100% NZTA funded. A review of this level of funding is likely to occur during the course of this LTP 2021-2031 period. The likelihood is that this funding will remain at 100% for 2021-24 LTP. Thereafter it is likely to reduce to 61%

For *Emergency Reinstatement (Work Category 141)* the *Business as Usual (BAU)* level of funding is at our base FAR rate of 61%. However, should a significant storm event occur, the Council may apply for an increase in financial assistance depending on the severity of the damage. An example is the storm event of June 2015 when \$5.2m of damage occurred. In this instance NZTA approved a 20% increase in our FAR for the 2015/16 financial year raising the co-investment to 75% for that event.

Stratford District Council is very pro-active in seeking alternate funding sources when government funding is not applicable. Where appropriate, the Council submits funding requests to the *TSB Community Trust (TSB)* and the *Taranaki Electricity Trust (TET)*. The Council also applies to the *Ministry of Business, Innovation and Employment (MBIE)* for tourism grants and initiatives. While the cost of capital projects driven by growth and led by a private Developer will be borne by the Developer, any Council-led projects in support of growth will be cost neutral and funded through Loans.

A summary of Council's Investment Funding Strategy is shown in Figures 59 - 67. Tables 55 - 58 provide the financial projections for the Roothing activity.

## 9.5 RELIABILITY OF OUR INVESTMENT STRATEGY

The Council provides an assessment of the reliability of its Investment Strategy below – overall, the forecast is considered a reliable estimate of the financial investment in the Roothing Activity:

- NZTA has confirmed the short-term funding at a FAR of 61% for the 2021- 2024 year. This is a reliable funding source;
- The Council's remaining funding source of 39% is largely from rates. Rates will be confirmed for the 2021-2024 period via the appropriate processes for inclusion in the LTP 2021-2031. Once adopted, the rates in the LTP 2021-2031 will constitute a reliable funding source for the delivery of Roothing services;
- The short-term budget for Years 1-3 (2021 – 2024) are as approved by NZTA; funding forecast for Years 4 – 10 (2025 – 2031) has been escalated using the BERL inflation rates; and
- The Council does not rely on *Fees and Charges* or *Development Contributions* to deliver Roothing services. Any new demand for new assets to be vested in Council or services will generally be funded by the direct beneficiary of the assets/service.

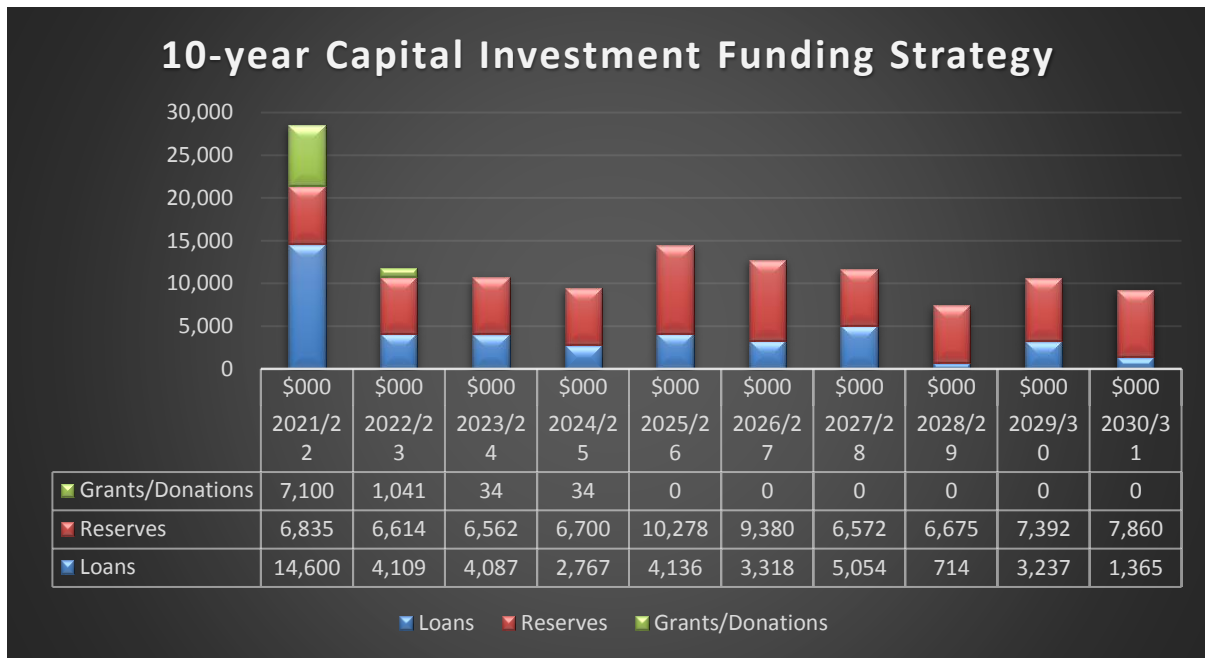


Figure 59 - All Assets Capital Investment Funding Strategy

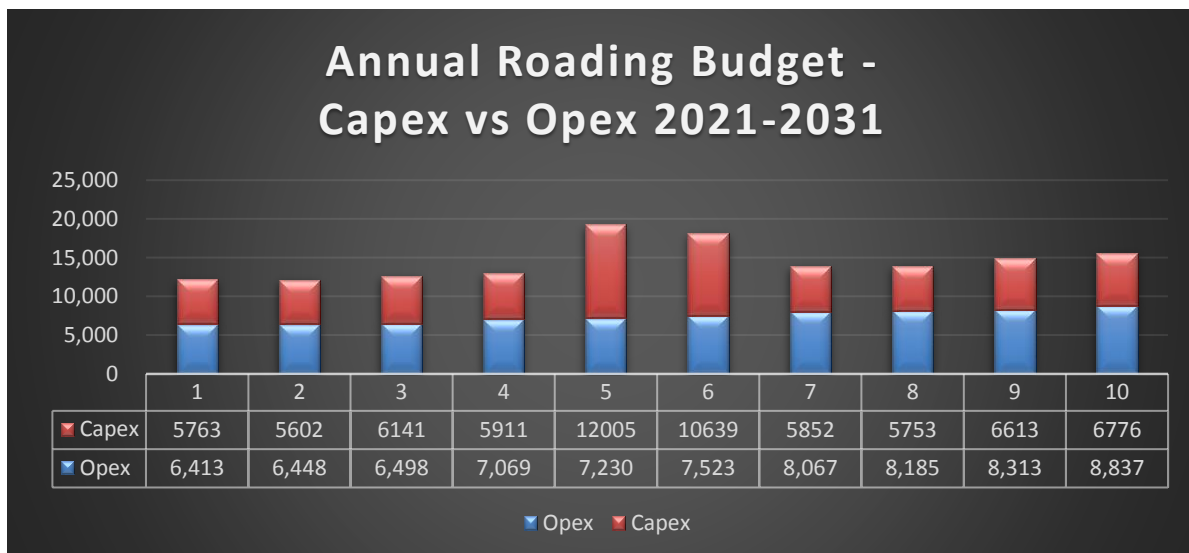


Figure 60 – Annual Roothing Budget – Capital vs Operating Expenditure

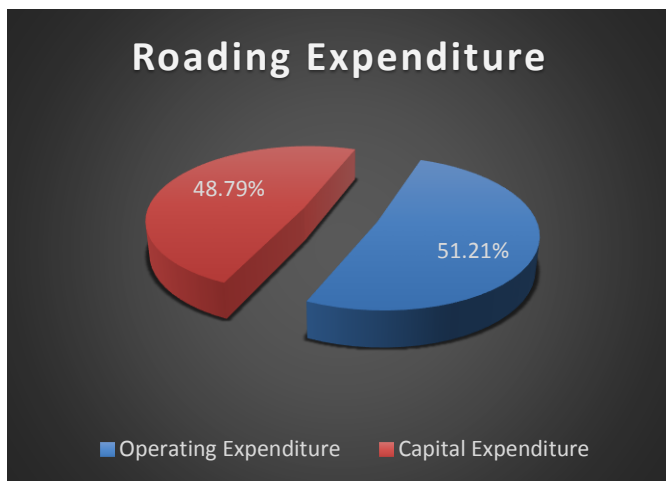


Figure 61- Total Expenditure - Capital vs Operating

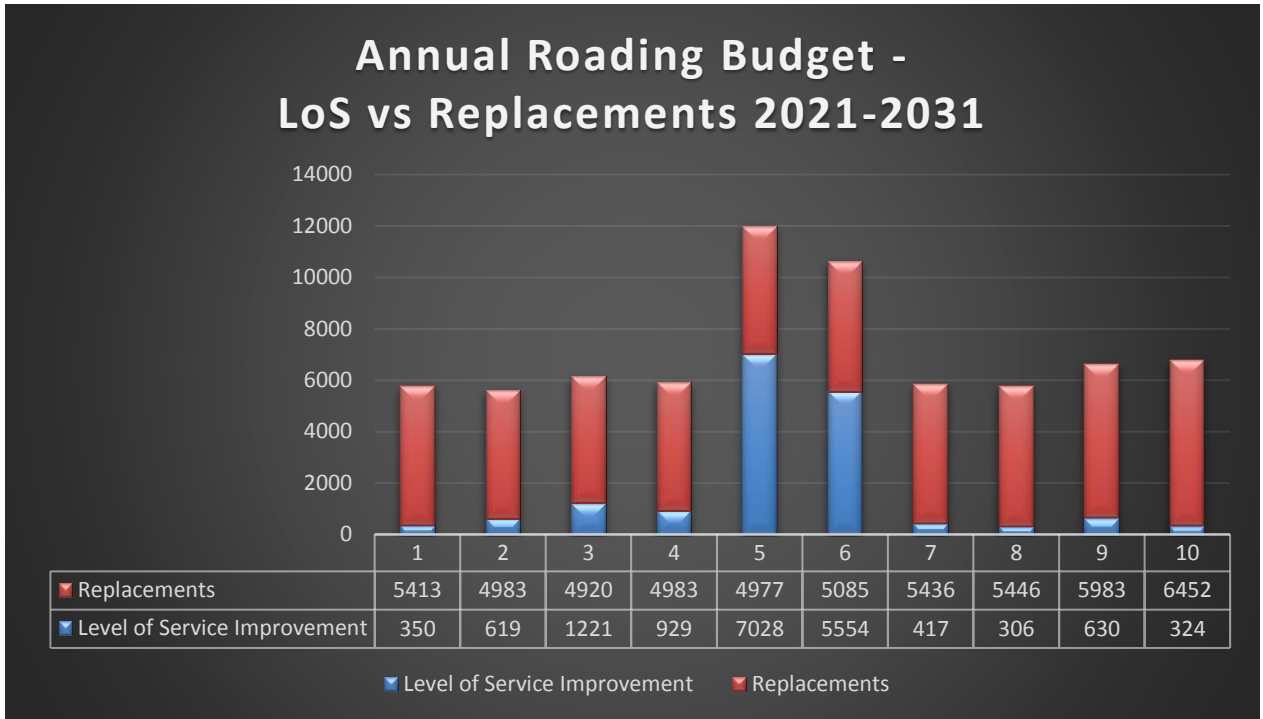


Figure 62: Annual Roding Budget - LoS vs Replacements 2021-2031

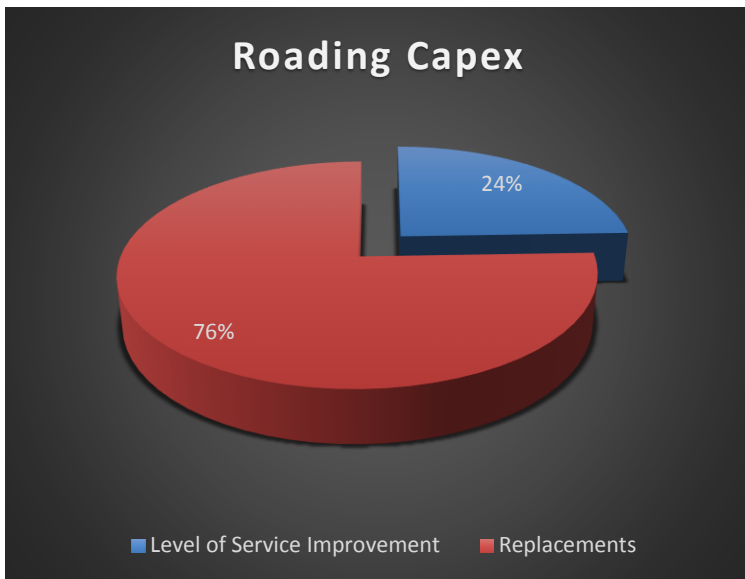
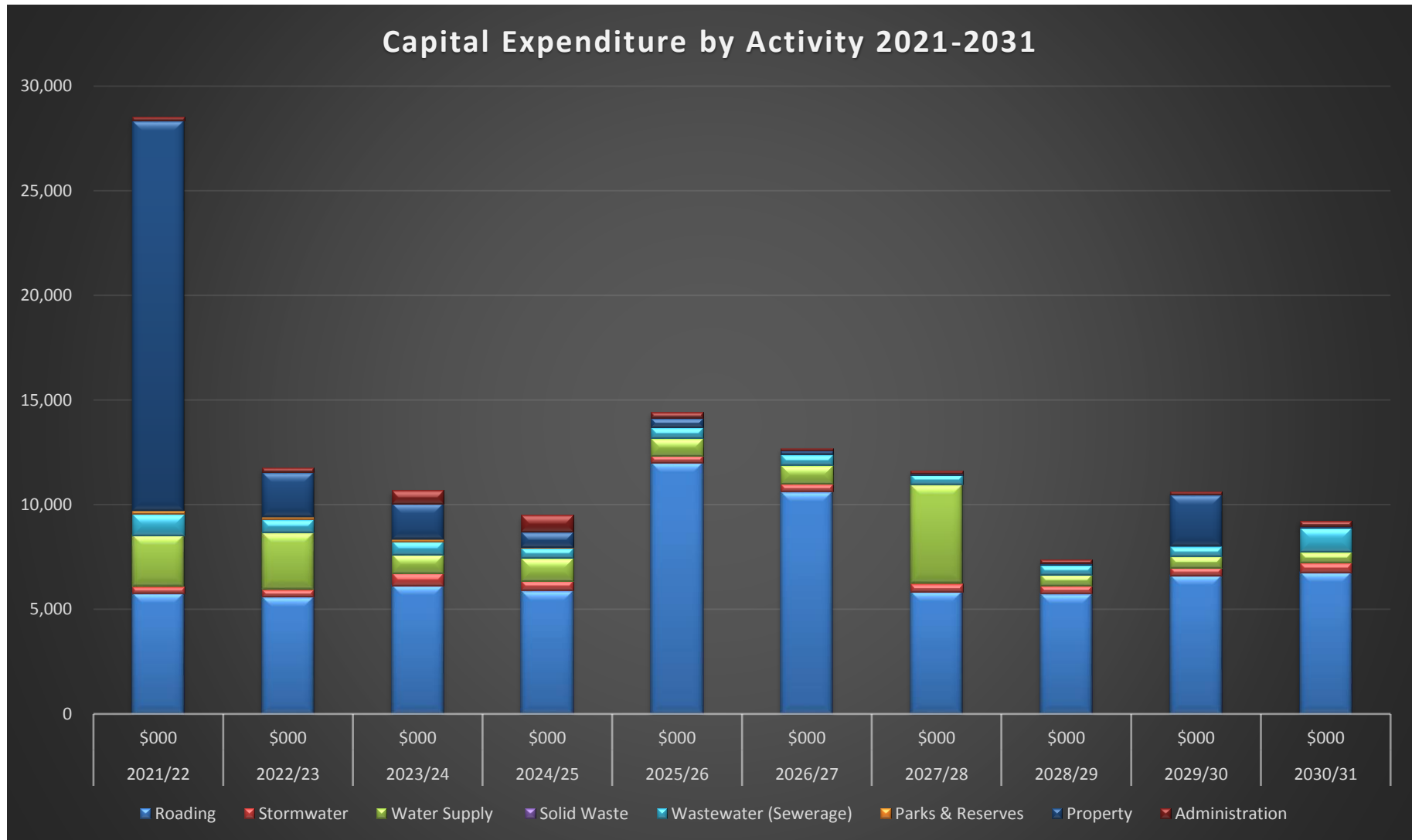


Figure 63: Capital Expenditure - LoS vs Replacement

## 9.6 FINANCIAL STATEMENTS AND PROJECTIONS

Table 55 - Council Level of Service versus Replacement Funding

	Forecast	Projection								
	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
<b><u>Roading</u></b>										
Level of Service Improvement	350	619	1,221	929	7,028	5,554	417	306	630	324
Replacements	5,413	4,983	4,920	4,983	4,977	5,085	5,436	5,446	5,983	6,452
<b><u>Stormwater</u></b>										
Level of Service Improvement	252	292	533	275	283	291	300	310	321	331
Replacements	53	55	56	167	59	61	63	65	67	122
<b><u>Water Supply</u></b>										
Level of Service Improvement	1,780	1,904	369	673	390	401	4,289	37	38	0
Replacements	695	812	510	414	443	496	452	486	502	498
<b><u>Solid Waste</u></b>										
Level of Service Improvement	0	0	0	0	0	0	0	0	0	0
Replacements	0	10	0	11	0	11	0	12	14	12
<b><u>Wastewater (Sewerage)</u></b>										
Level of Service Improvement	800	362	380	273	281	288	238	184	178	839
Replacements	213	252	258	200	228	211	218	262	271	305
<b><u>Parks &amp; Reserves</u></b>										
Level of Service Improvement	97	110	99	69	0	0	0	0	0	0
Replacements	47	0	0	0	0	0	0	0	0	0
<b><u>Property</u></b>										
Meet Additional Demand	1,200	1,025	1,049	0	0	0	0	0	0	0
Level of Service Improvement	17,335	1,112	609	607	442	171	64	63	2,454	68
Replacements	114	6	59	114	7	7	7	7	17	8
<b><u>Administration</u></b>										
Replacements	186	222	621	788	276	121	142	210	153	266
<b><u>TOTAL PROJECTS (excl GST)</u></b>										
	<b>28,535</b>	<b>11,764</b>	<b>10,683</b>	<b>9,501</b>	<b>14,414</b>	<b>12,698</b>	<b>11,626</b>	<b>7,389</b>	<b>10,629</b>	<b>9,225</b>
<b><u>FUNDING</u></b>										
Loans	14,600	4,109	4,087	2,767	4,136	3,318	5,054	714	3,237	1,365
Section sales	0	0	0	0	0	0	0	0	0	0
Cash from Investments	0	0	0	0	0	0	0	0	0	0
Reserves	6,835	6,614	6,562	6,700	10,278	9,380	6,572	6,675	7,392	7,860
Grants/Donations	7,100	1,041	34	34	0	0	0	0	0	0
Rates	0	0	0	0	0	0	0	0	0	0
NZTA Financial Assistance	0	0	0	0	0	0	0	0	0	0
<b><u>TOTAL (excl GST)</u></b>										
	<b>28,535</b>	<b>11,764</b>	<b>10,682</b>	<b>9,501</b>	<b>14,414</b>	<b>12,698</b>	<b>11,626</b>	<b>7,389</b>	<b>10,629</b>	<b>9,225</b>



**Figure 64 - Capital Expenditure by Activity - All Assets**

## Investment Funding Strategy

**Table 56: Roading Expenditure and Funding Projection**

Budget 2020/21 \$000	ROADING	Forecast 2021/22 \$000	Projection								
			2022/23 \$000	2023/24 \$000	2024/25 \$000	2025/26 \$000	2026/27 \$000	2027/28 \$000	2028/29 \$000	2029/30 \$000	2030/31 \$000
<b>6,324</b>	<b>Operating Expenditure</b>	<b>6,413</b>	<b>6,448</b>	<b>6,498</b>	<b>7,069</b>	<b>7,230</b>	<b>7,523</b>	<b>8,067</b>	<b>8,185</b>	<b>8,313</b>	<b>8,837</b>
<b>3,830</b>	<b>Revenue</b>	<b>5,689</b>	<b>5,601</b>	<b>5,943</b>	<b>5,974</b>	<b>9,756</b>	<b>8,990</b>	<b>6,144</b>	<b>6,153</b>	<b>6,754</b>	<b>6,921</b>
<b>2,494</b>	<b>Net Cost of Service</b>	<b>725</b>	<b>846</b>	<b>555</b>	<b>1,095</b>	<b>(2,526)</b>	<b>(1,468)</b>	<b>1,923</b>	<b>2,032</b>	<b>1,559</b>	<b>1,916</b>
<b><u>EXPENDITURE</u></b>											
3,368	Operating Costs	3,350	3,370	3,392	3,660	3,765	3,871	3,983	4,095	4,211	4,330
0	Interest	2	6	13	25	63	122	175	172	171	170
2,805	Depreciation	2,885	2,891	2,901	3,191	3,206	3,323	3,704	3,708	3,711	4,117
152	Allocated Overheads	176	181	191	193	196	207	205	210	219	220
<b>6,324</b>	<b>Total Operating Expenditure</b>	<b>6,413</b>	<b>6,448</b>	<b>6,498</b>	<b>7,069</b>	<b>7,230</b>	<b>7,523</b>	<b>8,067</b>	<b>8,185</b>	<b>8,313</b>	<b>8,837</b>
0	Principal Loan Repayments	3	10	24	40	100	195	233	230	228	226
3,107	Capital Expenditure	5,763	5,602	6,141	5,911	12,005	10,639	5,852	5,753	6,613	6,776
<b>9,431</b>	<b>Total Expenditure</b>	<b>12,179</b>	<b>12,060</b>	<b>12,663</b>	<b>13,020</b>	<b>19,335</b>	<b>18,356</b>	<b>14,153</b>	<b>14,168</b>	<b>15,154</b>	<b>15,840</b>
<b><u>FUNDED BY:</u></b>											
169	Charges for Services	243	248	253	258	264	269	275	280	286	293
3,661	NZTA Financial Assistance	5,446	5,353	5,690	5,716	9,492	8,721	5,869	5,873	6,467	6,629
<b>3,830</b>	<b>Revenue</b>	<b>5,689</b>	<b>5,601</b>	<b>5,943</b>	<b>5,974</b>	<b>9,756</b>	<b>8,990</b>	<b>6,144</b>	<b>6,153</b>	<b>6,754</b>	<b>6,921</b>
2,992	Targeted Rates	3,203	3,026	3,344	3,493	3,859	4,347	4,753	4,831	5,120	5,127
0	UAGC	0	0	0	0	0	0	0	0	0	0
0	General Rates	0	(0)	0	0	0	0	0	0	0	0
1,482	Depreciation funded from Reserves	1,611	1,615	1,621	1,784	1,793	1,865	2,081	2,084	2,086	2,314
1,278	Transfer from Reserves - Capital	2,088	1,928	1,917	1,954	2,012	2,147	2,317	2,318	2,521	2,708
(153)	Transfer (to) from Reserves	(558)	(361)	(648)	(558)	(835)	(1,167)	(1,316)	(1,346)	(1,581)	(1,364)
0	Loan Funding - Capital	137	241	476	362	2,741	2,166	163	119	246	126
0	Grants/Donations - Capital	0	0	0	0	0	0	0	0	0	0
2	Other Funding	9	9	9	10	9	9	10	9	8	7
<b>9,431</b>	<b>Total Funding</b>	<b>12,179</b>	<b>12,060</b>	<b>12,663</b>	<b>13,020</b>	<b>19,335</b>	<b>18,356</b>	<b>14,153</b>	<b>14,168</b>	<b>15,154</b>	<b>15,840</b>



