

Roading
Activity Management Plan 2024-2034

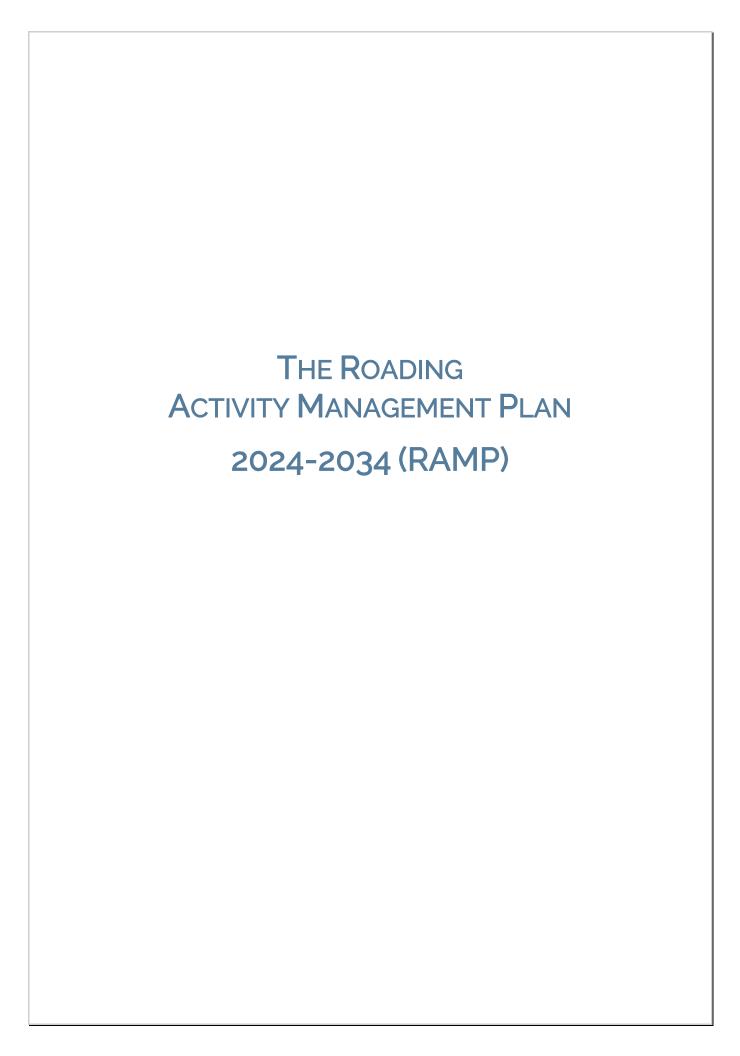


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Contents

EXECUTIVE SUMMARY	10
1.0: Introduction	21
2.0: LEGISLATIVE AND STRATEGIC CONTEXT	34
3.0: Asset Information	49
4.0: STRATEGIC ASSESSMENT	69
5.0: LEVELS OF SERVICE PERFORMANCE	76
6.0: FUTURE GROWTH AND DEMAND	101
7.0: RISK MANAGEMENT	113
8.0: LIFECYCLE MANAGEMENT	127
9.0: Investment Funding Strategy	166
10.0: ASSET MANAGEMENT PRACTICES AND IMPROVEMENT PLAN	177
Appendices 185	

List of Figures Figure 3 - The Stratford District......24 Figure 6 - The Senior Leadership Team......27 Figure 8 - Business Case Approach Activity Management Planning.......29 Figure 12 - SDC ONF Network characteristics......51 Figure 13 - Network Length/Lane Comparison (by ONF Category).......57 Figure 14 - Hastings, Cornwall and Finnerty......57 Figure 15 - Oru Road......57 Figure 16 - Okau Road.......58 Figure 17 - Upper Duthie, Rowan and Palmer Roads......58 Figure 18 - Stratford District Special Purpose Roads......59 Figure 20: Roading Condition Assessment - Critical vs Non-Critical Assets.......65 Figure 22 - Investment Logic Map72 Figure 23 - Fulton Hogan Programme Achievement January 2024.......78 Figure 24 - Road Controlling Authority (RCA) Report 2021/22......81 Figure 25 - Road Safety - Death and Serious Injuries83 Figure 26 – Personal and Collective Risk......84 Figure 27 - Wet Roads/Nights/Intersections......85 Figure 28 – Vulnerable Road Users......86 Figure 29 - Infrastructure Risk Rating......87 Figure 30 - Smooth Travel Exposure88 Figure 32 – Hollard Garden Culvert Renewals......97 Figure 33 - Lower Kohuratahi Road Bridge......98 Figure 34 - Projected Growth Rate104 Figure 37 - Stratford Forestry Distribution Map as at 30 June 2016.......111 Figure 38 - Risk Management Process......115 Figure 3g - The Risk Matrix......115 Figure 40 - Incident Response Plan......123 Figure 41 - Asset Insurance Valuations124 Figure 42 - Roading Management Strategies......139 Figure 43 - Photo of Mangaehu Road......141 Figure 44 - Photo of Mangaoapa Road......141 Figure 45 - Photo of Mangaoapa Road......142 Figure 47 - Photo of Puniwhakau Road......143 Figure 48 - Photo of Puniwhakau Road......143 Figure 49 - Photo of (Opunake Road)......145 Figure 50 - Examples of retaining walls to be replaced......149 Figure 51 - Proposed Walking and Cycling Strategy Map - Stratford Town......155 Figure