# Investment Funding Strategy

**Table 57 – Work Category Summary – Local Roads**

Work Category Summary												
Activity Class	Expenditure Reporting Lines	Work Category	Description	Status	Last Review	2021/22	2022/23	2023/24	Three-year Total Cost (\$)	Three-year NLTF Cost (\$)	Total Cost Previous NLTP (\$)	
Local road maintenance	Maintain	111	Sealed pavement maintenance	Draft		380,000	380,000	380,000	1,140,000	0	1,994,370	
		112	Unsealed pavement maintenance	Draft		250,000	250,000	250,000	750,000	0	568,911	
		113	Routine drainage maintenance	Draft		370,000	370,000	370,000	1,110,000	0	733,360	
		114	Structures maintenance	Draft		210,000	210,000	210,000	630,000	0	331,065	
		124	Cycle path maintenance	Draft		0	0	0	0	0	0	
		125	Footpath maintenance	Draft		60,000	60,000	60,000	180,000	0	630,494	
		140	Minor events	Draft		354,000	354,000	354,000	1,062,000	0	920,133	
		<b>Sub-total Maintain</b>						<b>1,624,000</b>	<b>1,624,000</b>	<b>1,624,000</b>	<b>4,872,000</b>	<b>0</b>
Local road maintenance	Operate	121	Environmental maintenance	Draft		185,000	185,000	185,000	555,000	0	681,435	
		122	Network service maintenance	Draft		210,000	210,000	210,000	630,000	0	724,766	
		123	Network operations	Draft		0	0	0	0	0	0	
			Rail level crossing warning devices									
		131	maintenance	Draft		28,400	28,400	28,400	85,200	0	48,236	
	151	Network and asset management	Draft		474,500	474,500	474,500	1,423,500	0	1,493,425		
<b>Sub-total Operate</b>						<b>897,900</b>	<b>897,900</b>	<b>897,900</b>	<b>2,693,700</b>	<b>0</b>	<b>2,947,862</b>	
Local road maintenance	Renew	211	Unsealed road metalling	Draft		840,000	840,000	840,000	2,520,000	0	1,741,606	
		212	Sealed road resurfacing	Draft		1,100,000	1,100,000	1,100,000	3,300,000	0	2,329,656	
		213	Drainage renewals	Draft		700,000	700,000	700,000	2,100,000	0	1,156,377	
		214	Sealed road pavement rehabilitation	Draft		750,000	750,000	750,000	2,250,000	0	2,230,840	
		215	Structures component replacements	Draft		415,000	195,000	165,000	775,000	0	494,991	
		216	Bridge and structures renewals	Draft		420,000	452,000	410,000	1,282,000	0		
		221	Environmental renewals	Draft		0	0	0	0	0	0	
		222	Traffic services renewals	Draft		113,000	113,000	113,000	339,000	0	221,395	
		224	Cycle path renewal	Draft		0	0	0	0	0	0	
		225	Footpath renewal	Draft		170,000	170,000	170,000	510,000	0		
<b>Sub-total Renew</b>						<b>4,508,000</b>	<b>4,320,000</b>	<b>4,248,000</b>	<b>13,076,000</b>	<b>0</b>	<b>8,174,865</b>	
<b>Total Local road maintenance</b>						<b>7,029,900</b>	<b>6,841,900</b>	<b>6,769,900</b>	<b>20,641,700</b>	<b>0</b>	<b>16,301,060</b>	
Road to Zero	Road safety promotion	Safety promotion, education and										
		432	advertising	Draft		0	0	0	0	0	0	
<b>Total Road to Zero</b>						<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

# Investment Funding Strategy

**Table 58 - Work Category Summary - SPR**

Work Category Summary											
Activity Class	Expenditure Reporting Lines	Work Category	Description	Status	Last Review	2021/22	2022/23	2023/24	Three-year Total Cost (\$)	Three-year NLTF Cost (\$)	Total Cost Previous NLTP (\$)
Local road maintenance	Maintain	111	Sealed pavement maintenance	Draft		19,000	19,000	19,000	57,000	0	82,788
		112	Unsealed pavement maintenance	Draft		6,000	6,000	6,000	18,000	0	10,400
		113	Routine drainage maintenance	Draft		6,000	6,000	6,000	18,000	0	72,768
		114	Structures maintenance	Draft		0	0	0	0	0	0
		124	Cycle path maintenance	Draft		0	0	0	0	0	0
		125	Footpath maintenance	Draft		2,000	2,000	2,000	6,000	0	0
		140	Minor events	Draft		30,000	30,000	30,000	90,000	0	45,454
		<b>Sub-total Maintain</b>						<b>63,000</b>	<b>63,000</b>	<b>63,000</b>	<b>189,000</b>
Local road maintenance	Operate	121	Environmental maintenance	Draft		75,000	75,000	75,000	225,000	0	142,268
		122	Network service maintenance	Draft		4,000	4,000	4,000	12,000	0	12,742
		123	Network operations	Draft		0	0	0	0	0	0
		131	Rail level crossing warning devices maintenance	Draft		0	0	0	0	0	0
		151	Network and asset management	Draft		10,000	10,000	10,000	30,000	0	19,768
<b>Sub-total Operate</b>						<b>89,000</b>	<b>89,000</b>	<b>89,000</b>	<b>267,000</b>	<b>0</b>	<b>174,778</b>
Local road maintenance	Renew	211	Unsealed road metalling	Draft		10,000	10,000	10,000	30,000	0	0
		212	Sealed road resurfacing	Draft		60,000	60,000	60,000	180,000	0	155,912
		213	Drainage renewals	Draft		10,000	10,000	10,000	30,000	0	0
		214	Sealed road pavement rehabilitation	Draft		0	0	0	0	0	0
		215	Structures component replacements	Draft		0	0	0	0	0	0
		216	Bridge and structures renewals	Draft		0	0	0	0	0	0
		221	Environmental renewals	Draft		0	0	0	0	0	0
		222	Traffic services renewals	Draft		5,000	5,000	5,000	15,000	0	0
		224	Cycle path renewal	Draft		0	0	0	0	0	0
225	Footpath renewal	Draft		0	0	0	0	0	0		
<b>Sub-total Renew</b>						<b>85,000</b>	<b>85,000</b>	<b>85,000</b>	<b>255,000</b>	<b>0</b>	<b>155,912</b>
<b>Total Local road maintenance</b>						<b>237,000</b>	<b>237,000</b>	<b>237,000</b>	<b>711,000</b>	<b>0</b>	<b>542,100</b>

Figure 65 - Asset Management Plan Outline 2021-2024



**Stratford District Council  
Activity Management Plan 2021-24**

**Activity Management Plan outline**

Activity Management Plan outline

Outline	
Unique identifier - Activity ID	134532
Programme name	Activity Management Plan 2021-24
Public name	
Your reference	10 Year Forecast 2021-31 Local Roads

AMP Programme Business Case Upload	
Upload your draft AMP or equivalent supporting documentation which forms the business case to support the programme. Other supporting documents can be attached in the 'Supporting Documents' section.	
Upload the completed and final AMP programme business case	
Are you seeking support for this AMP?	No

**Benefits and measures**

Benefits and measures

Benefits and measures				
Unique identifier - Activity ID		134532		
Benefit and measure summary				
Transport sector outcome	Benefit cluster	Benefit	Quantitative measure(s)	Qualitative measure(s)
<u>Healthy and safe people</u>	1. Changes in user safety	1.1 Impact on social cost of deaths and serious injuries	ONRC-1.1.3.a Safety - Customer Outcome 1: the number of fatal and serious injuries on the network ONRC-1.1.1.a Safety - Customer Outcome 2: collective risk (fatal and serious injury rate per km) ONRC-1.1.4.a Safety - Customer Outcome 3: personal risk (fatal and serious injury rate by traffic volume) ONRC-1.1.3.b Safety - Technical Output 4: loss of control on wet roads ONRC-1.1.3.c Safety - Technical Output 5: loss of driver control at night ONRC-1.1.3.d Safety - Technical Output 6: intersections ONRC-1.1.3.e Safety - Technical Output 9: vulnerable users	
<u>Inclusive access</u>	11. Changes in liveability of places	11.3 Impact on townscape	10.2.3 Spatial coverage - cycle lanes & paths 10.2.4 Spatial coverage - cycling facilities 2.1.1 Access - perception (walking and cycling)	

**10 Year Forecast**

10 Year Forecast

10 Year Forecast										
Unique identifier - Activity ID		134532								
Activity Class	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
<b>Subsidised Activities</b>										
<b>Expenditure (by GPS Activity Class)</b>										
Road to Zero	830,000	575,000	575,000	450,000	450,000	450,000	480,000	480,000	480,000	510,000
Public transport services	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0

Activity Class	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Public transport infrastructure										
Walking and cycling improvements	350,000	350,000	400,000	350,000	250,000	300,000	350,000	250,000	250,000	250,000
Local road improvements	0	0	0	0	0	500,000	7,500,000	7,000,000	0	0
Local road maintenance	7,266,900	7,078,900	7,006,900	7,617,000	7,617,000	7,617,000	8,177,500	8,177,500	8,177,500	9,234,500
Investment management (Incl. Transport Planning)	0	0	0	0	0	0	0	0	0	0
Coastal shipping	0	0	0	0	0	0	0	0	0	0
Rail network	0	0	0	0	0	0	0	0	0	0
<b>Total expenditure</b>	<b>8,446,900</b>	<b>8,003,900</b>	<b>7,981,900</b>	<b>8,417,000</b>	<b>8,317,000</b>	<b>8,867,000</b>	<b>16,507,500</b>	<b>15,907,500</b>	<b>8,907,500</b>	<b>9,994,500</b>
<b>Revenue for subsidised activities</b>										
- Approved organisation revenue	3,294,291	3,121,521	3,112,941	3,282,630	6,168,630	3,458,130	6,437,925	6,203,925	3,473,925	3,897,855
- NLTF revenue	5,152,609	4,882,379	4,868,959	5,134,370	9,648,370	5,408,870	10,069,575	9,703,575	5,433,575	6,096,645
- Other revenue	0	0	0	0	0	0	0	0	0	0
<b>Total Subsidised revenue</b>	<b>8,446,900</b>	<b>8,003,900</b>	<b>7,981,900</b>	<b>8,417,000</b>	<b>15,817,000</b>	<b>8,867,000</b>	<b>16,507,500</b>	<b>15,907,500</b>	<b>8,907,500</b>	<b>9,994,500</b>
<b>Unsubsidised Activities</b>										
<b>Expenditure</b>										
Unsubsidised operational expenditure	201,500	201,500	201,500	230,000	230,000	230,000	240,000	240,000	240,000	250,000
Unsubsidised capital expenditure	0	0	0	0	0	0	0	0	0	0
<b>Total Unsubsidised expenditure</b>	<b>201,500</b>	<b>201,500</b>	<b>201,500</b>	<b>230,000</b>	<b>230,000</b>	<b>230,000</b>	<b>240,000</b>	<b>240,000</b>	<b>240,000</b>	<b>250,000</b>
<b>Revenue</b>										
- Local Authority revenue	201,500	201,500	201,500	230,000	230,000	230,000	240,000	240,000	240,000	250,000
- Other revenue	0	0	0	0	0	0	0	0	0	0
<b>Total revenue</b>	<b>201,500</b>	<b>201,500</b>	<b>201,500</b>	<b>230,000</b>	<b>230,000</b>	<b>230,000</b>	<b>240,000</b>	<b>240,000</b>	<b>240,000</b>	<b>250,000</b>
Any comments on the above forecasts? In years 6-8 for Local Road Improvements we have included a significant fund for the extension to Brecon Rd which includes the construction of two river bridges and a new road linking the the north western suburbs of Stratford to the south western suburbs.										
NZ Transport Agency comments										

## NZTA assessment of AMP

NZTA assessment of AMP

NZTA assessment of AMP	
Unique Identifier - Activity ID	134532
Upload NZTA AMP assessment template	
Assessment of business case rating for AMP	
Summary of assessment of business case rating for AMP	
Provide any recommended conditions if applicable	

## Supporting documents

Supporting documents

Supporting documents	
Unique Identifier - Activity ID	134532

Upload your draft AMP or equivalent supporting documentation which forms the business case to support the programme. Other supporting documents can be attached in the 'Supporting Documents' section.	
Upload the completed and final AMP programme business case	
Upload NZTA AMP assessment template	
Long Term Plan extract	
Procurement Strategy Document	

### Summary of linked component activities

Linked Component Activities	Phase	Status	Organisation	Start Year	End Year
Maintenance, Operations and Renewals Programme 2021-24	Local Roads	Draft	Stratford District Council	2021/22	2023/24
Maintenance, Operations and Renewals Programme 2021-24	SPR	Draft	Stratford District Council	2021/22	2023/24

Figure 66 - Low Cost Low Risk Workbook LTP 2021-2024 - Local Roads

Row Labels	Sum of 2021/22	Sum of 2022/23	Sum of 2023/24	Sum of Current Total Costs (across three years)
R2Z	\$830,000	\$575,000	\$575,000	\$1,980,000
Walking and Cycling	\$350,000	\$350,000	\$900,000	\$1,600,000
(blank)	\$350,000	\$350,000	\$900,000	\$1,600,000
<b>Grand Total</b>	<b>\$1,180,000</b>	<b>\$925,000</b>	<b>\$1,475,000</b>	<b>\$3,580,000</b>

Figure 67 - Low Cost Low Risk Workbook LTP 2021-2024 SPR

Row Labels	Sum of 2021/22	Sum of 2022/23	Sum of 2023/24	Sum of Current Total Costs (across three years)
R2Z	\$15,000	\$15,000	\$15,000	\$45,000
<b>Grand Total</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$45,000</b>

# **10.0**

## **Asset Management Practices and Improvement Plan**

## 10.0: Asset Management Practices and Improvement Plan

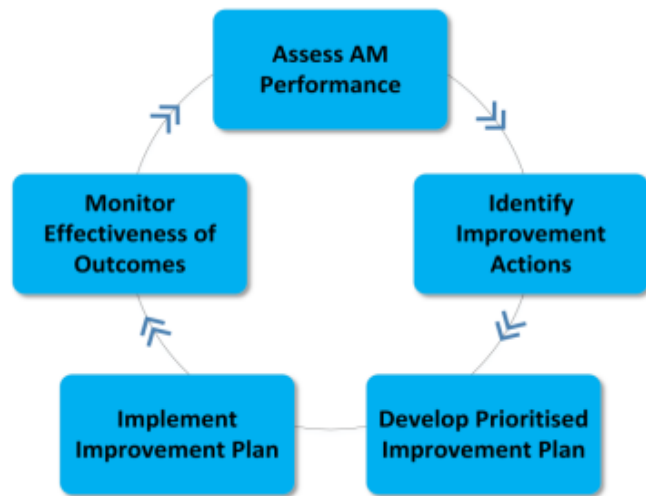
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## 10.1 OVERVIEW

Asset management improvement planning is a process. It enables Council to improve the way it manages infrastructure assets and the services they provide.

The Asset Management Practices and Improvement Plan section identifies the maturity of Stratford District Council asset management practices, improvements made since the last Activity Management Plan review and a plan for future asset management improvements resulting from areas for improvement identified in earlier Sections of this plan.

**Table 59 - Asset Management Improvement Process**



## 10.2 ASSET MANAGEMENT PRACTICES

### 10.2.1 ASSET MANAGEMENT POLICY

Stratford District Council developed and adopted its inaugural Asset Management Policy in 2016. The Policy establishes the first level of Council's asset management framework for managing infrastructure assets in a structured, coordinated, and financially sustainable manner. The objectives of this Policy are:

- Provide for a consistent approach to asset management planning within Council and ensure plans reflect the strategic direction of Council.
- Demonstrate to the community that Council recognises the critical importance of managing the District's assets and related activities in an effective and sustainable manner in order to deliver appropriate Levels of Service to current and future generations.
- Confirm a coordinated process for each asset/activity area that links their contribution to the Community Outcomes with specific Levels of Service performance requirements and desired improvement priorities and strategies.

The Council's Asset Management Policy can be viewed on the Stratford District Council website.

### 10.2.2 ASSET MANAGEMENT GOALS AND OBJECTIVES

Stratford's asset management goals and objectives are guided by the Asset Management Policy to drive best practice. The Asset Management goals and objectives for Stratford District Council are to:

- Provide for good quality infrastructure and local public services that are efficient, effective and appropriate for current and future generations.
- Meet the foreseeable needs of the community.
- Ensure that assets are planned for, created, replaced and disposed of in accordance with Council priorities as determined in the Long Term Plan.
- Ensure all legal delegations are met.
- Ensure customer expectations are properly managed.
- Provide technical and professional advice that enables elected members to make sound well informed decisions concerning the management of assets.
- Assets are managed to meet agreed customer levels of service.
- Assets are managed and delivered in accordance with the strategies stated in the Activity Management Plans.



- Ensure data collection systems are in place to collect, store, maintain and use for prudent management of Council owned assets.

Stratford District Council's overarching principles for sound asset management are:

- Asset management goals and objectives will be aligned with corporate objectives and community outcomes.
- Capital, operation and maintenance, and renewal/replacement works will be aligned with asset management objectives.
- Sustainable and suitable development will be considered in the options for asset development and service delivery.
- Optimal replacement/lifecycle asset management strategies will be developed.
- Asset replacement strategies will be established through the use of optimised lifecycle management and costing principles.
- Funding allocation for the appropriate level of maintenance in order for assets to deliver required Levels of Service.
- Growth and demand forecasting will be integrated as part of all asset management planning to meet current and future needs of the community.
- Ensure the design, construction and maintenance of assets, so far as reasonably practical, are without risk to the health or safety of any person.

### **10.2.3 ACTIVITY MANAGEMENT PLAN DEVELOPMENT**

Planning processes tend to be circular with built in reviews. The AMP and LTP need to have regular review cycles so that they remain current and deal with issues at the time. An important function of the review cycle is to monitor performance against the goal levels of service and KPIs that were set some years before.

The AMPs are reviewed every three years in line with the 10 year long term planning cycle but work programmes can change annually. These changes can be brought about by outside pressure, weather events, budget constraints and new projects becoming apparent. The ability to become responsive each year is through the annual planning process. The AMP details goals, levels of service, goals, KPIs and targets which contribute to Stratford's organisational vision for the district and community.

The review process considers the overall impact of the planned programme to deliver the defined levels of service through the on-going development of the AMP. This review/AMP development process moderates competing priorities within the context of community affordability and may result in some projects being deferred or budgets being re-prioritised. An example of this for Stratford is the planned increase in sealed road pavement rehabilitation to cater for the surge in forestry throughout the period of this AMP.

The proposed increase in this activity will be specifically targeted to the roads affected by the forestry industry, rather than being applied across the entire land transport network. For example, Beaconsfield Road, Mangaotuku Road, and, Brewer Road are three roads which have been identified as being particularly affected by the increase in forestry activity. Figure 68 below shows a graphical display of the AMP development process.

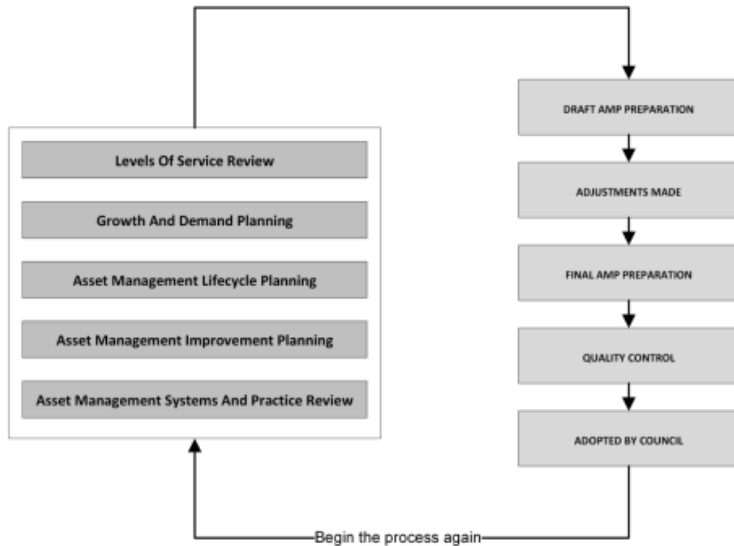
### **10.2.4 ASSET MANAGEMENT MATURITY**

We have assessed that our asset management system maturity is predominantly at the Core level. It is largely based on the long-term knowledge of the asset management team. It contains asset data that has been collected over time and held in asset management information systems.

Through continual improvement and development of asset management practices and processes it is our intention that the activity management plans progressively improve.

# Asset Management Practices and Improvement Plan

Our target is to develop our asset management practices and processes to an Intermediate level of maturity where appropriate. The Council in the process of assessing our asset management maturity level to identify areas for improvement. The Council is considering options for undertaking a formal assessment of our asset management maturity. The five levels of activity management plan maturity are shown in Figure 67 and are Aware, Basic; Core; Intermediate and Advanced.



**Figure 68 - Activity Management Plan Development Process**



**Figure 69 - Asset Management System Maturity Index**

## **10.3 OPTIMISED DECISION-MAKING**

### **10.3.1 TOOLS AND TECHNIQUES**

The following tools and techniques are used by Council to ensure that the decision of future maintenance requirements is both optimal in terms of the intersection timing and lowest whole-of-life costs.

### **10.3.2 TREATMENT SELECTION ALGORITHM**

The condition information gathered from RAMM condition rating surveys is used in the treatment selection algorithm (TSZ) within RAMM. The tool aids in the decision making for the identification and scheduling of:

- Resealing – sealing in budget, sealing next treatment.
- Smoothing overlays - in budget.
- Strengthening overlays – in budget.

At present Stratford District Council does not use the deterioration modelling software for identifying projects beyond year five.

### **10.3.3 CRASH ANALYSIS SYSTEM (CAS)**

Crash records are collected by the NZ Police and entered into the NZTA's CAS system. This information is used to identify crash trends and "hot spots" within the Stratford District. Mapping functionality within CAS can highlight graphically location where low cost/low risk improvements could be beneficial in reducing New Zealand's road toll.

### **10.3.4 TRAFFIC COUNTS**

Traffic count information is collected and stored in RAMM. To date, the numbers of traffic counts that Stratford has undertaken are minimal. As part of our improvement plan our intention is to undertake 100 traffic counts per annum throughout the district, on all road categories. Further individual traffic counts will be taken on reseal sites to aid with the design of the reseal. The information can also be used for bridge replacements, capital (improvement and renewal) works that require justification.

### **10.3.5 NET PRESENT VALUE (NPV)**

With the implementation of our measure and value contract we can build up a history of maintenance costs. These can be used to determine the least whole-of-life costs for various treatments such as pavement rehabilitation projects.

## 10.4 CURRENT AND FUTURE IMPROVEMENTS

**Table 60 - Current and Future Improvements**

Asset Management Practice Area	Improvement/s Made	Completion Date	Future Improvements	Section Identified	Responsibility	Due Date
<b>AM Policy Development</b>	Asset Management Policy developed and adopted by Council on 26/01/2016	2016	Asset Management Strategy or Strategic Activity Management Plan development	10.2	Director of Assets Asset Managers	July 2021
<b>Levels of Service and Performance Management</b>	Department of Internal Affairs (DIA) Mandatory Performance Measures in place.	2015-2017	Unplanned Road Closures - Development of internal database to record unplanned road closures.	5.3	Asset Manager	July 2024
	One Network Road Classification and Performance Measures in place.		Traffic Counts – Annual programme for 100 traffic counts per year in place. To be reviewed annually to identify if 100 traffic counts is sufficient.	10.3.4	Asset Manager	In progress
<b>Demand Forecasting</b>			Analysis of growth and demand impacts – Analyse CRMs, consumption of assets, growth in Roding network	6.2	Asset Management Team	On-going
<b>Asset Register Data</b>	Process for verifying data accuracy now documented in Activity Management Plan.	2016	Verify existing data held in RAMM against hard copy inspection forms and data captured in RAMM Contractor.	3.4	Asset Manager	Ongoing
	Enter bridge inspection data into RAMM	On-going	Analysis of condition of bridges within the Stratford District	3.4	Roding Engineer	On-going
	Enter retaining wall inspection data into RAMM	On-going	Analysis of condition of retaining walls within the Stratford District	3.5	Roding Engineer	On-going
	Enter road marking data into RAMM	On-going	Collection of data for record keeping	3.5	Roding Engineer	On-going
<b>Asset Condition</b>	Condition Grading System now documented in Activity Management	2016	Collect more data to identify the condition of asset components.	3.6	Roding Engineer	On-going

## Asset Management Practices and Improvement Plan

Asset Management Practice Area	Improvement/s Made	Completion Date	Future Improvements	Section Identified	Responsibility	Due Date
	Plans.		Seismic assessment of our bridges.			
			Develop joint inspection programme with contractor	3.6	Asset Manager Roading Engineer	On-going
<b>Decision Making</b>	Procurement procedures reviewed and process in PROMAPP	2020	Processes will be reviewed annually	8.2 10.3	Asset Manager	Completed
	Use condition rating surveys to develop forward works programmes	On-going		3.6		
	Net Present Value option analysis is further refined and completed for all proposed pavement renewal projects.	Underway	Target is to reconstruct 90km per annum. Subject to funding levels.	8.8.1	Asset Manager Roading Engineer	On-going
<b>Risk Management</b>	Critical assets reviewed. Top ten risks identified.	2017	Complete revision of Incident Response Plan	7	Asset Manager Asset Management Coordinator	Completed
<b>Operational Planning</b>	Mapping of processes. Analysis of specifications, e.g. cyclic vs reactive works.	On-going	Collect data to calculate overall network cost of sealed pavement and unsealed pavement maintenance and the average life of unsealed road metalling.	8.3	Asset Manager Roading Engineer	July 2021
<b>Capital Works Planning</b>	Use customer satisfaction survey results and footpath condition rating surveys to develop footpath replacement programme.	On-going		8.7.1	Asset Manager Roading Engineer	On-going
			FWD testing of HPMV routes	3.3	Asset Manager	Partially Completed
	Safety audits covering road safety and accessibility of pedestrian facilities to inform footpath				Asset Manager Roading Engineer	

## Asset Management Practices and Improvement Plan

Asset Management Practice Area	Improvement/s Made	Completion Date	Future Improvements	Section Identified	Responsibility	Due Date
	improvement work programming.					
<b>Financial and Funding Strategies</b>	LTP budgeting. Allocation of budgets	On-going	Develop strategy to fund replacement of structures that have previously not been depreciated.	8.8	Asset Manager Finance Dept	December 2021
			Development of a Maintenance Intervention Strategy.	8.7.1		Started January 2021
			Development of a delineation devices strategy to be consistent with the ONRC road hierarchy, eg: Primary collection fully conforms, through to Low volume access to highlight hazards only.			To commence April 2020
			Finalise and adopt the Walking and Cycling Strategy to ensure active mode work programmes align with both Council and Waka Kotahi investment objectives.	8.9		
<b>AM Teams</b>	Identified that our department is essentially “The Team”	On-going	Define roles and responsibilities in relation to AMP preparation.		Director of Assets Asset Manager Asset Management Coordinator	July 2021
<b>AM Plans</b>	Draft documents saved to TRIM to enable direct contribution from Asset Managers.	2016	Continue the formal process for developing the Activity Management Plan with timeframes.	10.2.3	Director of Assets Asset Manager Asset Management Coordinator	July 2024
			Continue to improve the document format and information presentation.	10.2.3	Director of Assets Asset Manager Asset Management	On-going

## Asset Management Practices and Improvement Plan

Asset Management Practice Area	Improvement/s Made	Completion Date	Future Improvements	Section Identified	Responsibility	Due Date
					Coordinator	
			ONRC is embedded into the AMP, Council's business systems, planning documents, management practices and reports as well as maintenance contracts.	5.3.2	Director of Assets Asset Manager Asset Management Coordinator	On-going
<b>Management Systems</b>			Review Procurement Strategy	8.2.2	Asset Manager	Completed
<b>Information Systems</b>	REG surveys for RAMM data	On-going	Review data held in RAMM to identify accuracy and completeness.	3.4	Asset Manager	On-going
			Pocket RAMM for direct input of data into AMIS		Asset Manager	July 2021
			Collect additional data associated with forest harvest timing to strengthen our strategic, programme and investment response to these challenges.	8.8.4	Asset Manager Roading Engineer	On-going
<b>Improvement Planning</b>	Develop a monitoring regime for the AMP Improvement Plan		Review A.M improvements made	10.2.4	Director of Assets Asset Manager	On-going
	Identify A.M. performance gaps		Identify A.M performance gaps		Asset Management Coordinator	
			Develop improvement plan performance measures, KPIs and monitoring method. Development of a strategy to prioritise the work programme that connects to the		Asset Management Team	July 2024

# Asset Management Practices and Improvement Plan

Asset Management Practice Area	Improvement/s Made	Completion Date	Future Improvements	Section Identified	Responsibility	Due Date
			<p>goals of the Council and the Strategic Problem Statements. Consider resilience, accessibility, safety, amenity values, cost, economic wealth creation, growth, level of service provision (Decision Matrix required).</p> <p>Develop an improvement project list for the Low Cost/Low Risk improvements spreadsheet to assist with prioritising external requests, EG: Councillors</p>	8.9	Roading Engineer	



# Appendices

- Appendix 1 – Walking and Cycling Implementation Plan
- Appendix 2 - Roading Potential Risk Register
- Appendix 3 - The 2021-2024 Road Safe Taranaki Strategic Plan
- Appendix 4 – Road Network Procurement Strategy 2019-2022
- Appendix 5 – Kerb and Channel Condition Rating
- Appendix 6 – District Map Encompassing Low-Low Volume Roads
- Appendix 7 – Dragon Dens Questions
- Appendix 8 – Roading Operational Documents

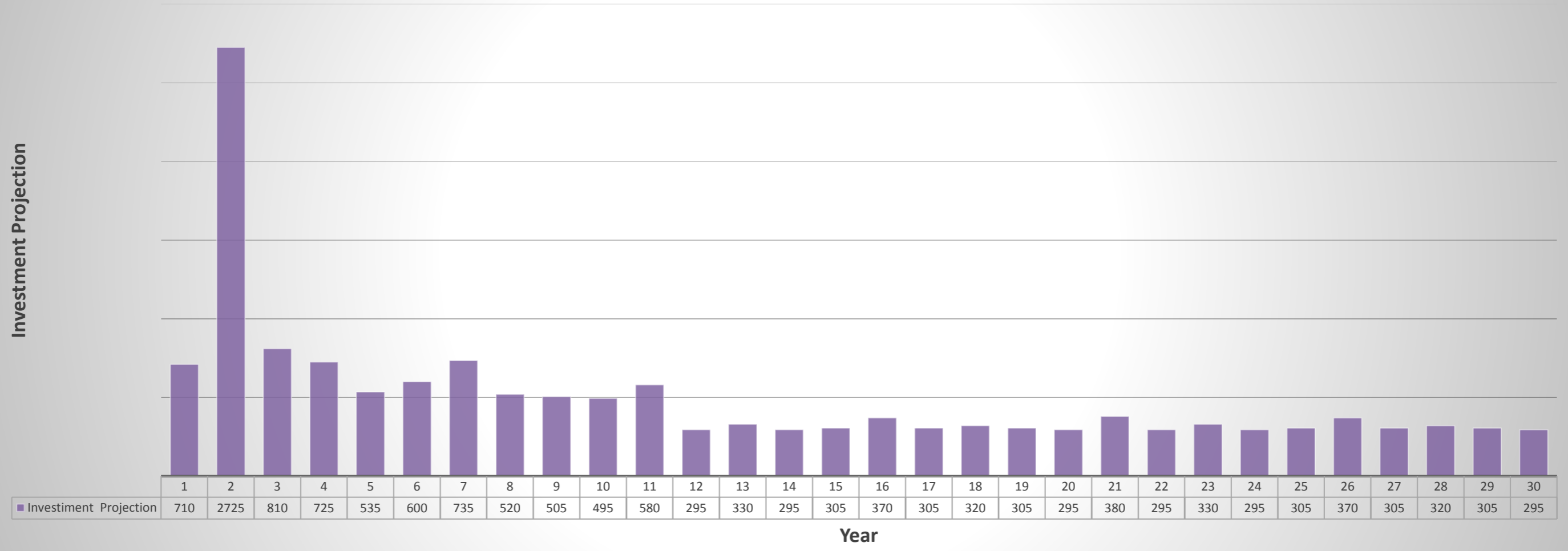
## Appendix 1 – Draft Walking and Cycling Implementation Plan Excerpt

### 30-Year Implementation Plan 2021-2051

The indicative Timeframe for the next 30 years is set out below:

Item	Projects/Initiatives	Cost (\$'000) / Timeframe (Years)																														Indicative Funding Sources		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		TOTAL	
<b>1</b>	<b>Safe Walking and Cycling Networks</b>	520	370	470	370	370	370	370	370	370	370	370	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	7550	Grant/Loan
A	• Improving all existing footpaths to better support walking and cycling.	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	3000	Loan
B	• Providing new shared-use footpaths on key collector/arterial roads	200	200	200	200	200	200	200	200	200	200	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2200	Loan	
C	• Providing new footpaths to high traffic areas/key destinations	150		100																											250	Loan		
D	• Completing the existing footpath networks in the district	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	1500	Loan	
E	• Implementing safety features in the rural network to better support walking and cycling	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	600	Grant	
<b>2</b>	<b>Providing Safe storage facilities for Bikes and Cars</b>	25		25			25		25			25		25			25		25			25		25			25		25		300	Grant		
<b>3</b>	<b>New/Improvements to Crossing(s) over the Patea River and the State Highway</b>	50	2000	50	250	50	50	250	20	20	20	70	20	20	20	20	70	20	20	20	20	70	20	20	20	20	70	20	20	20	3360	Loan		
A	• New Crossings over the Patea River		2000																												2000	Loan/Grant		
B	• Overpass/Underpass over the State Highway/Railway				250			250			50				50					50						50					700	Grant/NZTA		
C	• Other Crossings	50		50		50	50		20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	660	Other		
<b>4</b>	<b>Providing Initiatives to encourage the Walking and Cycling</b>	115	355	265	105	115	155	115	105	115	105	115	105	115	105	115	105	115	105	115	105	115	105	115	105	115	105	115	105	115	105	3750	NZTA	
A	• New facilities	10	250	160	0	10	50	10	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0	600	Other	
	• Improving Existing facilities???																														0	Other		
	• Review of Parking Bylaw	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	In-house	
	• District Plan Provisions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PGF	
	• Community Education	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	3150	Other	
	<b>TOTAL</b>	<b>710</b>	<b>2725</b>	<b>810</b>	<b>725</b>	<b>535</b>	<b>600</b>	<b>735</b>	<b>520</b>	<b>505</b>	<b>495</b>	<b>580</b>	<b>295</b>	<b>330</b>	<b>295</b>	<b>305</b>	<b>370</b>	<b>305</b>	<b>320</b>	<b>305</b>	<b>295</b>	<b>380</b>	<b>295</b>	<b>330</b>	<b>295</b>	<b>305</b>	<b>370</b>	<b>305</b>	<b>320</b>	<b>305</b>	<b>295</b>	<b>14960</b>		

### Walking and Cycling Strategy - 30 Year Investment Projection



## Appendix 2 – Roading Potential Risk Register

### 10.1 COMPLIANCE AND LEGISLATION RISKS

1. Compliance and Legislation Risk Assessment				
Risk Subject	Risk Description	Risk Score Raw	Control Description	Residual Risk Score
Legislation Changes	If changes to legislation or case law occur and are not implemented by staff, then council may be acting illegally and in breach of legislation.	4 High	<ul style="list-style-type: none"> <li>Regular review and update Legislative Compliance Register.</li> <li>Staff training and attending relevant industry conferences.</li> <li>Regular policy review to ensure policies and procedures are in line with legislation changes.</li> </ul>	2 Moderate
Incorrect Planning Advice	If Council provides wrong advice on LIM's in relation to major (>\$1M) roading capital projects/programmes, then it could be subject to a judicial review or similar form of dispute process involving legal costs, possible fines, and reputational damage.	3 Moderate	<ul style="list-style-type: none"> <li>Quality assurance. Resourcing and ongoing training of competent staff.</li> <li>Low tolerance for poor quality documentation from consent applicants.</li> <li>Good quality legal counsel.</li> <li>Council has professional indemnity, public liability, and statutory liability insurance.</li> <li>Review of 30 year Infrastructure Strategy.</li> </ul>	1 Low
Statutory Reporting Commitment	IF Council does not meet statutory commitments (eg Dept of Internal Affairs (DIA)) THEN it may be acting illegally and receive attention from DIA which could result in financial penalty and loss of status with NZTA as an approved organisation.	3 Moderate	<ul style="list-style-type: none"> <li>Quality assurance. Resourcing levels maintained.</li> <li>Schedule of dates and commitments is regularly maintained and updated by the roading manager.                             <ul style="list-style-type: none"> <li>Regular review and update of Legislative Compliance Register.</li> </ul> </li> </ul>	1 Low
Bylaws and Policies	If Council fails to keep Policies and Bylaws up to date, then the Policies will become irrelevant and Bylaws may become unenforceable and council could be acting illegally.	8 High	<ul style="list-style-type: none"> <li>Quality assurance.</li> <li>Resourcing levels maintained.</li> <li>Regular Policy Schedule review by CEO.</li> <li>Regular review of Bylaw timetable maintained in Content Manager.</li> </ul>	3 Moderate
Issue Regulatory Licence or Decision	If Council issues a licence to occupy road reserve or decision that is not consistent with legislation, policy or bylaws, then Council may be subject to a judicial review or a similar form of dispute process.	3 Moderate	<ul style="list-style-type: none"> <li>Quality assurance</li> <li>Ongoing training around the changes in legislation.</li> <li>Keep bylaws and policies up to date with legislation.</li> </ul>	1 Low
Annual Report Adoption and Publication	Roading is required to provide information for the Annual report to be adopted	2 Moderate	<ul style="list-style-type: none"> <li>Set annual report timetable to ensure statutory deadline is met.</li> </ul>	1 Low

1. Compliance and Legislation Risk Assessment				
Risk Subject	Risk Description	Risk Score Raw	Control Description	Residual Risk Score
	by 31 October and made publically available by 30 November. If this is not achieved then there will be additional audit scrutiny, reputational damage, loss of community trust.		<ul style="list-style-type: none"> <li>• Good project management by key staff.</li> <li>• Keep updated of possible changes to legislation and plan accordingly.</li> <li>• Good communication to all staff, and establish rapport with Audit NZ and respond in a timely manner to all queries.</li> </ul>	
RLTP/LTP/Annual Plan	If RLTP/LTP/Annual Plan is not adopted by 30 June then council cannot set rates, statutory breach reported to Minister, unable to commence service delivery, additional audit scrutiny	8 High	<ul style="list-style-type: none"> <li>• Set a timetable to ensure statutory deadline is met.</li> <li>• Good project management.</li> <li>• Good quality data is provided.</li> <li>• Keep abreast of possible changes to legislation and plan accordingly.</li> <li>• Good communication to all staff and liaison with Audit NZ.</li> </ul>	1 Low
Activity Management Plans <b>TOP 10 RISK</b>	If AMPs are incomplete then capital programmes, condition of assets, life cycle management will not be realised.	6 High	<ul style="list-style-type: none"> <li>• AMPs are reviewed every 3 years to address the current problems and issues at the time in order to develop work programmes for the next 3 years.</li> </ul>	4 High

## 10.2 DATA AND INFORMATION RISKS

2. Data and Information Risk Assessment				
Risk Subject	Risk Description	Risk Score Raw	Control Description	Residual Risk Score
Server Failure	If the server failed then systems down, data unavailable, potential data loss	12 Very High	<ul style="list-style-type: none"> <li>• Restore from backup, backups stored off-site.</li> <li>• Fail-over for Melbourne data centre replicates to Sydney data centre.</li> </ul>	3 Moderate
Cyber Attack	If the systems are compromised and subject to a cyber attack, then system downtime, loss of data, ransoms may be demanded, potential privacy breach, reputational damage, and potential loss of funds.	16 Very High	<ul style="list-style-type: none"> <li>• Council have several security measures in place such as enterprise grade firewalls, email filtering, backups, antivirus and device management.</li> <li>• If a breach was detected Council would activate the insurance policy and engage an IT security company resource to assist with recovery.</li> </ul>	3 Moderate
Communication to external RAMM server	If there is a loss of communication to RAMM (due to IT failure, power failure, or other damage to link) then systems downtime will cause	4 High	<ul style="list-style-type: none"> <li>• Can access private link or an internet link - reroute the traffic.</li> <li>• Backup generator if power supply lost.</li> </ul>	3 Moderate

2. Data and Information Risk Assessment				
Risk Subject	Risk Description	Risk Score Raw	Control Description	Residual Risk Score
	temporary disruption. Council staff will be unable to access data and complete work and respond to customers satisfactorily.			
Uncontrolled access to Physical and Digital Records	If there is uncontrolled or unauthorised access to archives, then records/ files could go missing, privacy breached, possible legislative breaches.	2 Moderate	<ul style="list-style-type: none"> <li>Access to physical archives is limited to IM Specialist and IT Manager, door is locked at all other times.</li> <li>Digital records must be stored in IT approved repositories, with access restricted where necessary.</li> <li>Electronic access is restricted to staff who have a SDC login and have also been granted the relevant security permissions to access applications relevant to their job role.</li> </ul>	1 Low
Records Handling	If hard copy protected records are handled in a way that could cause damage, degradation or disorganisation, then this could lead to loss of protected records, non-compliance with legislation and potential financial penalties.	1 Low	<ul style="list-style-type: none"> <li>Access to archives is limited to trained staff.</li> <li>Ensure the Information Management Specialist is fully trained in all areas of protected records management.</li> <li>Maintain a register of archived records, and a process by which records will be archived.</li> <li>Storage area must be restricted and temperature controlled.</li> </ul>	1 Low
Unapproved online platforms used	If unapproved online platforms are used for Council business, then Council sensitive information and individual private details could be hacked and made available publically.	3 Moderate	<ul style="list-style-type: none"> <li>All Council information should only be stored on platforms that are approved by IT and gone through proper procedures and checks by IT.</li> </ul>	1 Low

### 10.3 FINANCIAL RISKS

3. Financial Risk Assessment				
Risk Subject	Risk Description	Risk Score Raw	Control Description	Residual Risk Score
Asset Disposal/ Acquisition	Policy changes result in substantial asset disposal occurs.	1 Low	<ul style="list-style-type: none"> <li>Officers will require approval from Council for disposal/acquisition of assets.</li> </ul>	1 Low
Roading Annual Work Programme	If there is a severe weather event, funds are redirected for the clean up and repairs. This will affect planned work programmes,	3 Moderate	<ul style="list-style-type: none"> <li>Encourage maintenance contractor to sub-contract out work if they do not have sufficient resources in-house.</li> <li>Ensure there is a clear</li> </ul>	2 Moderate

3. Financial Risk Assessment				
Risk Subject	Risk Description	Risk Score Raw	Control Description	Residual Risk Score
	or; If non-availability of labour and plant affect ability to complete annual programme of work to deliver the planned levels of service, then risk of spend being under budget (over-rating) and cannot realise expected revenue from NZTA.		<p>understanding between Council and Contractor of completion timeframes, as per the Contract.</p> <ul style="list-style-type: none"> <li>• Ensure the Contractor has a contingency plan in the event of a severe weather event.</li> <li>• Outsource work to another contractor – this has to be considered carefully due to contract obligations and commitments.</li> </ul>	
Accessing Funding	If the AMP is incorrect or not developed, then the maintenance funding will be insufficient to provide the levels of service. We will not be able to maximise our income from NZTA.	3 Moderate	<ul style="list-style-type: none"> <li>• Ensure funding assessments are carried out by sufficiently experienced personnel and business cases are written for funding (AMP).</li> <li>• Regular liaison with NZTA's investment advisors will ensure funds can be obtained from NZTA.</li> </ul>	1 Low
Internal Financial Controls	If internal financial controls are compromised and ineffective, then possible fraud, budget blowout, delayed service	6 High	<ul style="list-style-type: none"> <li>• Good quality controls.</li> <li>• Implement annual external and internal audit recommendations.</li> <li>• Adhere to Procurement and Delegations Policy.</li> <li>• Communications of internal controls to all staff.</li> <li>• Recommend internal audit programme every year by independent contractor.</li> </ul>	1 Low
Procurement contracts	If the Roading Procurement Strategy is not endorsed by NZTA, then contracts entered into are non-compliant. Also roading is required to adhere to Council's Procurement Policies. Council projects could go over budget and council procurement could be subject to industry, media and legal scrutiny.	6 High	<ul style="list-style-type: none"> <li>• Ensure Roading Procurement Strategy, the procurement policy and procurement manual are appropriate, comply with legislation and good practice, and followed by all staff and significant contracts are reviewed by a tender evaluation team.</li> </ul>	1 Low
Population Growth	That growth is higher than projected thereby putting pressure on Council to provide additional infrastructure and services.	3 Moderate	<ul style="list-style-type: none"> <li>• Increase the level of funding by possible rates increase and other sources of income through fees and charges and adjustment in levels of service.</li> </ul>	2 Moderate
Significant Population Reduction	If there is a significant population reduction, resulting in loss of ratepayer base and reduction in property values - then this could result in higher rates for others and significant cost reductions may be	5 High	<ul style="list-style-type: none"> <li>• Ensure variable costs are clearly identifiable, and therefore able to be isolated and adjusted if ratepayer base reduced.</li> <li>• Approach NZTA for a Financial Assistance Rate review.</li> <li>• Adjust level of service and</li> </ul>	4 Moderate

3. Financial Risk Assessment				
Risk Subject	Risk Description	Risk Score Raw	Control Description	Residual Risk Score
	required. This could lead to significant deterioration of the network eg: sealed roads reverting back to unsealed roads.		work programme to work within the funds available	
New Regulations require Significant Investment	If new environmental regulations or legislation imposed on councils requires a significant increase in capital expenditure, then depending on what the regulations are could mean we would need to adjust the programme of works in order to meet the new regulations.	6 High	<ul style="list-style-type: none"> <li>Work within approved budgetary constraints.</li> <li>Approved allocation from NZTA is locked in for 3 year intervals.</li> </ul>	4 High
Inadequate financial provision to fund asset replacement	If there is inadequate financial provision in reserves to fund the replacement of assets, then the Council may have to borrow more than expected, or asset replacement may need to be delayed which may affect service level performance.	3 Moderate	<ul style="list-style-type: none"> <li>Ensure annual depreciation is based on accurate fixed asset values (replacement cost) and accurate useful lives.</li> <li>Assets should not, unless necessary, be replaced before the end of their useful life.</li> </ul>	1 Low
Bribery and Corruption	Perceived Bribery or Corruption from Roothing contractors,	4 High	<ul style="list-style-type: none"> <li>Ensure Staff code of conduct is current and regularly reviewed.</li> </ul>	3 Moderate
Revenue Increasing age demographic on fixed income, how does SDC meet the cost of providing the level of services into the future? <b>TOP 10 RISK</b>	High number of elderly on fixed income pensions. Could affect future levels of service for roading due to cost fluctuations within contractual arrangements	2 Moderate	<ul style="list-style-type: none"> <li>Factor in to budgets reasonable and sustainable rates increases.</li> <li>Or seek further financial assistance from NZTA.</li> <li>Review fees and charges.</li> </ul>	3 Moderate

### 10.4 HEALTH AND SAFETY WELLBEING RISKS

4. Health and Safety Wellbeing Risk Assessment				
Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
Road crashes	If accidents or incidents occur on the road network then increased costs can occur due to attendance at the scene of the crash/incident which may	4 High	<ul style="list-style-type: none"> <li>Included in the Roothing Incident Response Plan and Contract.</li> </ul>	2 Moderate



4. Health and Safety Wellbeing Risk Assessment				
Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
	not be recoverable.			
Abusive Customers	If abusive customers come into any of the Council's service centres, then there is the risk that council staff or the general public could be harmed or exposed to violence.	4 High	<ul style="list-style-type: none"> <li>Staff have personal alert alarms if in danger, customer service training and policies on how to deal with situations so they do not escalate.</li> </ul>	2 Moderate
Lone Worker	If a staff member is seriously injured or killed during field inspections/site visits, then possible health and safety breaches, death or serious injury.	12 Very High	<ul style="list-style-type: none"> <li>Quality assurance</li> <li>Ongoing training/awareness of HSE requirements and responsibilities</li> <li>Better use of council data/knowledge base on dangerous or insanitary sites before staff member deploys to site</li> <li>Use of GPS tracking, mobile phone tracking.</li> <li>Compliance officers to wear body cameras when on duty.</li> </ul>	3 Moderate
Council Vehicle accident	If a staff member has an accident in a council vehicle, then this could result in possible death or serious injury and damage to motor vehicle asset.	4 High	<ul style="list-style-type: none"> <li>All staff must have a full drivers licence, all staff are aware of procedures if there is an accident.</li> <li>Staff driver training to be provided to regular drivers.</li> <li>GPS and mobile phone tracking.</li> </ul>	3 Moderate
Staff under Stress	If staff are affected by personal issues or by work pressures and experiencing high levels of stress, then work performance may decline and/or fatigue, illness, unsafe work practices may result.	5 High	<ul style="list-style-type: none"> <li>Managers are responsible for being aware of the wellbeing of their direct reports.</li> <li>There are various options available for relieving the pressure of staff who are overworked including increasing staff or reallocating work.</li> <li>Ensure access to EAP service is widely known and communicated to all staff.</li> <li>Ensure all staff have a backup option available so they can take annual leave for at least a week at a time.</li> </ul>	3 Moderate
Exposure to Hazardous Substances	If staff are affected by exposure to hazardous substances eg chemicals, liquids, fumes and other toxic substances then there are possible risks to staff health and wellbeing.	6 High	<ul style="list-style-type: none"> <li>All hazardous substances are correctly labelled and stored according to best practice safety procedures and guidelines.</li> <li>Training is mandatory for all staff working with hazardous substances.</li> <li>Use appropriate PPE gear at all times in the vicinity of the hazardous substances.</li> <li>Regular health checks for staff.</li> </ul>	3 Moderate

4. Health and Safety Wellbeing Risk Assessment				
Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
Workplace Bullying or Harassment	If Bullying and harassment in the workplace occurs then it can have an impact on the health and wellbeing of staff subject to the bullying and other staff witnessing the behaviour. This may impact on staff productivity and the ability of Council to attract good quality candidates.	4 High	<ul style="list-style-type: none"> <li>• Top down culture against bullying and harassment of any kind, policy is followed through by management, staff are aware of the reporting process.</li> <li>• The reporting process to deal with bullying and harassment is fair, transparent, confidential and dealt with in a timely manner.</li> </ul>	3 Moderate
Asbestos Related Work	If removal of drainage pipes made out of products made with asbestos, then there is the possibility of asbestos exposure to staff and the public and increased risk of asbestosis and other lung and pleural disorders.	4 Moderate	<ul style="list-style-type: none"> <li>• Asbestos protocols need to be developed in line with the asbestos regulations.</li> <li>• Community needs to be made aware of Asbestos disposal guidelines.</li> <li>• Staff involved in building compliance or construction work should be appropriately trained in handling of asbestos materials.</li> <li>• Contractors will have their own protocols for handling and disposing of asbestos products.</li> </ul>	2 Moderate
Dangerous Roads due to weather events	If there are dangerous road conditions that are not managed and communicated to the public appropriately, then there is a higher potential for car accidents and possible road fatalities.	2 Moderate	<ul style="list-style-type: none"> <li>• Ensure standard operating procedures are in place for potential weather events that may cause damage to the roads. This should include timely social media communications, installation of temporary barriers, cordons and signage in affected areas.</li> </ul>	1 Low
Fatigue Management	If Fatigue affects an employee, as a result of working extraordinary hours, then the employee may have limited functionality which could result in personal injury or injury to others. It could also lead to stress and long term mental illness if it is reoccurring and could mean Council is in breach of the Health and Safety Act.	3 Moderate	<ul style="list-style-type: none"> <li>• Ensure employees take regular, quality rest breaks during the working day, in line with the Employment Relations Act (HR Policy requires this).</li> <li>• Ensure all staff know their responsibilities in terms of managing fatigue.</li> <li>• Ensure shift workers rostered times are manageable.</li> <li>• The Vehicle Use Policy has limits on driving a Council vehicle after exceeding max number of work hours.</li> <li>• Contractor fatigue management to be reported and monitored through regular contractor meetings.</li> </ul>	1 Low
Environmental Liability	Noncompliance with Resource Consent Conditions	2 Moderate	<ul style="list-style-type: none"> <li>• Contractors to produce an environmental management plan as</li> </ul>	2 Moderate

4. Health and Safety Wellbeing Risk Assessment				
Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
			part of their contract conditions.	

## 10.5 OPERATIONAL RISKS

5. Operational Risk Assessment				
Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
Roading - other work clashing	If there is work being carried out by others on/in road reserve, e.g. Broadspectrum, then council may not be able to complete its own work programme.	3 Moderate	<ul style="list-style-type: none"> <li>Co-ordination of planned works with other contractors in the area when planning physical works.</li> </ul>	2 Moderate
Road Closures – unplanned <b>TOP 10 RISK</b>	If there are un-planned road closures due to collapse of culvert/bridges/landslides and so forth e.g. Wingrove Rd culvert collapse then access in/out of district could be lost and people could be injured as a result.	4 High	<ul style="list-style-type: none"> <li>Asset criticality review to identify critical roading assets and increase monitoring activities.</li> <li>Ensure quality workmanship and contractors are aware of their obligations to report and repair any damages to roads.</li> <li>Resources diverted from other planned projects to remediate repairs to enable the road to be re-opened.</li> <li>Maintain a regular inspection regime of structures within road reserve.</li> </ul>	3 Moderate
Contractor - Damage to Property	If maintenance contractor damages council or private property while carrying out contracted work, then council could be liable for damages and additional expenditure.	4 High	<ul style="list-style-type: none"> <li>Stringent Operational procedures: Daily reporting of compliance.</li> <li>Regular liaison with contractor and regulators to monitor performance to ensure compliance.</li> <li>Contractor pre-approval process.</li> <li>Council has material damage insurance policy, excess \$5k.</li> <li>The contracts require third party public liability insurance to indemnify Council for damages.</li> </ul>	3 Moderate
Staff	Staff leaving results in staff skill levels falling below the standard required. Staffing levels are unable to be adequately maintained	2 Low	<ul style="list-style-type: none"> <li>Staff will have to manage until the positions can be filled, or secondment of consultants which could prove costly.</li> </ul>	2 Low
Attracting Qualified Staff <b>TOP 10 RISK</b>	If Council is unable to attract suitably qualified personnel, then services may become under threat and may cease.	4 High	<ul style="list-style-type: none"> <li>Internal training and succession planning programs.</li> <li>Ensure market wages are offered for all high demand</li> </ul>	2 Moderate

5. Operational Risk Assessment				
Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
			positions. <ul style="list-style-type: none"> <li>Recruit off shore option should be available for high-demand positions.</li> <li>Make greater use of consultants if necessary and/or shared services with neighbouring Councils.</li> </ul>	
Maintenance Contractor fails to deliver <b>TOP 10 RISK</b>	If a maintenance contractor fails to deliver contractual service necessitating termination of contract and re-tendering, then assets may become under threat, unreliable, or unable to meet community needs.	4 High	<ul style="list-style-type: none"> <li>Careful assessment of tender to ensure contract price viable for contractor to deliver level of service.</li> <li>Regular liaison with contractor to monitor performance and ensure compliance.</li> <li>Contractor pre-approval process must not be bypassed.</li> </ul>	3 Moderate
Property design/construction information	If Council does not have adequate information on original design or construction of asset, then there is a greater potential for failure of future work, potential of increased costs and unsafe future construction.	3 Moderate	<ul style="list-style-type: none"> <li>Carry out regular condition assessment of assets.</li> <li>Reassess use of asset or redesign to suit.</li> </ul>	1 Low
Natural Disaster - Response preparedness <b>TOP 10 RISK</b>	If a Natural Disaster causes significant damage to infrastructure then community welfare may be severely compromised, putting peoples lives at risk, and staff may be unable to access systems to carry out their day to day duties and functions.	15 Very High	<ul style="list-style-type: none"> <li>Civil Defence Emergency Management plans, Rooding Incident Response Plan are in place.</li> <li>Procedures following an emergency event are widely known by a number of staff due to Civil Defence</li> <li>Foundational training being rolled out to majority of council staff.</li> <li>Business Continuity Plans need to be in place and practiced regularly for all activities.</li> </ul>	12 Very High
Disease Outbreak	If there is a human disease outbreak in the district, then this could impact staff and contractors staff and the community access to healthcare is limited so it could result in population decline.	5 High	<ul style="list-style-type: none"> <li>Health and Safety Advisor to keep aware of any public health notifications of disease outbreaks.</li> <li>Ensure there is a plan to respond to any notifications.</li> <li>Civil Defence covers infectious human disease pandemics and will take responsibility for local management.</li> <li>Follow Ministry of Health's NZ Influenza Pandemic Action Plan.</li> <li></li> </ul>	4 Moderate

5. Operational Risk Assessment				
Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
Critical Asset Failure	If a critical road fails, then unexpected financial burden may arise and there could be significant disadvantage and risk to the community.	15 Very High	<ul style="list-style-type: none"> <li>Conduct 2 yearly Asset Criticality Review.</li> <li>Ensure there are established Civil Defence Emergency Management response procedures in relation to fixing critical assets in an emergency event.</li> <li>Management practices and staff training, retention to ensure appropriate skill level in critical asset maintenance.</li> <li>Consider suitable alternative routes to maintain access.</li> </ul>	4 High
Heavy/Extreme Rainfall incidents <b>TOP 10 RISK</b>	If the Stratford District experiences heavy rainfall continually over a period then roads may flood, restricting accessibility, landslips and mudslides may restrict road access and cause property damage, productive land areas may flood reducing functions,	8 High	<ul style="list-style-type: none"> <li>Activity Management Plans and Roding Incident Response Plan to document critical asset areas and response timeframes in the event of heavy rainfall incidents.</li> </ul>	3 Moderate
Government Policy or Legislation Impacting on Local Government <b>TOP 10 RISK</b>	If Government Policy or Legislation significantly changes the services Council delivers or the way they are delivered, then this could put financial pressure on the district to fund investment in changes, or it may mean previous investment has become redundant. Any changes in rules around Overweight Permits means there is increased likelihood of on-going damage to the roading network, and a reduced life expectancy resulting in increased maintenance costs.	12 Very High	<ul style="list-style-type: none"> <li>Where a policy change may have a significant impact Council can make a submission regarding the change.</li> <li>Council officers and elected members need to keep up to date with policy, and anticipate potential impacts of legislative changes and respond strategically, This could include joint collaboration with business and other councils, accessing alternative funding sources, or obtaining legal or professional advice.</li> </ul>	8 High
Levels of Service	There are significant increases in customer expectations regarding demand for services and/or the level of service provided	1 Low	<ul style="list-style-type: none"> <li>To manage expectations around the levels of service which could include being transparent about the levels of service that we can afford.</li> </ul>	1 Low
Programming of Works	The approved programme of works is not carried out within agreed timeframes.	1 Low	<ul style="list-style-type: none"> <li>In the event of an extreme rainfall event, a programme can be deferred following discussions between SDC and the Contractor.</li> <li>Hold regular meetings to discuss contractors performance and ability to deliver the agreed</li> </ul>	1 Low

5. Operational Risk Assessment				
Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
			programme. • Increasing resources via sub-contractors or additional staff. • We could mutually agree to defer some of the programme to later in the year.	
Consents	The contractor not undertaking the work in accordance with the resource consent conditions. Council can be fined by the Regional Council for breach of conditions.	1 Low	• Not negotiable - Consent conditions must be abided by otherwise the consent will be breached. • Contractor needs to submit to the Regional Council a methodology about how they are going to undertake the works.	1 Low

## 10.6 REPUTATIONAL AND CONDUCT RISKS

6. Reputational and Conduct Risk Assessment				
Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
Solvency of Contractor <b>TOP 10 RISK</b>	If Council engage a contractor that could potentially be insolvent the risk to Council is that they abandon the contract.	12 Very High	• Conduct the due diligence process for all contractors.	3 Moderate
Elected Members Communication	If elected members disclose commercially sensitive or confidential information to the public, then this could damage the reputation and public trust of elected members and council staff.	6 High	• Ensure elected members have a good awareness and understanding of the SDC Code of Conduct. • Induction for new councillors should be thorough and cover communication with the public, in private, and at Council meetings.	3 Moderate
Elected Members - Decision Making <b>TOP 10 RISK</b>	Elected members make significant decisions in relation to the Long Term Plan budget setting. This has an impact on the Roading Activity Management Plan and the work programmes that are developed throughout the 3 year period. This could have an impact on the levels of service for the community.	12 Very High	• Relies on the accuracy and quality of the advice given by staff to elected members -	4 High
Council employees abuse members of the public	IF Council employees, during the course of their Council duties abuse members of the public,, THEN the Council may suffer significant reputational damage and potentially be taken to court.	8 High	• Refer to the Staff Code of Conduct. •	4 Moderate

## **Appendix 3**

### **The 2021-2024 Road Safe Taranaki Programme Business Case**

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## Programme Business Case

### Roadsafe Taranaki Programme 2021-2024

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#### Executive Summary

The Roadsafe Taranaki Programme Business Case (PBC) is an evidence-based document that guides the direction for road safety education and partnerships in Taranaki from 1 July 2021 to 30 June 2024.

The PBC follows the 2018-2021 Roadsafe Taranaki Strategic Plan and Taranaki Road Safety Action Plan (RSAP). The evidence used to develop a local community based road safety programme includes data collected by the Ministry of Transport (MOT), Waka Kotahi NZ Transport Agency, Four Yearly Roadsafe Taranaki High School Survey (2005, 2009, 2013 and 2017), NZ Police, District Health Board data and feedback from the community.

The delivery of the Roadsafe Taranaki programme aligns itself with the *Road to Zero New Zealand's* Road Safety Strategy 2020-2030. This includes "acknowledging that:

- no loss of life is acceptable in the transport system
- deaths and serious injuries on our roads are preventable
- we all make mistakes, but these mistakes should not cost us our lives."

It is also recognised in the Strategy there is a need to "build relationships, insights, and responses to appropriately meet the needs of tangata whenua in New Zealand." This should result in better understanding of the issues, barriers, learning disadvantages for Māori while at the same time provide opportunities in road safety, driver licensing, employment and well-being.

Our road system "plays an important role in connecting people, and gives New Zealanders access to education, work and recreation. It also supports economic activity through movements of freight, by connecting businesses with their employees, customers, and other goods and services, and by creating vibrant towns and cities."

Taranaki death and serious injuries (DSI) road crash statistics had been following the national trend. Crashes on Taranaki roads have recently increased from previous years with 17 people killed in 2018 and 15 in 2019. As at 31 May 2020 there have been 6 deaths on Taranaki roads (including 3 deaths during COVID-19 lockdown).

Funding of Roadsafe Taranaki's share of the Taranaki National Land Transport Plan (NLTP) road safety programme has sat at around \$250,000 for approximately 10 years covering one full time equivalent (FTE) position based in South Taranaki and focussed on road safety across the region. The proposed increase in funding for 2021-2024 allows for an additional one FTE resource to improve delivery (particularly in North Taranaki). It will allow for sustainable succession planning and gives Roadsafe Taranaki the ability to have dedicated staff targeting key focus areas as identified in the Government Policy Statement (GPS) and *Road to Zero Strategy 2020-2030*.

The Roadsafe Taranaki Programme will focus on the following identified road safety issues in Taranaki:

- Alcohol
- Cycling (South Taranaki and Stratford)
- Distraction (*Car high risk South Taranaki and Stratford*)
- Driver Training/Licensing



- Drugs
- Fatigue
- Intersections
- Micromobility (South Taranaki and Stratford)
- Motorcycling (CaR high risk Stratford)
- Restraints
- Speed
- Vehicles
- Walking (South Taranaki and Stratford [CaR high risk Stratford])
- Older Road Users (CaR high risk South Taranaki)

The three district councils in Taranaki (New Plymouth, Stratford and South Taranaki) agree that the South Taranaki District Council will be the agent for the group with regard to Waka Kotahi NZ Transport Agency funding, the provision of financial services, accounting, auditing and management of funds and the delivery of the Regional Community Road Safety Programme (CRSP).

With this agreement in mind the CRSP delivery is region-wide and treated as a “cluster” of all three councils which makes economic sense due to both South Taranaki and Stratford having significantly less ratepayers than the larger New Plymouth district. As such, New Plymouth District Council has a dedicated Transportation team that delivers walking and cycling initiatives, including infrastructure improvements, to help reduce vehicle use and encourage more sustainable travel options.

#### Quality Analysis

In 2017 there was optimism the annual number of crashes and fatalities in New Zealand would continue on the downward trend with 2016 just being a blip on a three-year downward slope. Taranaki had four fatalities and there was hope drivers were heeding advice and improving their driving behaviour. However, 2018 was a horror year on Taranaki roads which included seven people being killed in one crash and 2019 didn't fare much better. As Taranaki is a rural region it can sometimes be difficult to isolate causes of a crash so being able to review crashes as part of a regional cluster makes economic and best practise sense.

*Recent Taranaki fatal and injury crash data (Source: MOT and CAS data ):*

Taranaki	Lowest Total	Highest Total	2012	2013	2014	2015	2016	2017	2018	2019
Deaths	4 (2017)	45 (1991)	17	7	11	8	12	4	17	15
Fatal crashes						6	10	4	10	14
Serious injury	46 (2014)	197 (1982)	67	51	46	56	70	77	79	92
Serious crashes						50	64	65	67	79

*The following Taranaki crash data is based on 2015-2019 CAS data (Report from Roland Devine - WSP Opus)*

Type and cause	Crash Numbers	% All	Casualty types	Fatal	Serious
Overtaking	17	4.61	Cyclists	1	24
Straight - lost control/head on	80	21.68	Drivers	34	198
Bend - lost control/head on	121	32.79	Motorcycle Pillions	0	6
Rear end/obstruction	58	15.72	Motorcycle Riders	5	61
Crossing/turning	60	16.26	Passengers	14	57
Pedestrian versus vehicle	30	8.13	Pedestrians	2	28
Miscellaneous	3	0.81			

Type of Road		Drivers at fault or part fault	
Urban	39%	Full	61.40%
Open road	61%	Restricted	12.95%
		Learner	11.66%

*1 January 2019 – 1 January 2020 Police Attended Crash Data – Based on Crash Reports (Report from Senior Sergeant Robbie O’Keefe)*

Crash Factor	No. crashes	Percentage
Poor observation	34	35.05%
Alcohol	32	32.99%
Poor handling	28	28.87%
Failed to give way or stop	20	20.62%
Incorrect lanes or positions	19	19.59%
Travel speed	18	18.56%
Poor judgement	16	16.49%

*2020 Fatal Crash Information (as at 31 May)*

- 2 Motorcyclists
- 4 Drivers

*Communities at Risk Register 2020*

[\(https://www.Waka Kotahi NZ Transport Agency.govt.nz/resources/communities-at-risk-register/\)](https://www.Waka Kotahi NZ Transport Agency.govt.nz/resources/communities-at-risk-register/):

High Risk	Medium Risk	Low Risk
Motorcyclist	Cyclist involved	Speed (too fast for the conditions)
Rural LOC and/or head on	Urban intersections	Young drivers
Older road users	Restraints	Alcohol and/or drugs
Distraction		Fatigue
Pedestrian involved		Rural intersections

### Background

Over the last three years Roadsafe Taranaki has made a significant investment into road safety programmes, with a particular focus on young drivers, alcohol, intersections and distractions. Statistics and anecdotal data had shown these four areas had high crash rates in Taranaki compared to other areas of concern, and they were statistics that could be significantly improved through education and behaviour change programmes. Death and Serious Injury (DSI) results over the last four years have been disappointing as the previous downward trend has reversed and is heading back up slowly. Taranaki is not alone in recording higher DSI crashes and in fact the whole country has been recording increases, which in part is the reason for a change in direction and strategy. It is also a key reason we need to look at historical delivery, change things up and work towards the *Road to Zero* with vigour to see better outcomes with a targeted focus on reducing DSI crashes in our region.

Historically Roadsafe Taranaki has had one FTE position covering all things road safety and after a recent review by Guild Research Limited one area for improvements is resourcing. Covering a region as big as Taranaki (which has a significant rural economy and population, and more than 3,000 km of road) by one person, results in delivery being watered down to a less than optimal level.

We are working with communities that often don't know any better (you don't know what you don't know) so does mean ongoing education is a major contributor to the sustainable long-term success in reducing crashes and severity of crashes. Though some of the risks are medium or low within the latest report, this can be attributed to the investment and ongoing education programmes that are currently running and need to keep running to see even more reductions.

## Fit for Purpose

The PBC communicates the need for investment and how the proposed delivery fits with the Regional Land Transport Plan, community outcomes and the Government Policy Statement on transport. This is done by identifying the key issues affecting Taranaki drivers and crash rates, the benefits of investing to address those issues and how success will be measured.

The Regional Road Safety Programme makes a significant contribution to the safety of road users with a specific focus on behaviour change and safe courteous driving in Taranaki. This business case details the planned delivery for 2021-2024, the cost of that delivery and the collaboration required to be successful. This approach helps Roadsafe Taranaki and its contributors, the New Plymouth, Stratford and South Taranaki District Councils plus co-investor, the Waka Kotahi NZ Transport Agency, determine that it is doing the right work with the right audience, at the right time and for the right reasons.

## No Surprises

All funding contributes to support the transformation of New Zealand through a transport system in Taranaki that is safe, reliable and effective, and connects Taranaki with other parts of New Zealand and the world. Any specific focus area in relation to delivery will already have been identified in the New Zealand Government *Road to Zero Strategy 2020-2030* and collaborating with key stakeholders, engineers and the community will ensure the programme also fits within a safe system approach to road safety.

## Aligned to Waka Kotahi NZ Transport Agency Processes

In 2004 the three district councils within the Taranaki region, namely South Taranaki, Stratford and New Plymouth, agreed to establish and maintain a joint management group for the purpose of employing or contracting personnel to deliver the Regional Community Road Safety Programme (CRSP). The three Taranaki district councils work together as a cluster for the delivery of road safety education programmes under the partnership banner of Roadsafe Taranaki. The programme is managed by the South Taranaki District Council under a memorandum of understanding.

Road safety action planning is a best practice process promoted by Waka Kotahi NZ Transport Agency to plan and implement safety interventions by road safety partners. It uses a collaborative approach to ensure the partners:

- Agree on risks
- Identify objectives
- Direct tasks
- Set targets
- Develop plans
- Monitor and review progress

Section 4.4(3) of the Taranaki Regional Land Transport Plan (RLTP) 2015-2021 ([as reviewed in 2018](#)) states *"Reducing the safety risk on Taranaki's transport network"* and the Roadsafe Taranaki programme fits within this section. This includes:

- Reduce risk on high risk rural roads, intersections and urban arterials with a particular focus on vulnerable road users
- Support the aims of Safer Journeys and Roadsafes Taranaki

The RLTP is still in draft form and may take some time to be finalised as noted in an email dated June 2020 from a Taranaki Regional Council Staff member;

*“The RLTP is in the early stages of review, with no draft of the strategic front-end until probably mid-August unfortunately. The mid-term (2018) review of the RLTP kept that section largely the same, though it merged the policy of supporting Safer Journeys into the one with Roadsafes Taranaki. I’ve underlined wording changes for you above. Obviously, this component will need to be updated to align with Road to Zero. Unfortunately, there is a larger project underway with all RLTPs across the country changing to a more consistent structure – which is going to mean significant reworking of the Taranaki document. Long-term it will be better, but it is involving short-term pain at this end!”*

## Strategic Case

### Introduction

The PBC is used to showcase the Roadsafes Taranaki Road Safety Programme 2021-2024. The purpose of the Strategic Case is to determine if the programme planned fits within the investment rules the Waka Kotahi NZ Transport Agency has in place.

This Business Case builds on work previously undertaken by Roadsafes Taranaki, the findings from Guild Research Limited’s evaluation of the Roadsafes Taranaki programme, the Taranaki Road Safety Action Plan and the Taranaki Regional Land Transport Plan. This PCB aims to enhance and complement the delivery of outcomes from previous programmes and approved funding streams.

The PBC confirms that the problems identified in the Strategic Case are valid and critical to the success of reducing death and serious injury crashes on Taranaki roads. The consequences of not continuing to deliver road safety educational programmes to the Taranaki community and in Taranaki schools could be an increase in risk taking and reversing the gains made in improved driver behaviours over the last 10 years.

### Scope

The PBC has been designed to inform the reader about why and what road safety education programmes will be delivered by Roadsafes Taranaki over the next three years (2021-2024). Therefore, existing projects/programmes being delivered during the 2018-2021 funding cycle will be unaffected by this PCB.

The guiding principles around a Safe System are designed to guide participation and decision making across the system. A shared understanding is key to a successful implementation of any strategy. To reduce DSI by 40% over the next decade requires a big commitment in terms of funding and of community buy-in to behaviour and changing driver attitudes in particular.

Taranaki is a rural community with one medium sized city and a number of satellite towns mainly dotted around the State Highway network. Every urban area in Taranaki was originally built to support the dairy industry and the survival of many small businesses relies on the same industry. In more recent times forestry and the oil and gas industry has brought increased vehicles, larger vehicles and

heavier vehicles. With the increased number of heavy vehicles using local roads designed for small vehicles and low volumes of traffic there has been more damage and more risk to locals using the road network.

- Driving when affected by alcohol, drugs, fatigue or distraction continues to show up as causes of DSI crashes across New Zealand. Understanding the reasons and triggers behind those driver decisions will help develop solutions to reduce or mitigate risky driver behaviour.
- Working with people so they understand, that like them, other drivers make mistakes, may help reduce overall speeds, reduce severity of crashes and help align with the *Road to Zero* strategy. The Speed Management Guidelines will help policy makers introduce and set new limits however help will be needed to engage and encourage road users to accept and commit to these speed reductions.
- Sustainable transport options and modal shift advancement has increased the number of cyclists, pedestrians, scooters, mobility scooters (and any other new technology developed in the future) utilising the road network, which has elevated the risk of conflict and injury.
- Having a network of roads criss-crossing the region to allow goods and services to be delivered, communities to be liveable and promote healthy lifestyles creates a road network with lots of intersections. These intersections are often located on high speed roads with limited visibility and sometimes taken for granted by local users.
- Rural isolated roads with corners, gullies and hills can entice motorcyclists and create high personal risk because of the isolation, quality and terrain of those same roads. The Forgotten Highway is a well-known road for motorcyclists and continued upskilling of riders is necessary to reduce the likelihood of injury on that road as well as around the region.

Safety is one of the key components in a transport system which both influences and responds to the regions' growth in travel demands. The relationship between road safety and transport use is complex and requires close scrutiny to prevent the system drifting into safety failure. While the majority of road trauma stems from poor road user choices on the network, Taranaki's local roads are unforgiving of people making mistakes which results in more serious injuries than acceptable. Quality safe vehicles, competent safe licenced drivers and everyone being correctly restrained will help bring the number and severity of injuries in those crashes down.

## Context

Road Safety is one of the top three priorities in the GPS and is strategically driven through the *Road to Zero* New Zealand's Road Safety Strategy 2020-2030, NZ Road Policing Programme, Regional Land Transport Plan, Regional Road Safety Action Plan and the Roadsafes Taranaki Road Safety Promotions Activity List.

The *Road to Zero* New Zealand's Road Safety Strategy 2020-2030 will be implemented through a series of national action plans which allocate responsibilities to National Road Safety Committee (NRSC) members (Ministry of Transport, NZ Transport Agency, NZ Police, ACC and Local Government NZ). These plans set out Safe System actions in the areas of Safe Roads and Roadsides, Safe Speeds, Safe Vehicles and Safe Road Users along with expected timings and responsibility for implementation. They also detail how progress will be monitored and actions evaluated.

The Regional Transport Plan is a six-year document covering the six financial years from 1 July 2015 to 30 June 2021. The focus of the plan is on detailed funding for the first three years. However, funding forecasts are also provided for an additional seven years (ten financial years in total from 1 July 2015 to 30 June 2024). The Plan is currently being reviewed and due to COVID-19 restrictions there has been a considerable delay to this review. The expected timeframe has the RLTP being finalised in mid-2021.

Although the Plan itself has a life of six years, strategically, the Plan retains a longer-term view over an approximate 30 year planning horizon, as the Regional Land Transport Strategy did before it.

Roadsafe Taranaki collaborates with both internal and external stakeholders and works closely with key partners in delivering behaviour change programmes. It delivers specific local operational activities not otherwise delivered through Central Government agencies.

### Rationale

Understanding our communities is vital to delivering the right messages at the right times. Road safety promotion can often be a hard sell so linking topics, themes and activities with the *Road to Zero* Strategy provides clear objectives and measurable outcomes.

The following table gives a glimpse into what themes Roadsafe Taranaki will focus on and the rationale behind those decisions.

Focus Area	Theme	Action	Rationale (Road to Zero 2020-2030 Strategy)
1. Speed	Vulnerable	Cycling, walking, schools	Safe modal choice, health benefits, remove feeling of danger
	Speed Management	Open discussions – explain and demonstrate benefits of lower speeds	Connect people, reduce child deaths, increase ability to recover from a mistake
2. Vehicle Safety	Safer Vehicles	Promote safer vehicles	1 and 2 Star vehicles make up 45% of the fleet, account for 66% DSI
	Public Knowledge	Resources, reliable data	Lift minimum standards of new and imported vehicles
3. Work Related	Workplace Charter	Continue sign-ups and workshops	Approximately 25% of fatalities involve person driving for work
	Fatigue and Distraction	Follow obligations to drive change (Health and Safety Act 2015)	Long working hours can impact safety
4. Road User Choices	Alert, Safe and compliant road users	Promote safe roads and safe user behaviour	Everyone needs to take responsibility for road safety
	Drive to the conditions (Intersections, See and Be Seen – winter)	Influence behaviour and support people making good decisions	Anyone can make a mistake and everyone should feel safe to use transport network
	Drivers (young, old, high risk, fatigued, distracted)	Training, improving driving culture, enhance skills already learnt	Challenge poor driving culture, improve safety by helping users understand what a good choice is
	Safe choices and motorcycling	Encourage promote better choices	DSI would decrease if everyone followed the rules. Motorcyclists DSI 21% more likely than car driver
	Impaired	Education and support to reduce risk of impaired driving	Low in number but contribute disproportionately to crash trauma and expose other road users to higher risk
	Targeted groups (young, old, high risk, disabled, pedestrian, cyclist, scooters)	Create safe speed and network, improve infrastructure, targeted marketing	Young (inexperienced), old (numbers increasing), disabled (80 mobility users were DSI between 2008-2017), others have lack of protection on road
5. System	Māori outcomes	Build relationships, co-design programme delivery	Evidence shows Māori at greater risk when travelling. Improved access to social and economic opportunities.

## Partners and Stakeholders

### Overview

Delivery of the Roadsafes Taranaki Road Safety Plan is reliant on collaboration, engagement and support of partners and stakeholders from around the region. The Road Safety Action Planning Group is made up of representatives of NZ Police, Waka Kotahi NZ Transport Agency, Taranaki Regional Council, Stratford District Council, South Taranaki District Council, New Plymouth District Council, ACC, New Plymouth Injury Safe, Taranaki District Health Board, NZ Automobile Association and WSP Opus.

In a wider context Roadsafes Taranaki continues to be supported by our Students Against Dangerous Driving, Department of Corrections, NZ Fire and Emergency, St John, Safer Community Organisations, Blue Light, Driving Instructors, Ngāruahine, Kidsafes Taranaki, local secondary schools/kura and community organisations like Positive Aging and Aged Concern.

### Understanding Stakeholders Needs

The RSAP is a critical component in the delivery of a Road Safety programme across the Taranaki region. The RSAP committee is tasked with the management of all road safety activities and to enable this, there is a supporting structure which includes:

- Council-led and chaired Road Safety Action meetings four times a year with formal agendas
- Each member of the RSAP committee providing updates on previous 3 months delivery and planning on next three months (noting any unfinished projects/activities)

The Taranaki Road Safety Action Plan aims to:

- Fully understand crash risk on our road networks
- Redesign or retrofit our high risk road infrastructures to be predictable, forgiving of mistakes and self-explaining
- Manage our local roads and State Highways to ensure that the travel speeds suit the function and safety level for the road environment and conditions
- Support compliance and enforcement partners' attempts to get local vehicles safe and road worthy
- Support efforts to help ensure all road users are skilled, competent, alert, unimpaired, comply with the road rules and take steps to improve their safety

Collaborating with the RTC as they support efforts to achieve the *Road to Zero* road safety target of a 40% reduction in death and serious injuries on NZ roads by 2030.

## Outlining the Need for Investment

### Specific Safety Problems

There are a number of ways to research specific safety problems in the Taranaki region. For transparency we have utilised crash data from the Ministry of Transport and Waka Kotahi NZ Transport Agency websites. Once issues have been identified research is undertaken to find best practice guidelines or examples for planned activities/education. To find more information follow the links noted below:

- <https://www.nzta.govt.nz/resources/communities-at-risk-register/>
- <https://www.transport.govt.nz/mot-resources/road-safety-resources/road-deaths/annual-road-deaths-2019-provisional/>
- <https://www.transport.govt.nz/mot-resources/road-safety-resources/roadcrashstatistics/social-cost-of-road-crashes-and-injuries/report-overview/>

We have also utilised the data collected during our four-yearly Roadsafe Taranaki High School Survey (Appendix II) which provides details about the behaviour and attitude of between 5,000 and 6,000 high school age students in Taranaki. This survey has been running since 2005 and gives us some very good insight into how 13 to 18 year olds are using and behaving on Taranaki roads.

To support the reduction in severity and number of crashes, Roadsafe Taranaki meets with the following partners:

- Quarterly meeting with Road Safety Action Planning Group
- Six weekly meeting with NZ Police (Highway Patrol, Traffic Alcohol Group, Road Policing)
- Twice yearly with NZ Police – School Community Officers – though catch up during school events/activities
- Twice yearly with Students Against Dangerous Driving – Regional Coordinator
- Quarterly ad-hoc New Plymouth injury Safe and Central Safer Community personnel
- Six weekly – NZ Police (Iwi Liaison) and Blue Light personnel

### Benefits of Addressing the Problems

Road safety benefits are derived from a combination of evidence-based investment in road safety *engineering* improvements, police *enforcement* and road safety *education* to reduce deaths and serious injury. Behaviour change is very difficult to achieve in a multi-cultural society with varying levels of competence, wealth, affordability, family/whānau support and community well-being.

The low overall cost of the programme at \$450,000 makes the Roadsafe Taranaki programme an effective one when linked with other partners including Road Controlling Authorities (engineering), Regional Council (public transport), Police (enforcement) and road safety partners (education/behaviour change).

Addressing the issues on Taranaki roads through education is one part of a crucial solution to eliminate or reduce deaths and serious injuries in our region. The benefit to the region includes:

- Reduction in lost productivity due to the ripple effect a crash resulting in serious injury or death has on a community
- Improved liveability, health and well-being outcomes within the communities
- Increased employment opportunities for young people because they become competent, safe licenced drivers
- Sustainable road safety education as people share their messages within their social networks and work environment
- Economic benefits as the road network is clear and easy to manoeuvre eliminating lost time when crashes reduce access
- A sense of community pride because pedestrians/cyclists and other vulnerable road users feel safe to travel when they so desire
- Ongoing participation in community events that support safe road use



### Critical Success Factors

Critical success factors are the attributes essential to the successful delivery of the programme, against which the available programme options are assessed. Alongside an assessment against critical success factors is the assessment of how well a programme option meets the project's investment objectives and benefits criteria.

Roadsafe Taranaki has applied for \$450,000 per year to deliver road safety education in the region. The Roadsafe Taranaki budget and outline is included in the Regional Transport Plan which shows the total expected spend for roads in Taranaki is around \$16 million per year. Roadsafe Taranaki deliverables are included in the regional Road Safety Action Plan and the Regional Land Transport Plan.

Most activities are evaluated on the day with an independent contractor currently undertaking a review of the Roadsafe Taranaki programme. This includes:

- Comparing our programme with best practise (including international best practice)
- Checking how well it integrates with other national strategies and programmes
- Assessing if the Roadsafe Taranaki programme is good value for money
- Asking if we have the capability and capacity to deliver what we say we are going to deliver
- Reviewing if there enough community contribution and collaboration with key partners

We are aware death and serious crashes have a significant impact on families, communities and the health and justice system with a corresponding high economic social cost. Moving forward the Roadsafe Taranaki programme should demonstrate that its regional focus in both rural and urban areas can deliver road safety and modal shift savings. Evidence shows that reducing road collisions has a significant and measurable effect on healthcare services.

Delivering hard messages and changing behaviour can result in a lot of conflict, so success can sometimes be reliant on external factors, including:

- Political commitment
- Leadership and road safety champions
- Accountable stakeholders
- Collaboration between stakeholders
- Road safety planning (goals, strategy, action plans, funding)
- Data sharing information systems
- Monitoring and evaluation
- Trained and equipped staff
- Marketing, outreach and public information

### Investment Objectives

The *Roads of National Significance* (RONS) attract significant funding due to the very nature of them being significant to the economic growth and transport link to the majority of road users. The One Network encourages smarter planning and investment which in turn will produce greater benefits for road users and businesses. Investment in Taranaki needs to include beneficial and positive outcomes for Māori, employment opportunities, improved public transport in South Taranaki and Stratford plus a serious focus on improving generations of un-licensed driving.

The enormous social cost of road crashes to our region does not include the ongoing trauma suffered by the families and friends of the road users either killed or injured. Many of the challenges we face are directly linked to the unique landscape and a road network created to best fit with agricultural and

transporting of goods to support the rural communities. We are not hemmed into a densely populated landscape, but the price we pay for this is people spend more time driving and covering greater distances.

Reduced collective risk (crash density):

- Reduced personal risk (crash rate)
- Crashes by cause and severity
- Reduction in deaths and serious injuries
- Difference between safe speed and actual speed
- Improved public awareness of travel choice
- Safety of cycling – perceived and actuals

## Issues and Constraints

Behaviour change is a key requirement in order to achieve modal shift and wider outcomes. However, unless the following areas are considered, more barriers are created and will slow solutions and hinder progress:

- An aging and growing population
- Increased availability of drugs in the community
- Cost of licensing/Whānau support for young drivers
- Climate change
- Land use and transport integration
- Journey time reliability
- The cost of public transport versus private vehicle travel
- Social attitudes to private vehicle use
- The lack of dedicated bus or cycle infrastructure outside of New Plymouth

Many of the problems identified relate to human behaviour and the way people use the road network. A significant number of the safety problems identified are due to human factors, travel time reliability with the way people choose to travel and the availability of safe and attractive alternatives to the private car.

It is possible that before all elements of the PBC have been investigated and commissioned, technologies may be available that either change the demand for travel or provide a wider range of interventions and solutions.

The availability of funding for the recommended programme will be influenced by political decisions made outside of the business case approach such as the National Land Transport Programme/National Land Transport Fund, Regional Land Transport Plan and the New Plymouth, Stratford and South Taranaki District Council's Long Term Plans. However, the recommended programme presents a compelling evidence-based investment story to enable these financial decisions and trade-offs to be considered.

## Funding Arrangements

It is expected that elements of the recommended programme will be funded under standard arrangements between the Waka Kotahi NZ Transport Agency and South Taranaki District Council (on behalf of New Plymouth District Council, Stratford District Council and South Taranaki District Council). The exception may be activities or projects which do not meet Waka Kotahi NZ Transport Agency funding criteria, which could be considered for council funding without subsidy from Waka Kotahi NZ

Transport Agency. The Roadsafes Taranaki programme is managed by the Community Development Manager at the South Taranaki District Council on behalf of the Roadsafes Taranaki Management Group.

### What is being funded?

The following table shows where funds will be allocated for the 2021-2024 three-year period.

Road Safety Issue	2021-22	2022-23	2023-24	Total Budget 2021-2024
Alcohol	\$90,000	\$90,000	\$90,000	\$270,000
Cycling	\$11,000	\$11,000	\$11,000	\$33,000
Distraction	\$35,000	\$35,000	\$35,000	\$105,000
Driver licensing/training	\$93,000	\$93,000	\$93,000	\$279,000
Drugs	\$15,000	\$15,000	\$15,000	\$45,000
Fatigue	\$18,000	\$18,000	\$18,000	\$54,000
Intersections	\$43,000	\$43,000	\$43,000	\$129,000
Micromobility	\$12,000	\$12,000	\$12,000	\$36,000
Motorcycling	\$20,000	\$20,000	\$20,000	\$60,000
Restraints	\$32,500	\$32,500	\$32,500	\$97,500
Speed	\$28,000	\$28,000	\$28,000	\$84,000
Vehicles	\$85,000	\$85,000	\$85,000	\$255,000
Walking	\$17,500	\$17,500	\$17,500	\$52,500
<b>TOTAL FUNDING 2021-2024</b>	<b>\$500,000</b>	<b>\$500,000</b>	<b>\$500,000</b>	<b>\$1,500,000</b>

## Delivery and Monitoring

### Management Case

The three district councils agree to delegate responsibility for decision making relating to the Regional Road Safety Programme to the Roadsafes Taranaki Management Group. Each of the councils will appoint one engineering and one community representative to the Roadsafes Taranaki Management Group. These appointments will be made with the written approval of the respective Chief Executive Officers.

The Roadsafes Taranaki Management Group will also:

- Oversee the strategic planning for the community-focussed Road Safety Programme
- Approve the Road Safety Promotions funding application to Waka Kotahi NZ Transport Agency
- Approve a Road Safety Strategic Plan highlighting what will be delivered by Roadsafes Taranaki staff each year of the plan
- Appoint a delegate or delegates to represent the Management Group in HR processes such as employment, performance and salary reviews
- Promote the role and activities of Roadsafes Taranaki within their respective councils

### Benefit Realisation

Road safety programmes are delivered at national, regional and district levels and are designed under an integrated model to work together and to complement each other. Developing a range of regional and district activities that connect with the locals contributes to a fully integrated safe and responsive

transport system and the meeting of inter-agency objectives. Each activity is evaluated to ensure value for money and key objectives and goals have been achieved.

Programmes at the community level specifically enable:

- Community participation in transport issues
- Local insight and connectivity to communities
- Community ownership and the development of local informed solutions to manage local issues
- The clustering of local resources and harnessing local expertise
- The transfer of expertise and capacity into communities
- Integrating and packaging projects and activities locally
- National programmes/activities to be supported at the community level

### Ongoing Stakeholder Engagement Plan

The Roadsafe Taranaki Management Group will jointly sponsor and administer a consultative group (Taranaki Road Safety Action Planning Group) made up of representatives of New Zealand Police, Waka Kotahi NZ Transport Agency, Taranaki District Health Board Health Promotion Unit, Accident Compensation Commission, South Taranaki District Council, Stratford District Council, New Plymouth District Council and any other group deemed appropriate from time to time.

The purpose of the Action Planning Group is to:

- Work together on collaborative projects and initiatives which will contribute to national and regional strategic goals for road safety, including the Safer Journeys Strategy
- Share information, statistics and professional advice to guide the development of the Roadsafe Taranaki Strategic Plan and Annual Plan

### Professional Engagement Process and Peer Review

Working on road safety is an ongoing process. It means permanently seeking out improvements and assimilating new knowledge, insights and techniques.

Roadsafe Taranaki has engaged an external company to evaluate the Road Safety Programme and check best practise and value has been achieved. They are also contracted to research options that may find improvements to the current delivery.

### Investment Logic Map and Regional Land Transport Plan 2021-2024 Current Update

No confirmed update available until 2021 due to delays across the country with Regional Transport Plans.

**Appendix 4**  
**Road Network Procurement Strategy 2019-2022**

# **Road Network Procurement Strategy 2019-2022**

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**CORPORATE OWNERSHIP AND INTERNAL/EXTERNAL ENDORSEMENT**

<b>The Project Manager for this Procurement Plan is:</b>		
<b>Date</b>	<b>Name</b>	<b>Designation</b>
1 August 2019	Stephen Bowden	Roading Asset Manager

<b>Procurement Plan: Prepared / Reviewed / Updated by:</b>		
<b>Date</b>	<b>Name</b>	<b>Designation</b>
1 August 2019	Stephen Bowden	Roading Asset Manager
1 August 2019	Victoria Araba	Director - Assets
1 August 2019	Sven Hanne	Chief Executive

<b>Council Consideration/Adoption:</b>		
<b>Date</b>	<b>Meeting</b>	<b>Recommendation</b>
27 August 2019	Policy and Services Committee	Council received and noted the information

<b>NZTA Endorsement:</b>		
<b>Date</b>	<b>Name</b>	<b>Designation</b>
August 2019		

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## 1. EXECUTIVE SUMMARY

### 1.1 Summary Statements of Key Issues and Opportunities to Obtain Value for Money

The balance between effective competition and efficiency of procurement processes is essential to achieving value for money over the long term. This strategy provides for a delivery model and procurement procedures that ensure competition is maintained without creating costly inefficiencies.

Ensuring competitive and efficient markets is about obtaining 'value for money' that is sustainable in the long term. This can be achieved by creating a market place where small to medium size contracting firms can compete with major national firms. This flows from Stratford District Council's reputation of being a fair and reasonable client. Stratford District Council (SDC) is an advocate of cooperative relationship building where 'value for money' can be achieved and unproductive adversarial disputes can be avoided.

The NZTA requires local authorities to separate their technical services and asset management functions. Many authorities choose to achieve this separation by employing consultants, while some have semi-autonomous in-house business units. The Stratford District Council made the decision some years ago to provide its technical services via an in-house business unit.

The Business Unit provides technical advice, design, data collection and other consultancy functions as required. It is responsible for ensuring that the Roding Contract works and other programmed works are carried out as efficiently and economically as possible.

The Unit is separately funded and operated to achieve the required separation, but the staff members are Council employees. The cost of the in-house business unit is recovered through work category 151: Network and asset Management.

For the procurement of physical works SDC intends using a traditional Measure and Value contract in accordance with NZS 3917:2013 Conditions of Contract for Building and Civil Engineering. The term of the contract will be an initial three years with the possibility of a further two, two year extensions (3+2+2). This contract includes maintenance for sealed and unsealed pavements, environmental maintenance, drainage maintenance, traffic services (signs), responding to Customer Service Requests, emergency works, pre-reseal repairs and reseals, drainage renewals, pavement rehabilitation and roadmarking.

Stratford District Council will be using the Price Quality Method (PQM) for major supplier selection, and Direct Appointment or Lowest Price Conforming for other minor contracts that do not form part of the Roding General Maintenance contract. This method is designed for the evaluation of tenders when the quality of the supplier is important.

It is our preference to use the PQM as it is simple, transparent and represents good value for money, one of the Government's strategic goals in the Government Policy Statement 2018-28.

Price Quality Method gives a clear and consistent process for deciding the supplier quality premium (SQP) for each tenderer. It also enables tenderers who don't win the contract to learn the difference between their SQP and the winning tenderer's SQP. It also makes evaluating alternative tenders much simpler. Stratford District Council believe that encouraging alternative tenders will also encourage innovation.

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## 1.2 Recommendations

It is recommended that the NZTA:

- Endorses Stratford District Council's Road Network Procurement Strategy;
- Approves the continued use of in-house professional services;
- Approve a variation to the Procurement Manual section 10.21 maximum term of a term service contract for infrastructure or planning and advice for a maintenance contract with a maximum term of seven years (3+2+2).
- Approve a variation to the Procurement Manual section 10.21 maximum term of a term service contract for infrastructure or planning and advice for a professional services contract for inspection of SDC's structural assets for a maximum term of six years (2+2+2).

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## 2. POLICY CONTEXT OF STRATFORD DISTRICT COUNCIL

### 2.1 Strategic Objectives and Outcomes

The roading activity encompasses the management, maintenance and provision of rural and urban roads, footpaths, kerb and channel, street lighting and associated infrastructure for the District excluding State Highway 43 (SH 43) and State Highway 3 (SH 3).

The roading network managed by the Stratford District Council totals 597.9km (as at 30 June 2017), made up of 557.1km of rural roads and 40.8km of urban streets. State Highways 3 and 43 are maintained by the New Zealand Transport Agency (NZTA). In addition there are over 700km of unformed legal road and a number of bridges 'beyond the maintenance peg' that are not maintained by Council.

The roading asset includes all pavements from the sub base to, and including, the top sealed or metal surface, traffic services (lighting, street and safety signage), footpaths, kerb & channel, bridges, culverts and side drains.

The main users of the network are residents, industries (particularly sheep and beef farming, dairy, forestry and to a lesser extent, oil), a small commercial sector, and visitors. Fonterra, NZ's largest dairy company, is a key heavy transport user and the dairy industry collectively has a significant impact on the rural roading network. With the recent increase in forestry activity and the implementation of 50Max and HPMV rated vehicles, we have seen nearly a fourfold increase in the number of HCV's using the roading network. This is evidenced by the number of overweight permits that are being issued on a daily basis. In 2016, 63 permits were issued, whereas the following year this had risen to 230. The network is coming under increased pressure from forestry, as trees planted in the mid 1980's are now reaching maturity. Whilst oil and gas still has a presence in the district, exploration has tailed off in the last three years as the oil and gas companies are focusing on maintaining their existing production sites.

Section 317 of the Local Government Act 1974 states that all district roads shall be under the control of the relevant Council.

This activity contributes to the District's well-being and the achievement of the desired outcomes through the Council's provision of an integrated, safe, responsive and sustainable local land transport system. This is a fundamental requirement for every district, as the Council is the road controlling authority under the Local Government Act 1974, with responsibility for all local roads within the district.

Table 1 – Community Outcomes.

Regional Outcomes	Community Priorities
<p><b>Integrated transport network</b> - An integrated and collaborative approach to transport and land use planning that maximises transport effectiveness.</p> <p><b>Facilitating growth and economic development</b> – An effective, efficient and resilient land use transport system that enhances economic wellbeing, growth and productivity in the Taranaki region and beyond.</p> <p><b>Reducing the safety risk</b> - A safe transport network increasingly free of death and serious injury.</p> <p><b>Maintaining and improving accessibility and travel options throughout the region</b> - A people focused, multi-modal land transport system that caters for the different and changing needs of transport users, connects communities and enables participation.</p> <p><b>Ensuring network resilience and responsiveness</b> – A land transport system that is robust, responsive to changing needs and resilient to external influences.</p> <p><b>Reducing negative environmental and community impacts arising from transport</b> – An energy efficient and environmentally sustainable land transport system.</p> <p><b>Addressing these issues in an environment of constrained funding and affordability</b> – An adaptable and flexible approach to managing and developing the land transport system that optimises funding options to best meet the needs of the region in an affordable way.</p>	<p><b>Quality Leadership</b> – To maintain Stratford as a place to live, work, invest and play. Take a positive leadership role in growing and developing the urban environment.</p> <p><b>Affordable, Quality Services and Infrastructure</b> – We will focus on meeting the current and future needs of our community by providing good quality local infrastructure including the land transport system.</p> <p><b>Smart, Vibrant and Prosperous District</b> – We will work to create an attractive and safe built environment.</p> <p><b>Stratford District as a unique destination</b> – we will work collaboratively to support, build on and promote our uniqueness.</p> <p><b>Financial Strength</b> – We will fund infrastructure development and capital works in a way that is most cost effective for households and businesses.</p> <p><b>Growth</b> – Actively promote the district and its lifestyle. Support and participate in regional economic development initiatives for the benefit of the Stratford District and its residents. Ensure the availability of sustainable land for development for residential and commercial purposes, ensuring an integrated approach to the land transport system.</p>

## **2.2 Objectives and Outcomes for the Procurement Strategy**

Council has developed goals and supporting objectives to direct its efforts towards the achievement of the desired outcomes.

The Roding activity goal is:

*To ensure a safe, accessible, resilient and appropriate land transport network that supports growth and remains sustainable to meet the needs of current and future communities.*

The principal objectives are:

- (a) To plan for, and forecast, the investment for the future maintenance and provision of the roading infrastructure in perpetuity, to anticipate growth and demand trends that may affect this level of investment.
- (b) To ensure that all roads, bridges, street lighting, footpaths and traffic services meet adequate safety and service standards.
- (c) To monitor and assess the performance and compliance of the various roading components.
- (d) To maintain an adequate management system for all matters relating to the roading infrastructure; and
- (e) To provide for informed community consultation.

## **2.3 The NZTA's Procurement Requirements and What They Mean for Stratford District Council**

### **2.3.1 Value for Money**

For the purposes of this Strategy, the definition is provided by the Ministry of Transport as one of the Strategic Priorities – Value for Money in the Government Policy Statement 2018-28. The GPS increases the emphasis on value for money to maximise the impact of money spent to achieve the Government's outcomes. Value for money in transport will deliver the right infrastructure and services to the right level at the best cost. The Stratford District Council will consider a range of options, the costs, the benefits and the GPS 2018 strategic direction for maintaining and renewing the components of the land transport system.

### **2.3.2 Competitive and Efficient Markets**

The balance between effective competition and efficiency of procurement processes is essential to achieving value for money over the long term. This strategy provides for a delivery model and procurement procedures that ensures competition is maintained without creating costly inefficiencies.

### **2.3.3 Fair Competition among Suppliers**

Ensuring competitive and efficient markets is about obtaining 'value for money' that is sustainable in the long term. This can be achieved by creating a market place where small to medium size contracting firms can compete with major national firms. This flows from Stratford District Council's reputation of being a fair and reasonable client. Stratford District Council is an advocate of cooperative relationship building where 'value for money' can be achieved and unproductive adversarial disputes can be avoided.

**2.4 Other Relevant Factors**

**2.4.1 Consultancy**

The NZTA requires local authorities to separate their technical services and asset management functions. Many authorities choose to achieve this separation by employing consultants, while some have semi-autonomous in-house business units. The Stratford District Council made the decision some years ago to provide its technical services via an in-house business unit.

*Table 2 – In House Business Unit Development*

<b>Date</b>	<b>Organisation</b>	<b>Action</b>
Aug 1994.	Stratford District Council	Entered into an agreement with its in-house Engineering Business Unit to provide Professional Services.
Jan 1996	Transfund New Zealand	Issued a Review & Audit Division Memorandum No 96/1: Interim provisions allowing professional services business units to operate until 30th June 1998
Jun 1996	Transfund New Zealand	Carried out a Procedural Audit and endorsed Stratford District Council's use of 'In-house Professional Services'.
Oct 1996	Stratford District Council	Policy & Services Committee endorsed the use of 'In-house Professional Services'.
Nov 1996	Transfund New Zealand	Issued Review and Audit Division memorandum No 96/03: Provision of In-house Professional Services. This document required SDC to complete an audit test in order to retain in-house professional services.
Jun 1997	Stratford District Council	Policy & Services Committee, reviewed audit test and endorsed the continued use of 'In-house Professional Services'.
Feb 2001	Transfund New Zealand	Carried out a Procedural Audit and endorsed Stratford District Council's use of 'In-house Professional Services'.
Nov 2014	New Zealand Transport Agency	Carried out a Procedural Audit and noted that the Business Unit Manager and the Rooding Asset Manager are separated to remove any risk associated with conflict of interest,
Oct 2017	New Zealand Transport Agency	Carried out a Procedural Audit and commented the updated Procurement Strategy is to reflect the Transport Agency's professional services policy for in-house professional services.

The Business Unit provides technical advice, design, data collection and other consultancy functions as required. It is responsible for ensuring that the roading contract works and other programmed works are carried out as efficiently and economically as possible.

The Unit is separately funded and operated to achieve the required separation, but the staff members are Council employees.

This option was chosen because it offered the following advantages:

- Long standing knowledge and expertise is retained in-house. As the staff members are council employees, professional intelligence issues do not arise and the full knowledge of the business unit is available to the Council at all times at no additional cost. This is a particularly important consideration in Stratford. Recent staff changes has resulted in some loss of “institutional knowledge” from Stratford, however, this has been off-set somewhat by the appointed of the new Roothing Asset Manager in 2015, who had previously spent 10 years with New Plymouth District Council (a neighbouring authority).
- Overheads can be spread over additional Council departments as the Business Unit are available as an internal consultant for other teams within council, for example, Environmental Services, in regard to planning/consenting issues. Overheads would be reduced without the business unit, but probably not in direct proportion, which means that overhead charges would be higher across other departments.
- There are opportunities for business unit staff members to be utilised from time to time by other Council departments. This is an important consideration in a small local authority with limited staff numbers and budgets.
- Outsourcing professional services to consultants would result in a significant increase in the cost of Network and Asset Management work category, thereby negating the “value for money” the current in-house business unit provides.

## 2.4.2 Network Management

The level of service including, ride comfort, safety, and general appearance of the roading network is dependent upon how well the asset is maintained. The roading maintenance contract (2019 – 2022) defines the inspection regime for the roading network within the Stratford district. Typically the inspection cycles are as follows;

- Primary Collector Roads - monthly
- Collector and all urban roads – monthly
- Rural access roads – one sixth of the network each month
- Rural low volume access roads – three monthly.

The management of the roading network can be grouped into the following activity areas:

- Planned (including Renewals, Capital Projects) and Routine Maintenance – proactive regular or programmed work required to maintain the service level of an asset or prevent its failure, for example, repairing minor defects in sealed roads, grading unsealed roads, painting guard rails.
- Unplanned maintenance – reactive minor repairs to a failed asset to return it to its normal level of service, for example, pothole repairs, replacing damaged signs, clearing minor slips from roadsides and un-blocking culverts.

The annual roading budgets include operational costs associated with activities such as street cleaning and energy costs for street lighting. The budget also includes for activities undertaken by third parties such as Kiwirail, for the maintenance of the level crossings within our district.

The physical works carried out on the district roads are undertaken by private contractors. Most of the work, including all routine maintenance and most renewals and planned work such as reseals and unsealed roads metal replacement, is carried out by one contractor under the “General Roothing Maintenance, Resurfacing, Rehabilitation and Roadmarking Contract”. Emergency works, such as clearing major slips and snow clearing is generally included in this contract as ‘Ready Response’.

The contractors utilise sub-contractors for some activities, for example, roadmarking, rehabilitation, and street cleaning. Streetlight maintenance is handled under a separate contract. For major capital works such as bridge or large diameter culvert replacements, SDC intend using the Price Quality Method (PQM) for major supplier selection. Works of a more minor nature, for example bridge maintenance packages, will be sought using our own internal policy of seeking three quotes from local contractors. In certain situations, (time and cost), it may be preferable to utilise the general roading maintenance contractor in order to complete the works during a financial year. This has the

potential for efficiency savings in terms of consultancy fees associated with contract document preparation, tendering and supervision of the physical works.

All contracts are let under the New Zealand Transport Agency's Procurement Manual and in accordance with Council's Procurement Policy.



### 3. PROCUREMENT PROGRAMME

The Stratford District Council (the Council) invited, in February 2019, suitably qualified Contractors to tender for a service delivery contract for the continued operation and maintenance of the Council's roading facilities.

The Contract will be a "General Roding Maintenance, Resurfacing, Rehabilitation and Roadmarking Contract", requiring the Contractor to provide not only physical works but also a degree of professional services for significant aspects of the work. The Contractor will be expected to develop, execute and monitor maintenance strategies which will ensure the proper and long term performance of Council's roading asset.

This will be a three year contract with two rights of renewal of two years each for the continued operation and maintenance of the Stratford District Council's roading assets.

The contractor will be required, unless specified otherwise, to provide a complete maintenance service for all elements included in the Contract. This will include:

- (a) The identification of maintenance needs within the defined work categories contained in the specifications.
- (b) Undertaking all necessary inspections, reporting and programming of work required.
- (c) Providing all labour, plant and materials to effect prompt and efficient maintenance of the District's assets included in the Contract.
- (d) Executing the works to specification requirements in a safe efficient and timely manner while minimising any inconvenience to the public.
- (e) Undertaking the annual resealing programme in accordance with NZTA P17 and M10.
- (f) Undertaking sealed road pavement rehabilitation projects as defined throughout the duration of the contract period.
- (g) Complete the annual roadmarking programme.
- (h) Responding promptly to emergencies and minimising as far as possible any resultant damage.

#### 3.1 Streetlight Maintenance and Renewals 2016- 2019.

In March of 2016, the Stratford District Council invited suitable qualified contractors to tender for a service delivery contract of the maintenance the districts streetlights including the conversion from 70w high pressure sodium to the equivalent LED's. Stratford District Council's bid for funding from NZTA was approved in February 2016, having completed NZTA's HPS to LED spreadsheet for the conversion. In our case, payback for the capital investment was given as seven years.

The scope of this maintenance contract includes:

- (a) Monthly inspections.
- (b) Programming and undertaking routine maintenance of streetlight stock.
- (c) Fault investigation.
- (d) Updating the asset inventory via RAMM Contractor.
- (e) Validating RAMM data and condition rating of the streetlights.
- (f) Reporting additional works that maybe required over and above the routine maintenance.
- (g) Undertaking ordered works following an instruction from the Engineer.
- (h) Responding to emergency repairs on a 24 hour basis.
- (i) Forward works programming.

- (j) Replacement of existing HPS lights with LED's. The LED's are to be supplied by SDC.

The term of this contract is three years with the possibility of two further one year extensions. The contract start date was 11 April 2016, the completion of the contract being 31 March 2021. At present this contract has been extended by one year, so we are now in our fourth year. The conversion of the HPS streetlights to LED's was completed by 30 June 2018, as stated in the contract. This contract was let using NZTA's PQM methodology.

The value of this contract is \$87,820 per annum.

### **3.2 Professional Services for Inspection and Management of SDC's Structural Assets 2020 – 2026.**

We are currently considering the option of preparing a contract for Professional Services providers to undertake annual inspections of the council's structural assets. As Stratford District Council does not have a Professional Services contract, this will be a first for this authority. Currently, professional services are engaged on an "as and when basis" via short form agreements which are valid for 12 month time periods.

The general scope of this proposed contract will be:

- (a) Inspection of all structural assets of Stratford district council, including, bridges, retaining walls, tunnels, large diameter culverts ( $\geq 1200$ mm diameter), earth drives, pipe bridges and an external inspection of reservoirs.
- (b) Delivery of inspection reports.
- (c) Recommending maintenance programmes.
- (d) Developing long term structural replacement programmes, based on condition of the structure.
- (e) Bridge posting for over-weight vehicles.
- (f) Approval of over-weight permits for non HPMV approved routes.

Currently the bridge inspection programme is split into two regions; Front Country (Mt Taranaki to Douglas) and Back Country (Douglas to Ruapehu District boundary) in order to spread the workload and reduce the annual cost of inspections. The requirement of this proposed contract is for inspections to alternate between Front and Back Country areas. As well as being national best practice, it is recommended that every six years a detailed inspection is undertaken on structural assets. The proposed duration of this professional services contract is for two years with potentially two extensions of two years, (2+2+2). The rationale for this contract duration, is that every structure will have two general inspections and one detailed inspection.

Based on current costs of inspections, we anticipate that annual cost will be in the order of \$50,000 per annum. Our plan is for the contract to be tendered and awarded prior to the Christmas holiday closed down, with a contract start date of 1 January 2020. The supplier selection method will be PQM, with at least 70% weighted towards non-priced attributes.

## 4. PROCUREMENT ENVIRONMENT

### 4.1 Analysis of Supplier Market

Table 3 – Maintenance Contracts within Taranaki

Contract Area	Approved Organisation	Expected Completion Date	Contractor
Patea/Waverley	South Taranaki	30/6/2021	Fulton Hogan
Egmont & Central	South Taranaki	30/9/2021	Inframax
New Plymouth Urban and Rural	New Plymouth	30/06/2029	Downer
Stratford Urban & Rural	Stratford	30/6/2022	Fulton Hogan

The four contracts outlined above have differing timeframes associated with them. For South Taranaki District Council both of their contracts are (3+1+1), whilst Stratford District Council contract is (3+2+2). Both districts operate a traditional measure and value style of contract which includes; pavement repairs, vegetation control, drainage work, customer service requests, traffic services, emergency works. There is a slight difference between South Taranaki District Council's contracts and Stratford District Council's in as much as SDC's includes reseals and pavement rehabilitations works, whereas STDC's, does not. These are let separately by STDC.

New Plymouth District Council has recently awarded a NEC4 Infrastructure Term Service Contract that is expected to last 10 years. This contract includes the following:

- Maintenance and Renewals of Transportation activity (ROC \$12M pa)
- Maintenance and Renewals of Parks assets on the Transport Corridor
- Water Reticulation Renewals
- Waste Water Network Renewals

Fulton Hogan also have an Open Space Management (OSM) contract with South Taranaki District Council, which involves the maintenance of Parks, Cemeteries, Gardens and Local Berms the expected completion date is 30/6/2022.

New Plymouth District Council Parks Department maintain their own Parks and Open Spaces.

The other major maintenance contracts are:

Table 4 – Other Notable Contracts

Contract Area	Approved Organisation	Expected Completion Date	Contractor
West Wanganui State Highways	NZTA	30/6/2020	Downer
Open Space Management	Stratford	30/6/2022	Downer
Stratford Water Services	Stratford	30/6/2022	Citycare
New Plymouth Water Services	New Plymouth	30/6/2021	Citycare
South Taranaki Water Services	South Taranaki	02/10/2020	Veolia

## **4.1.1 Regional Contractors Capable of Performing SDC's Maintenance Contracts**

- Citycare – 3 Waters
- Downer
- Fulton Hogan
- Inframax Construction Ltd
- Warner Construction
- Taranaki Civil Construction
- Whitaker Civil Engineering
- Burgess and Crowley Construction Limited

## 4.2 Analysis of the Stratford District Council Current Procurement Expenditure and Profile

<b>LOCAL ROADS (Urban and Rural)</b>	<b>2019/20</b>	<b>2020/21</b>	<b>2021/22</b>	<b>2022/23</b>	<b>2023/24</b>	<b>2024/25</b>	<b>2025/26</b>
<b>Operational Costs</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Sealed Pavement Maintenance	350,000	350,000	373,978	382,953	392,144	401,947	412,398
Unsealed Pavement Maintenance	150,200	150,200	160,507	164,359	168,304	172,511	176,997
Routine Drainage Maintenance	332,200	332,200	354,996	363,517	372,241	381,547	391,468
Structures Maintenance	140,000	140,000	149,591	153,181	156,857	160,779	164,959
Environmental Maintenance	251,900	251,900	269,198	275,658	282,274	289,331	296,854
Traffic Services Maintenance	193,300	193,300	206,700	211,661	216,764	222,205	227,983
Footpath Maintenance	206,550	211,115	215,960	217,420	226,470	232,125	238,085
Level Crossing Warning Devices	26,200	26,200	29,995	28,667	29,355	30,089	30,871
Minor Events	326,500	326,500	348,905	357,279	365,854	375,000	384,750
Network and Asset Management	327,900	327,900	347,672	354,932	362,554	370,487	378,951
Low Cost/Low risk Improvements	713,941	806,741	695,722	676,883	816,374	866,067	880,317
<b>TOTAL OPERATIONAL COSTS - LOCAL ROADS</b>	<b>3,018,691</b>	<b>3,116,056</b>	<b>3,153,224</b>	<b>3,186,510</b>	<b>3,389,191</b>	<b>3,502,088</b>	<b>3,583,633</b>
<b>LOCAL ROADS RENEWAL</b>							
Unsealed Road Metalling	844,600	844,600	864,700	865,900	866,300	867,600	868,800
Sealed Road Resurfacing	800,000	800,000	820,200	821,900	823,000	824,800	826,800
Drainage Renewals	568,300	568,300	581,600	582,200	582,300	583,000	583,700
Sealed Road Pavement Rehabilitation	762,000	762,000	780,000	780,900	781,100	782,000	782,900
Structures Component Replacement	96,000	96,000	98,500	98,600	98,700	98,900	99,000
Traffic Services Renewals	58,000	58,000	64,600	64,700	64,800	64,900	65,000
Footpath Renewals	0	0	0	0	0	0	0
<b>TOTAL RENEWAL - LOCAL ROADS</b>	<b>3,128,900</b>	<b>3,128,900</b>	<b>3,209,600</b>	<b>3,214,200</b>	<b>3,216,200</b>	<b>3,221,200</b>	<b>3,226,200</b>

## SPECIAL PURPOSE ROADS

### OPERATIONAL COSTS

Sealed Pavement Maintenance	17,000	17,000	18,539	18,984	19,439	19,925	20,443
Unsealed Pavement Maintenance	5,200	5,200	5,599	5,733	5,871	6,018	6,174
Routine Drainage Maintenance	4,900	4,900	5,236	5,361	5,490	5,627	5,774
Structures Maintenance	0	0	0	0	0	0	0
Environmental Maintenance	63,600	63,600	68,004	69,639	71,307	73,090	74,990
Traffic Services Maintenance	3,600	3,600	3,921	4,016	4,112	4,215	4,324
Minor Events	26,200	26,200	27,995	28,667	29,355	30,089	30,871
Network and Asset Management	8,200	8,200	8,727	8,909	9,100	9,299	9,511
Low Cost/Low risk Improvements	9,061	9,061	9,682	9,914	10,152	10,406	10,676
<b>TOTAL OPERATIONAL COSTS - SPR</b>	<b>137,761</b>	<b>137,761</b>	<b>147,703</b>	<b>151,223</b>	<b>154,826</b>	<b>158,669</b>	<b>162,763</b>

### SPECIAL PURPOSE ROADS RENEWALS

Sealed Road Resurfacing	52,000	52,000	53,300	53,400	53,400	53,500	53,600
<b>TOTAL SPECIAL PURPOSE ROADS - RENEWAL</b>	<b>52,000</b>	<b>52,000</b>	<b>53,300</b>	<b>53,400</b>	<b>53,400</b>	<b>53,500</b>	<b>53,600</b>

<b>TOTAL ALL</b>	<b>6,337,352</b>	<b>6,434,717</b>	<b>6,563,827</b>	<b>6,605,333</b>	<b>6,813,617</b>	<b>6,935,457</b>	<b>7,026,196</b>
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### Note

The current contract expires 30<sup>th</sup> June 2019. This contract is currently held by Inframax Construction Ltd. As of 1 July 2019 there will be a new Roding maintenance contract that is a three year term with the possibility of two opportunities for a further two year rights of renewal. This contract has been awarded to Fulton Hogan Ltd.

**4.3 Analysis of the Impact of the Procurement Programmes of Other Approved Organisations and Other Entities**

Stratford District Council advertised its Roothing Network Maintenance Contract on 28<sup>th</sup> February 2019. The tenders closed on 28 March 2019 with the successful contractor (Fulton Hogan Ltd) being announced on 18 April 2019. The next step in the process is for the contract agreement to be signed by the Chief Executive of Stratford District Council and the Regional Manager of Fulton Hogan Ltd. This is expected to take place early in May 2019. Thereafter the contractor is required to supply the following documents to SDC for approval:

- Contract Management Plan;
- Quality Plan;
- Environmental Plan;
- Health and Safety Plan; and
- Traffic Management Plans.

With New Plymouth District Council going to tender in late 2018 with their 10 year maintenance and renewals contract, this has set the scene locally for other contracts and contractors in the region. With Downer being the successful tenderer for the NPDC contract, and the incumbent for the Taranaki Network Outcomes Contract for NZTA, Downer did not submit a tender for SDC's maintenance contract. As a result, three tenders were received from Inframax (incumbent), Fulton Hogan and Warner Construction. The table below outlines other significant maintenance contracts that will be going to the tender box within the next 12 month period.

*Table 5 - Future Maintenance Contracts*

<b>Contract Area</b>	<b>Approved Organisation</b>	<b>Expected Commencement Date</b>
Patea/Waverley	South Taranaki	1/7/2021
Egmont & Central	South Taranaki	1/7/2021
West Wanganui State Highways	New Zealand Transport Agency	1/7/2020

## 5. APPROACH TO DELIVERING THE WORK PROGRAMME

### 5.1 Specific Strategic Objectives

The Roding activity encompasses the management, maintenance and provision of rural and urban roads, footpaths, kerb and channel, street lighting and associated infrastructure for the District excluding State Highway 43 (SH 43) and State Highway 3 (SH 3).

The aim of the activity is to provide a road network that is suitable for the effective and efficient movement of vehicles and people, has a suitable all weather surface that is appropriate to its location and function in terms of skid resistance and smoothness, and has a structure suitable for traffic loading requirements.

Council is a 'Road Controlling Authority' and is legally responsible for the control of its roading network. Section 317 of the Local Government Act 1974 states that all district roads shall be under the control of the relevant council.

The Roding activity goal is:

*"To ensure a safe, accessible, resilient and appropriate land transport network that supports growth and remains sustainable to meet the needs of current and future communities".*

The principal objectives are:

- (a) To plan for, and forecast, the investment for the future maintenance and provision of the Roding infrastructure in perpetuity, and to anticipate growth and demand trends that may affect this level of investment.
- (b) To ensure that all roads, bridges, street lighting, footpath and traffic services meet adequate safety and service standards.
- (c) To monitor and assess the performance and compliance of the various Roding components.
- (d) To maintain an adequate management system for all matters relating to the Roding infrastructure; and
- (e) To provide for informed community consultation.

The Regional Outcomes to which the Roding activity primarily contributes are:

- i) **Affordable, Quality Services and Infrastructure** – We will focus on meeting the current and future needs of our community by providing good quality local infrastructure including the land transport system.
- ii) **Smart, Vibrant and Prosperous District** – We will work to create an attractive and safe built environment.
- iii) **Stratford District as a unique destination** – we will work collaboratively to support, build on and promote our uniqueness.



- iv) **Growth** – Actively promote the district and its lifestyle.
  - a. Support and participate in regional economic development initiatives for the benefit of the Stratford District and its residents.
  - b. Ensure the availability of sustainable land for development for residential and commercial purposes, ensuring an integrated approach to the land transport system.

The Roading activity contributes to the District’s social and economic well-being, and supports the following desired Community Outcomes from the Stratford District Council’s LTP 2018-2028

- Affordable high quality core services and facilities.
- Smart, vibrant and prosperous district.
- Growth.
- Stratford district as a unique destination.

## 5.2 The Procurement Approach

### 5.2.1 Nature of Activities

#### Roading Maintenance Contract – Roading

**Scope:** Consists of all road maintenance items, including emergency response work. Renewal work such as Reseals, Metal Dressing, Pavement Rehabilitation and Watertabling are also included. Seven year term (3+2+2) is the preferred period for the contract.

**Scale:** Approximately \$5.8 million per annum.

Table 6 – Value of SDC’s Maintenance Contract

Activity	Average Cost per Annum 2019/20-26/25 \$000	Complexity	Risk	Potential Suppliers
<b>OPERATIONS</b>				
Sealed Pavement Maintenance	350	Low	Low	See 4.1.1
Unsealed Pavement Maintenance	180	Low	Low	See 4.1.1
Routine Drainage Maintenance	330	Low	Low	See 4.1.1
Structures Maintenance	140	Low	Low	See 4.1.1
Environmental Maintenance	250	Low	Low	See 4.1.1
Traffic Services Maintenance	190	Low	Low	See 4.1.1
Level Crossing Warning Devices	25	Low	Low	See 4.1.1
Emergency Reinstatement	300	Low	Low	See 4.1.1
Network and Asset Mngt	300	Low	Low	See 4.1.1

Activity	Average Cost per Annum 2019/20-26/25 \$000	Complexity	Risk	Potential Suppliers
Low Cost/Low Risk Improvements	690	Low	Low	See 4.1.1
<b>SUB-TOTAL</b>	<b>2755</b>			

Activity	Average Cost per Annum 2019/20-25/26 \$000	Complexity	Risk	Potential Suppliers
<b>RENEWALS</b>				
Unsealed Road Metalling	800	Low	Low	See 4.1.1
Sealed Road Resurfacing	750	Medium	Medium	See 4.1.1
Drainage Renewals	560	Low	Low	See 4.1.1
Pavement Rehabilitation	750	Medium	Medium	See 4.1.1
Structure Components Replacement	100	Low	Low	See 4.1.1
Traffic Services Renewals	60	Low	Low	See 4.1.1
<b>SUB-TOTAL</b>	<b>3020</b>			
<b>TOTAL</b>	<b>5775</b>			

### **5.2.2 Key Attributes and Value for Money Strategy**

'Value for money' is the principal driver of performance; this concept can be illustrated with the following equation:

$$\text{Value for money} = \frac{\text{Functional Performance}}{\text{Resources Consumed}}$$

In this equation 'Functional Performance' is described as the gain received from the investment in terms of economic, social and environmental performance. SDC considers such intangibles as innovation, design and integrity, safety and human development in its measure of 'Functional Performance'.

'Resources Consumed' include the cost incurred to deliver the functionality sought. Therefore in SDC's view best 'value for money' from any activity is a result of extracting the greatest performance out of any activity and delivering the work for the most efficient cost, where both performance and cost are assessed in economic, social and environmental terms.

### **5.2.3 Proposed Delivery Model(s) and Supplier Selection Method(s)**

SDC will continue to use the Price Quality Method (PQM) for supplier selection for significant projects or term maintenance contracts. On occasions small specific projects will be let to local contractors, for example minor bridge maintenance works. The method of procurement for these works will be invited tender, where three invitations are sought. This method is designed for the evaluation of tenders when the quality of the supplier is important.

SDC prefer the PQM because it is simple and transparent.

### **5.2.4 Impact of the Preferred Approach on Value for Money, Fair Competition, and Competitive and Efficient Markets**

PQM gives a clear and consistent process for deciding the supplier quality premium (SQP) for each tenderer. It also enables tenderers who don't win the contract to learn the difference between their SQP and the winning tenderer's SQP. It also makes evaluating alternative tenders much simpler. SDC believe that encouraging alternative tenders will also encourage innovation.

### **5.2.5 Risk Identification and Management**

SDC has developed a risk management process based on AS/NZS 31000:2009. In July 2018, the Council adopted a Risk Management Framework, Risk Management Policy, and an initial council-wide Risk Register which is regularly reviewed and updated. Specifically, the risk management process is designed to raise awareness of threats to Council and ensure appropriate mitigations are implemented to minimise either the impact or likelihood of a harm incident occurring or both. The risks in the council-wide Risk Register are categorised by the following areas:

- Financial
- Operational
- Legislative and Compliance
- Data and Information
- Health and Safety Wellbeing
- Reputational and Conduct

In terms of procurement, Procurement Contract risk is ranked as High risk (between Moderate and Very High, with Extreme being the highest risk assessment) prior to any mitigations or control measures and Low after implementation of strategies, discussed below, to counter potential risks that are common to the procurement process.

Risk Management of Procurement Contracts is guided by the Council's Procurement Policy and comprehensive Procurement Manual.

Health and safety of contractors risk is managed by ensuring all contractors are pre-approved by the Council's Health and Safety Adviser prior to being able to submit a tender for a Council contract. The health and safety pre-qualification process is robust and requires demonstration that the contractor has the experience and capability to comply with health and safety best practice. Council officers must identify potential health and safety risks at the procurement planning phase of the procurement lifecycle. All tenders must incorporate a health and safety section which will be weighted appropriate to the type of contract.

The following excerpt is taken from the Council's Procurement Policy:

### **RISK MANAGEMENT IN PROCUREMENT**

*Procurement is a major activity for local government organisations and involves significant sums of money for the Council. It spans across all areas of the organisation and most council officers are involved in Procurement activities in some way or another. The consequences of failing to follow a robust policy and framework can be significant in terms of the potential financial implications, reputational damage, political scrutiny, and reduced Council performance.*

*There are important areas throughout each of the phases of Procurement that must be addressed in order to reduce the impact or likelihood of a risk incident. Each of these phases are addressed in further detail in the Procurement Manual.*

#### **Planning the Procurement – Phase 1**

- *Document business needs and reason/s for the procurement (Business Case).*
- *Develop detailed scope and design of the procurement project (Procurement Plan).*
- *Identify health and safety risks.*
- *Consideration of alternative business models such as public/private partnerships, government schemes, social enterprise delivery, and potential alternative funding sources.*
- *Identify desired outcomes.*

#### **Engaging with the Market – Phase 2**

- *Ensure the approach to the market is fair and accessible, acknowledging that it is the perception of openness and fairness that matters.*
- *Develop a set of criteria and appropriate weightings based on the risk, complexity and nature of the work required.*
- *Consider the benefits of using alternative approaches such as shortlisting, requesting expressions of interest / RFI, or invitation only tenders where appropriate.*
- *The selection process should be fair and objective with any conflicts of interest declared prior to the appointment of the TET.*
- *Due diligence to be carried out on prospective suppliers.*
- *Ensure retention, dispute-resolution, confidentiality, contractor insurance and security clauses are incorporated into public works contracts.*
- *Draft contract for High Risk Procurement should be independently reviewed by a legal professional and the Health and Safety Manager before signing.*

#### **Review and Monitoring – Phase 3**

- *Regular and timely reporting provided by contractor on specific key contractual obligations and updated in Authority contract management system.*
- *Implement regular performance reviews, meetings.*

- *Retentions held until specific performance criteria met as per Contract Schedule.*
- *All records, minutes, and relevant communications between contractor and council officers to be filed in Content Manager.*
- *Internal audit programme to review Council Officer compliance with the Procurement Policy and Procurement Manual.*
- *Implement regular staff training on Council's Procurement Policy, Procurement Manual, and Pre-Qualified Contractor Manual.*

Note: The Procurement Policy shall not be applied to invalidate New Zealand Transport Agency's Procurement Manual when applied to roads maintenance and construction.

### **5.2.6 Approach to Contract Management**

SDC planning for the management of the contract commences in the procurement planning phase and continues right through evaluation and contract award. Throughout this period consideration is being given to the requirements of how the contract will be managed based on consideration of the value, complexity, strategic importance, risk, the general market maturity and the selected supplier capability.

The planning for contract management is broken down into three broad areas:

- Service delivery management
- Relationship management
- Contract administration

All three areas must be managed successfully if the contract is to be a success.

While the written contract is a record of each party's obligations, it is not designed as a management document for the contract. Therefore SDC prepare a contract management plan. The contract management plan is formalised following the contract award, however it is a living document and will continue to be updated throughout the life of the contract.

### **5.3 Analysis of Whether Advanced Components, Customised Procurement Procedures or Variations to Procurement Rules are Required and Why**

The procurement of an output or activity takes place within a strategic context that is informed by the overarching procurement strategy. This context informs the delivery model best suited to managing, amongst other things, the price, risks, scope and complexity of the output. The choice of delivery model in turn informs the choice of supplier selection method. A contract is then established to purchase the required outputs. Surrounding each of these components are rules that put limitations or restrictions on the choices that can be made.

In relation to delivery models and supplier selection methods, several options are available within each procurement procedure. The Procurement manual contains guidance on which delivery models and supplier selection methods are best suited to particular situations.

When considered in this way, the procurement process can be broken down into discrete pieces of work and, due to the options available, considerable tailoring of the procurement procedures is therefore possible, all within a strategic context. This ensures that the specific procurement procedure chosen to purchase the outputs can be designed by SDC to obtain best value for money in our particular circumstances.

'Advanced' delivery models generally apply to more complex procurement activities and require a higher level of procurement capability and experience to ensure their success. SDC have therefore decided to retain with a tried and tested procurement procedures, i.e. the Price Quality Method (PQM) for supplier selection.

SDC's decisions and choices are consistent with its strategy, the relevant procurement procedure and rules, therefore no further approval from the NZTA should be required.

## **6. IMPLEMENTATION**

### **6.2 Capability and capacity**

#### **6.1.1 *The current and desired state, including current structure, roles and responsibilities within the wider organisational structure***

The Roding assets will be managed in a sustainable way, delivered by a ten year programme to meet future demand and to preserve the long term service potential of the assets.

The Council will monitor its targets for Roding, and review its service through surveys and feedback, and plan for continuous improvement.

Comprehensive reviews of the Asset Management Plan (AMP) and the Road Maintenance Procurement Strategy will coincide with the preparation of subsequent Long Term Plans. Any changes resulting from increased knowledge of the assets, including their operating and financial performance, will also be expressed through the Annual Plan and Long Term Planning process.

#### **6.1.2 *Identification of any Capability or Capacity Gaps***

Stratford District Council has participated in the Road Efficiency Group Workshops, since their inception in 2015. Over time, these workshops have led to including the Business Case Approach into asset management planning and incorporation into our Activity Management Plan. The focus for the latest round of workshops has been focusing on procurement. It has become apparent at these workshops, of the skills shortage facing the construction and roading industry.

Following the departure of two key staff from the business unit in September 2105, SDC's roading team comprised of the Roding Manager only. It was not until January 2016 that a junior Roding Engineer was appointed to fill one of the roles vacated. Having operated with a staff compliment of two full time equivalents for three years, a gap was identified within the structure of the organisation that needed to be filled. This subsequently led to the advertising and appointment of a Graduate Roding Engineer in April 2019.

Having a full complement of staff, knowledge retention within the roading team is vital, especially considering the size of the district and the "history" attached to various aspects of managing the roading network. This institutional knowledge can be catalogued in files, process maps, procedures and policies along with passing this local knowledge onto members of the team.

Outside of the organisation itself, there is a real concern within the region of the lack of resources available to undertake the physical works. With New Plymouth District Council awarding a 10 year maintenance contract to Downer, this has resulted in Downer increasing their workforce to service this contract, thus drawing on the limited pool of resources within the region.

On the horizon are numerous projects that are planned to commence within the next five years, these being:

- The Network Outcomes Contract for NZTA – start date 1 July 2020.
- Two maintenance contracts in South Taranaki District - starting 1 July 2021.
- State Highway 3 Waitara to Bell Block safety improvements – valued at \$29M
- State Highway 3/3A intersection upgrade
- State Highway 3 – New Plymouth to Hawera – Roadsafety Alliance project – estimated \$25M
- State Highway 3 Awakino Tunnel Bypass
- State Highway 3 Mt Messenger Bypass - \$200M

Whilst these projects could attract the attention of the larger contracting organisations, typically within the Taranaki region, Downer and Fulton Hogan are the only two that tender for these works, as they both have a base within the region.

That said, we do have a strong body of small contracting companies who are available to tender for the small value contracts (\$200,000 - \$1,000,000). For SDC this would be for the replacement of retaining walls, large diameter culverts, bridges or components of bridges, and low cost low risk improvement projects.

### **6.1.3 Plan to fill the gaps.**

Continue to review the best methodology for delivering roading services. This includes looking for effectiveness and efficiency gains through collaboration and shared services.

Currently we engage consultants who are qualified tender evaluators to assess any contracts that we tender. Both the Director Assets and Roading Asset Manager have attend the “Clever Buying” two day training course with a long term view that either or both attain the qualified tender evaluator status. This will reduce the requirement to engage consultants to fulfil this role.

In regard to the limited resources available for contracts, SDC engages with the contracting industry in order to optimise the timing of when we tender contracts, in order that we avail ourselves of the best price, certainty of programming and to support the local contracting industry.

## **6.2 Internal Procurement Processes**

Council is required to follow the New Zealand Transport Agency’s Procurement Manual when it engages a roading contractor, as detailed in the NZTA’s Procurement Manual.

In addition, Council has its own procurement policy, which is to be followed when goods or services are being purchased. The policy can be found in the SDC Policy Manual.

## 6.3 Performance Measurement and Monitoring

### 6.3.1 Stratford District Council's KPIs

The Stratford District Council has undertaken to provide a safe and well maintained Rooding network that meets LoS expectations and regulatory requirements. To ensure these expectations and requirements are met, the Stratford District Council undertakes performance monitoring of Rooding activities and infrastructure through the use of performance measures and key performance indicators (KPIs).

Performance measures and reporting enable Stratford District Council to identify how well it is delivering on the agreed LoS. KPIs enable Council to regularly measure actual performance against projected targets. By doing this we are able to identify trends, areas of achievement and areas for improvement to be identified.

The results of the performance monitoring are reported internally and externally through:

- Monthly reports to Elected Members, also accessible to the public via the Council website; and
- The Long Term Plan, Annual Plan and Annual Report to our customers, key stakeholders and partners.

### 6.3.2 SDC KPIs

#### a) Performance Measures

Our current performance is monitored through the measures from three main sources:

- The ONRC performance measures;
- The Department for Internal Affairs (DIA) performance measures; and
- Internal performance measures.

In maintaining its roads, the Council must deliver on three Outcome categories:

- Customer Outcome;
- Technical Output; and
- Cost Efficiency.

**The ONRC Performance Measures:** Under the ONRC, the Stratford District Council is required to maintain the Rooding infrastructure to the 'Customer Levels of Service' of Safety; Resilience; Amenity; Accessibility and Cost efficiency. The KPIs under each of these measures are outlined in Table 20.

**The DIA Performance Measures:** Since 2014 all local authorities have been required to comply with a standard set of performance measures. The performance measures are intended to provide information that will enable the public to contribute to discussions on future levels of service and participate more easily and effectively in decision-making processes. These measures are provided in Table 21.



**The Internal Performance Measures:** These are performance measures put in place by Council that are intended to inform the community about how well Council is delivering on Levels of Service and the performance of the activity assets. Currently there is only one Council specific performance measure - Customer Satisfaction – which monitors customer satisfaction with regards to the Roding Network and Footpaths. This measure includes drainage, as per Table below.

*Table 7 - Internal/Other Agency Performance Measures*

	Level of Service	Performance Measure	Outcome Category
1.	Customer response	<b>Responses to Customer Requests (CRM's).</b> - Greater than 90% are responded to within agreed timeframes.	Customer Outcome 1
2.	Maintenance for Sealed and Unsealed roads	<b>Sealed Road Resurfacing</b> – Greater than 10% of the sealed road network to be resealed annually.	Customer Outcome 2
3.	Maintenance for Sealed and Unsealed roads	<b>Unsealed Road Metalling</b> – Greater than 1% of the unsealed road network to be metal dressed annually.	Customer Outcome 3
4.	Condition of sealed roads	<b>Sealed Pavement Rehabilitation</b> – completion of 2km of sealed pavement rehabilitation per annum.	Customer Outcome 4
5.	Resilience and drainage maintenance	<b>Water Table Cleaning</b> – Cleaning of 200km of water tables per annum.	Customer Outcome 5
6.	Resilience, Safety and Drainage Maintenance.	<b>Water Table Spraying</b> – Spraying the invert of 1400km of water table per annum.	Customer Outcome 6
7.	Drainage Maintenance	<b>Clearing of Deep Drains</b> – Clearing of 2km of deep drains per year.	Customer Outcome 7
8.	Drainage Renewals	<b>Replacing / Upgrading of Culverts</b> – replacement of 10 culverts per annum	Customer Outcome 8
9.	Footpath Renewals	<b>Replacement of footpaths</b> – 1200m of footpaths to be replaced annually	Customer Outcome 9
10.	Sight Maintenance Rail	<b>Cleaning and Repainting of Sight Rails</b> – Clean and paint 1400m of sight rails per annum.	Customer Outcome 10.

The rating of our performance against the key performance indicators (KPI's) or targets is shown in the table below.

Table 8 – KPI's

	Performance Measure	Current 2018/19	Target				How Measured
			Year 1 2019/20	Year 2 2020/21	Year 3 2021/22	Years 4-10 2022-2028	
To provide a well maintained roading network.	<b>Response to service requests</b> - 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 (note: this information is actually held in the asset management plan not the long term plan).	>86%	>87%	>88%	>89%	>90%	Council Records and customer satisfaction survey
	<b>Road condition</b> – The average quality of ride on sealed road network, measured by smooth travel exposure.	Urban - ≥83%	≥83%	≥83%	≥83%	≥83%	RAMM Roughness Rating Survey and report.
		Rural - ≥91%	≥91%	≥91%	≥91%	≥91%	RAMM Roughness Rating Survey and report.
	<b>Sealed Road maintenance</b> – The percentage of the sealed road network that is resurfaced:	≥5%	≥5%	≥5%	≥5%	≥5%	RAMM Contractor
	<b>Unsealed Road maintenance</b> - The percentage of the unsealed road network that has been metal dressed.	≥15%	≥15%	≥15%	≥15%	≥15%	RAMM Contractor
	Pavement rehabilitation km.	4km	4km	4km	4km	4km	RAMM Contractor
	Water tabling km.	200km	200km	200km	200km	200km	RAMM Contractor
	Percentage of residents who are satisfied with the roading network.	76%	77%	78%	79%	80%	Customer Survey
	Percentage of residents who are satisfied with the footpaths.	77%	78%	79%	80%	80%	Customer Survey
To provide a safe roading network.	<b>Road safety change</b> - The number of fatalities and serious injury crashes (DSI) on the local road network, expressed as a number.	1	0	0	0	0	Crash Analysis System

**b) Emergency Roothing Works**

The Long Term Plan contained a budget of \$326,535 per annum for three years, to fund business as usual minor events. Any significant event, where the costs are anticipated to be in excess of 10% of the approved allocation, ie \$530,000, specific funding will be requested from NZTA. This budget line is based on the long term average of actual events over time.

The table below shows the costs of emergency work that was required from 1998/99 to 2008/09. This expenditure is totally dependent upon weather conditions, which is outside of Council’s control. The ratio between the Council portion and financial assistance received changes according to the amount of damage. Amounts are in \$000s.

Table 9 – Emergency Works Historical Costs

Year	2011/12	2012/13	2013/14	2014/15	*2015/16	Average
<b>Total</b>	579,578	159,922	675,400	483,709	468,478	473,417
<b>SDC</b>	243,498	75,163	263,406	232,180	210,815	205,012
<b>NZTA</b>	336,260	84,759	411,994	251,529	257,663	268,441
<b>Assist %</b>	58%	53%	61%	52%	55%	56%

Note: The June 2015 storm event was a major event with a total expenditure of \$5,248,567 for which SDC received an enhanced FAR of 75% for \$4,780,089 of the total works. A further “hardship” claim was made to NZTA in May 2017, and as a result, a further \$525,810 was paid to SDC.

**6.4 Communication Plan**

The primary audience for Procurement strategies is intended to be employees (i.e. the team that need to actually implement it) and the supply market. The communication plan would normally include employees, the supply market, other approved organisations, NZTA, Councillors, local community stakeholders and so forth. The Procurement strategy will be uploaded to the SDC website under Procurement manual s.10.6 *Documentation and publication requirements*.

Table 10 – Communications Plan

Stakeholder	Issues related to this stakeholder	Communications Objectives	Activities	When	Who is Responsible
<b>External: NZTA</b>	SDC are required to provide reports and business cases where appropriate in order to seek on-going funding for successive LTP’s.	To ensure NZTA are advised of changes to maintenance programmes, development of strategies, revisions of Activity Management Plans.	Annual achievement report to NZTA outlining expenditure, outline the works undertaken during the year, seek support from NZTA with the development of future road related strategies, such as walking and cycling. Obtain guidance on the development of work programmes.	Annually and as required.	SDC Roothing Asset Manager

Stakeholder	Issues related to this stakeholder	Communications Objectives	Activities	When	Who is Responsible
<b>External: Contractors</b>	Tenders Contracts Administration	Programming Advertising Contract deliverables Levels of Service Financial Management	Attendance at Forums, Workshops, Seminars, Trade Fairs Invitations to tender Monthly Meetings	At planning phase of programme establishment. As and when indicated	SDC Roding Asset Manager
<b>Internal: SDC &amp; Executive Leadership Team, Planning and Funding Team</b>	Council and Senior management endorsement of the Long Term Plan programme	<i>To acquire Senior Management endorsement of the Roding Programme within the wider context of the Long Term Plan</i>	Development of Asset Management Plans Develop sustainable Roding Programme. Incorporating ONRC into maintenance contracts and AMP's.	Long Term Plan every 3 years, AMPs reviewed Annually Annual Plans Contracts every 7 years	Director Assets  SDC Roding Asset Manager

## 6.5 Implementation Plan

SDC has an Implementation Plan that outlines what the Assets Department will be delivering and when. It sets the framework for dealing with the “on time, on budget and to expectations” objective.

The Implementation Plan determines and defines the major phases of work that will be undertaken to achieve the desired objectives and the associated deliverables. It documents a logical sequence of events over time to progress the roading programme from concept to delivery. It also includes the work breakdown structure that details the related activities and tasks, responsibilities and timeline.

The Implementation Plan provides the following information:

- Project Phases
- Deliverables associated with each phase
- Major Activities for each deliverable
- Key milestones
- Who is responsible for delivery of each major activity, and
- Any dependencies.

## Appendices

### Appendix 5 - Kerb and Channel Condition Rating

Road	Start	End	Length	Side	Type	Age	Condition	Condition Date
CURTIS STREET	105	202	97	Right	Kerb & Channel (Concrete)	70	Poor	18/05/2020
FABIAN STREET	5	200	195	Left	Kerb & Channel (Concrete)	70	Poor	2/03/2020
FABIAN STREET	5	200	195	Right	Kerb & Channel (Concrete)	70	Poor	2/03/2020
MARGARET STREET	2	42	40	Left	Kerb & Channel (Concrete)	70	Poor	30/08/2020
ESSEX STREET	5	123	118	Left	Kerb & Channel (Concrete)	70	Poor	18/05/2020
ESSEX STREET	7	117	110	Right	Kerb & Channel (Concrete)	70	Poor	18/05/2020
ESSEX STREET	123	150	27	Left	Kerb & Channel (Concrete)	70	Poor	30/08/2020
ESSEX STREET	128	175	53	Right	Kerb & Channel (Concrete)	70	Poor	18/05/2020
ESSEX STREET	160	175	19	Left	Kerb & Channel (Concrete)	70	Poor	18/05/2020
TYBALT STREET	8	165	157	Left	Kerb & Channel (Concrete)	70	Poor	1/07/2020
JULIET STREET	595	954	359	Left	Kerb & Channel (Concrete)	70	Poor	30/08/2020
JULIET STREET	708	740	32	Right	Kerb & Channel (Concrete)	70	Poor	30/08/2020
OBERON STREET	592	625	33	Left	Kerb & Channel (Concrete)	70	Poor	1/07/2020
OBERON STREET	587	625	38	Right	Kerb & Channel (Concrete)	70	Poor	1/07/2020
MIRANDA STREET (2 SOUTH)	375	685	310	Left	Kerb & Channel (Concrete)	70	Poor	30/07/2020
MIRANDA STREET (2 SOUTH)	369	685	316	Right	Kerb & Channel (Concrete)	70	Poor	30/07/2020
MIRANDA STREET (2 SOUTH)	702	842	140	Right	Kerb & Channel (Concrete)	70	Poor	30/07/2020
PORTIA STREET (2 MIDDLE)	15	296	281	Left	Kerb & Channel (Concrete)	70	Very poor	29/07/2020
PORTIA STREET (2 MIDDLE)	81	296	215	Right	Kerb & Channel (Concrete)	70	Poor	29/07/2020
LEAR STREET	7	118	111	Left	Kerb & Channel (Concrete)	70	Poor	30/08/2020
LEAR STREET	118	190	72	Left	Kerb & Channel (Concrete)	70	Poor	30/08/2020
PEMBROKE ROAD (1 URBAN)	1474	1582	108	Right	Kerb & Channel (Concrete)	70	Poor	5/03/2020
SWANSEA ROAD (1)	1185	1482	297	Left	Kerb & Channel (Concrete)	70	Poor	30/08/2020
SWANSEA ROAD (1)	1192	1491	299	Right	Kerb & Channel (Concrete)	70	Poor	30/08/2020
SWANSEA ROAD (1)	1500	1578	78	Left	Kerb & Channel (Concrete)	70	Poor	30/08/2020
SWANSEA ROAD (1)	1503	1581	78	Right	Kerb & Channel (Concrete)	70	Poor	30/08/2020
CLOTEN ROAD	735	843	108	Right	Kerb & Channel (Concrete)	70	Poor	30/08/2020
FAIRBANK AVENUE (1)	151	198	47	Left	Kerb & Channel (Concrete)	70	Poor	22/05/2020
LEAR STREET	190	228	38	Left	Kerb & Channel (Concrete)	17	Poor	30/08/2020
CRESSIDA AVENUE	6	96	90	Left	Kerb & Channel (Concrete)	70	Very poor	3/03/2020
AVON STREET	36	119	89	Left	Kerb & Channel (Concrete)	70	Poor	2/03/2020
LYSANDER STREET	92	161	74	Left	Kerb & Channel (Concrete)	70	Poor	10/02/2020
LYSANDER STREET	92	161	73	Right	Kerb & Channel (Concrete)	70	Poor	10/02/2020
CORDELIA STREET (1 NORTH)	1000	1159	159	Right	Kerb & Channel (Concrete)	70	Poor	30/08/2020
JULIET STREET	595	702	107	Right	Kerb & Channel (Concrete)	70	Poor	30/08/2020
JULIET STREET	751	954	203	Right	Kerb & Channel (Concrete)	70	Poor	30/08/2020
ELSINORE STREET	5	118	113	Left	Kerb Only (Concrete)	70	Very poor	30/08/2020
ELSINORE STREET	5	118	113	Right	Kerb Only (Concrete)	70	Very poor	30/08/2020
JULIET STREET	702	708	6	Right	Mountable Kerb & Channel (Heavy Duty)	3	Poor	30/08/2020
JULIET STREET	740	751	11	Right	Mountable Kerb & Channel (Heavy Duty)	3	Poor	30/08/2020
<b>40</b>			<b>5009</b>					<b>40</b>



Appendix 7 – Dragon Dens Questions

Pillar	Question	SDC Response
Systems	1. What is the logic underpinning your approach and the investment you propose?	<ul style="list-style-type: none"> <li>The four problem statements are clearly defined. We have showed the line of sight between the “problem” and the programme of works that will address each of the problem statements.</li> </ul>
	2. Why do we need to do this and what is so different from what we currently do?	<ul style="list-style-type: none"> <li>Forestry activity has increased markedly in the last three years, due to the maturing pine trees planted in the late 1980’s/early 1990’s.</li> <li>With the change in maintenance contractor, our water table renewal programme has significantly reduced due to the increase in the contract rate for this item of work.</li> </ul>
	3. How does this fit within our strategic direction?	<ul style="list-style-type: none"> <li>One of Waka Kotahi’s technical audit recommendations is to address the issue of poor roadside drainage to maximise the life of our pavements.</li> </ul>
	4. Does this meet Government’s requirements?	<ul style="list-style-type: none"> <li>The four strategic priorities of the Government Policy Statement for Land Transport are covered within SDC’s Activity Management Plan:                             <ul style="list-style-type: none"> <li><b>Safety</b> We aim to reduce our DSI crashes annually through safety improvements and collaborating with neighbouring authorities via Roadsafe Taranaki.</li> <li><b>Better Travel Options</b> Our Council vision aligns with this priority of providing a “progressive, prosperous district where communities are celebrated”.</li> <li><b>Improving Freight Connections</b> With increasing numbers of HPMV permits issued each year, our focus will be to target our maintenance and renewals programmes to this pre-determined routes. Increase in forestry activity will impact on our programme for the unsealed network. Again we will focus on the roads most affected.</li> <li><b>Climate Change</b> We continue to develop our Walking and Cycling Strategy to increase the update of active modes of transport.</li> </ul> </li> </ul>
	5. How does what you are proposing resolve the issues we are trying to address in our community?	<ul style="list-style-type: none"> <li>The issues we are trying to resolve are:                             <ul style="list-style-type: none"> <li>Safety by reducing the number of DSI crashes each year</li> <li>Poor roadside drainage. A programme to clean 90km of water tables, replace 1500m of kerb and channel and 500m of culverts annually.</li> <li>Increase in forestry activity. Targeted approach to pavement maintenance on the roads mainly affected by the increase in HCV’s across the district.</li> <li>Customer expectations. Continue without footpath replacement programme to improve the level of service for pedestrians, mobility scooter users which compliment out Walking and Cycling Strategy.</li> </ul> </li> </ul>
	6. How do we know there is not a better way to resolve these problems and issues	<ul style="list-style-type: none"> <li>We have considered alternative approaches to what we are proposing in the AMP. Given the limited funding and the numerous claims on these budgets, “Optioneering” will be more prevalent than in past AMPs.</li> </ul>
Evidence	1. What is the evidence to logically support your proposed investment?	<ul style="list-style-type: none"> <li>The Performance Measures Reporting Tool (PMRT) outputs show a high risk for crashes on our Primary Collector Roads (Opunake Road).</li> <li>The PMRT outputs for our pavement conditions are higher than our peers for our Access Roads.</li> <li>Condition surveys and inspection reports for structures has identified a large backlog of maintenance works on these structures.</li> <li>We have identified approximately 1000km of roadside drains which need cleaning through visual inspection programmes.</li> </ul>
	2. How good is your evidence?	<ul style="list-style-type: none"> <li>The evidence is based on REG PMRT tools and visual inspections.</li> <li>Bi-annual road roughness and rating surveys and results are entered into RAMM.</li> <li>CAS reporting is undertaken monthly for Council reports.</li> </ul>
	3. Where is the evidence that your proposal will deliver what the user wants?	<ul style="list-style-type: none"> <li>This will be delivered by improvements in our customer satisfaction survey results. These surveys are held annually.</li> <li>Reduced number of customer calls and complaints relating to the four key issues.</li> </ul>
	4. What is the evidence that the community really wants this?	<ul style="list-style-type: none"> <li>Customer satisfaction survey results and comments.</li> <li>CRMs to Council</li> <li>Complaints to Council</li> <li>Feedback to officers and Elected Members.</li> </ul>
mun icati	1. What is the compelling reason to change from what we are doing now, or to maintain BAU?	<ul style="list-style-type: none"> <li>The deterioration of the roading network, especially from forestry activity.</li> <li>This is reported to Elected Members in monthly activity reports.</li> <li>Recent technical audit by NZTA included a site visit to Puniwhakau Road which has been significantly affected by logging.</li> <li>Increased occurrences of localised flooding due to inadequate roadside drainage.</li> </ul>

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Pillar		<ul style="list-style-type: none"> <li>Increased number of pavement failures and reactive maintenance to repair adjacent roads, where roadside drains are in-effective or non-existent.</li> </ul>
	2. What are the consequences/greatest risks that you see if we don't agree with your recommendation?	<ul style="list-style-type: none"> <li>There will be poor public perception of both SDC and NZTA, so the risk is of reputational damage and credibility of both organisations.</li> <li>Aside from the above, the network will continue to deteriorate at a greater pace than we can undertake repairs. This will generate a large workload and associated costs for future generations.</li> <li>The PRMT outputs will clearly show a degrading network, so SDC will be below our peers and rural districts.</li> </ul>
	3. What communication and involvement has there been with stakeholders in developing this proposal?	<ul style="list-style-type: none"> <li>None. Our community does not want much. Potholes filled, roads graded, drains cleared, footpaths upgraded and streets swept.</li> </ul>
Pillar	<b>Questions</b>	<b>SDC Response</b>
Decision Making	1. What is the single most important reason you believe we should support your proposal?	<ul style="list-style-type: none"> <li>With increasing forestry activity SDC will have to provide a reasonable level of service for the economy of the district, regional New Zealand Inc. If access is unavailable due to poor road conditions, local farmers will not be able to get product to the markets.</li> </ul>
	2. How will this help fix the corrugations on unsealed roads, the potholes and the dropouts?	<ul style="list-style-type: none"> <li>We have increased the funding requirements for our unsealed roads for two reasons:                             <ol style="list-style-type: none"> <li>To meet the level of service set out in our contract for grading unsealed roads due to the increase in contract rates;</li> <li>Considering the amount of damage caused to unsealed roads, (eg: Puniwhakau Road), we have allowed for increased funding in maintenance metalling, in order to be more pro-active by working with forestry operators in advance of logging taking place.</li> </ol> </li> <li>SDC has recently participated in a NZTA technical audit of its roading network. As noted by the auditors, we have approximately 25% of our sealed network that is overdue by more than two years for a reseal. In order to address this backlog over time we have increased the funding for reseals, but reduced our request for pavement rehabilitation projects.</li> </ul>
	3. You mentioned you used some fancy software to develop your programme. Does this line up with what is happening on the roads and do others use it?	<ul style="list-style-type: none"> <li>Our programme is based on visual inspections undertaken at regular intervals depending on the hierarchy of the road, This is a three month rolling programme. We do not use DTims as we do not currently have the capability in house.</li> </ul>
	4. What happens to the community if this work is not achieved??	<ul style="list-style-type: none"> <li>SDC will receive more complaints from the community relating to the condition of the roading network.</li> <li>In some cases access could be lost due to a failure of a bridge or retaining wall. There are currently 64 "no exit" rural roads that serve farming communities and forestry blocks. These communities would be at risk if access was lost.</li> </ul>
	5. Why should we continue to do this work when our community is suffering financially?	<ul style="list-style-type: none"> <li>We are conscious of the Council's share towards this proposal and as such we have requested a reasonable increase in the funding, taking into account the current issues and the recommendations from the technical audit. We believe this will be supported by our community, as the provision of reasonable roading infrastructure is vital for the community to go about their daily lives.</li> </ul>
	6. How did you prioritise the programme?	<ul style="list-style-type: none"> <li>Our programme is based on condition surveys for roads, footpaths, bridges and retaining walls. We have focussed our unsealed road programme to target the roads used most extensively by forestry contractors. This will require a reduction in the level of service on the low low volume unsealed roads.</li> </ul>
	7. What are the risks associated with this option?	<ul style="list-style-type: none"> <li>Other roads could reduce in quality at a quicker rate that we have anticipated. We have given ourselves the opportunity to react to some instances of this should they occur. This is a "trade off" we are prepared to take.</li> </ul>
	8. What other options did you consider?	<ul style="list-style-type: none"> <li>We have considered reducing the length of our reseal programme to divert funds to other activities, eg: drainage. However this will be counter-productive as we are already in arrears for this work category.</li> <li>We have considered an extensive maintenance programme for bridges and retaining walls, but this is funded through rates, which could require a large increase in household rates being necessary. There is an element of risk associated with structural work, so we are reliant on the advice of our structural engineers.</li> </ul>
	9. What element can you afford to lose?	<ul style="list-style-type: none"> <li>If any, it would be to reduce the programme for footpath replacements and maintenance metalling.</li> <li>Replacement of some urban kerb and channel could be deferred for the term of this LTP if savings were necessary.</li> </ul>
	10. Why is this more important than giving our community safe drinking water?	<ul style="list-style-type: none"> <li>This is NOT more important that the provision of safe drinking water. Many of the rural communities are either on tanked water or from their own well.</li> <li>This activity provides for the community to have free un-interrupted access to the entire district, whether it is for business, recreational use or pleasure. Stratford prides itself as a district where our community can live, work and play.</li> </ul>
	11. Does NZTA support what you are suggesting?	<ul style="list-style-type: none"> <li>There is support for our proposal based on discussions with our Investment Advisor and the recommendations from the recent (September 2020) technical audit.</li> </ul>
Service Deliver	1. Can we actually deliver what you are proposing?	<ul style="list-style-type: none"> <li>Yes. We have a large national maintenance and construction contractor (Fulton Hogan) who can deliver this programme of work. We can also call upon other mid-sized contractors based locally for projects which do not form part of the maintenance contract, eg: the replacement of bridges and retaining walls.</li> </ul>
	2. Will this work be done by our local community or some flash outsiders?	<ul style="list-style-type: none"> <li>We use local contractors wherever possible. This is a Council policy. However we do accept that if the work is "specialised" or of a technical nature (eg: tunnel repairs) then contractors from outside the district may be required.</li> </ul>
	3. Is there capacity in the market to deliver this?	<ul style="list-style-type: none"> <li>Yes. The majority of the programme will be undertaken through the General Roding Maintenance, Resurfacing Rehabilitation and Roadmarking Contract, This contract is currently in year 2 of a potential 7 year contract.</li> </ul>
Pillar	1. Are we delivering the benefits identified in the	<ul style="list-style-type: none"> <li>We are able to monitor the progress and performance of the contractor to ensure we clean/reconstruct the 90km of water table each year.</li> </ul>



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Improvement	current AMP?	<ul style="list-style-type: none"> <li>Increasing the annual resealing length can also be measured to ensure our targets are met. The benefits are longer term rather than short term.</li> </ul>
	2. What makes you think the benefits you are stating are likely to come to pass?	<ul style="list-style-type: none"> <li>We will have fewer pavement failures as a result of poor drainage control.</li> <li>Our customer satisfaction survey results will improve. Our DSI crash rate will reduce.</li> <li>The ride quality of our sealed network will improve with time.</li> <li>As far as forestry is concerned this is somewhat reactionary, as we are not always informed of planned forestry activity.</li> </ul>
	3. What makes you think the community really wants this?	<ul style="list-style-type: none"> <li>The community complain about poor drainage, the condition of the unsealed roading network, logging trucks and poor footpaths. Therefore this programme will need to address these issues.</li> </ul>
Improvement	1. What are you putting in place to make sure we can better understand all this technical stuff in the future?	<ul style="list-style-type: none"> <li>We have developed an improvement plan shown in Section 10.4 of the AMP. We will set up regular monitoring meetings to ensure progress with the improvements identified. As we move through this LTP period, further improvements maybe forthcoming, which we have not captured in the AMP or improvement plan. This is a continually evolving industry. With a greater understanding of the RAMM database this will enable SDC to grow and improve.</li> </ul>
	2. How do we continue to improve our overall approach to this?	<ul style="list-style-type: none"> <li>Greater knowledge of the tools and reports that we can extract from RAMM to ensure we target our maintenance and renewal programmes.</li> <li>Ensuring the quality of the data inputted into RAMM is accurate. We have commissioned GHD's Max Quality data quality reporting tool for this purpose. We make no bones about this, it is a long road as we have limited staffing resources.</li> </ul>

## Appendices

### Appendix 8 – Roading Operational Documents

Consents	Commencement Date	Expiry Date	CM Reference
6468-1 Culvert in unnamed tributary of Kahouri Stream (Cordelia Street)	20/10/2004	1/06/2022	D17/20448
7094-1 Groynes, Rock Amouring, Disturb Kapuni Stream	3/04/2007	1/06/2023	D17/20476
7682-1 Pipe installation, divert stream, pipe construction, reclaim part of river bed (Brecon Road)	2/09/2010	1/06/2028	D17/20477
7944-1 Install Culvert in unnamed tributary of Kahouri Stream (Swansea Road)	3/11/2011	1/06/2028	D17/20478
9338-1 Replace Culvert in unnamed tributary of Patea River (121 Swansea Road)	29/08/2012	1/06/2028	D17/20480
9683-1.1 Install piping in two unnamed tributaries of Patea River	7/02/2014	1/06/2028	D17/20482
7967-1 Replace Culvert in unnamed tributary of Tuikonga Stream (Brookes Road)	9/12/2011	1/06/2029	D17/20479
10057-1 Replace Culvert in unnamed tributary of Kahouri Stream (Pembroke Road)	20/04/2015	1/06/2034	D17/20484
10134-1 Install erosion protection in Mangaehu Stream (Mangaehu Road)	4/08/2015	1/06/2034	D17/20485
10136-1 Install Culvert in unnamed tributary of Waipuku Stream (Rutland Road)	5/08/2015	1/06/2033	D17/20486
10141-1 Replace Culvert in unnamed tributary of Mangaehu Stream	6/08/2015	1/06/2034	D17/20497
10235-1 Install box culvert in unnamed tributary of Toko Stream (Ahuroa Road)	8/03/2016	1/06/2034	D17/20498
10307-1 Install erosion protection in unnamed tributary of Mohakau Stream (Makuri Road)	9/06/2016	1/06/2034	D17/20500
10306-1 Install erosion protection in Makuri Stream (Raupuha Road)	14/06/2016	1/06/2034	D17/20499
10677-1.0 Pembroke Road Land Development - Install Culvert in an unnamed tributary of the Kahouri Stream	16/11/2018	1/06/2034	D20/4894
10678-1.0 Pembroke Road Land Development - Install Culvert in an unnamed tributary of the Kahouri Stream	16/11/2018	1/06/2034	D20/4894
10679-1.0 Pembroke Road Land Development - Install Culvert in an unnamed tributary of the Kahouri Stream	16/11/2018	1/06/2034	D20/4894
10680-1.0 Pembroke Road Land Development - Install Culvert in an unnamed tributary of the Kahouri Stream	16/11/2018	1/06/2034	D20/4894
10720-1.0 Replace Culvert in an unnamed tributary of Kahouri Stream (Beaconsfield Rd)	21/02/2019	1/06/2034	D19/21898
10729-1.0 Replace culvert in unnamed tributary of the Kahouri Stream (Monmouth Road)	10/05/2019	1/06/2034	D21/5429
10778-1.0 Replace culvert in unnamed tributary of the Toko Stream (Gordon Road)	11/10/2019	1/06/2034	D21/5436
Policies	Commencement Date	Review Date	CM Reference
Asset Management	26/05/2020	2023/2024	D20/4330
Procurement Policy	11/06/2019	2022/2023	D18/29563(v3)
Temporary Road Closures	15/05/2013	2018/2019 Expired	D16/2608
Stock Underpasses	14/05/2013	2018/2019 Expired	D16/2606
Pegging and Maintenance of Roads and Bridges	9/04/2013	2018/2019 Expired	D16/2596
Occupation of Unused Road Reserve	19/04/2019	2021/2022	D19/7184
Fences on Road Reserves	12/02/2013	2021/2022	D19/14728
Vehicle Crossings and Culverts	13/08/2019	2021/2022	D18/35500
Traffic Count Policy	1/06/2020	2022/2023	D20/20419
Bylaws	Commencement Date	Review Date	CM Reference
Speed Limits	1/02/2020	2029/2030	D20/1920
Stock Control	2005 (reviewed 2010)	2020/2021	D12/28804
Strategies	Commencement Date	Review Date	CM Reference
Infrastructure Strategy 2021-2051	1/02/2021	2050/2051	D21/2700
Roading Procurement Strategy	1/08/2019	1/07/2022	D19/21973
Walking and Cycling Strategy (draft)			D20/21400
Unsealed Roads (draft)			D20/33217
Bridge (draft)			D20/33201
Retaining Walls (draft)			D20/33231
Contracts	Commencement Date	Review Date	CM Reference
Roading Maintenance Contract (1430)	1/07/2019	1/06/2022	D19/16134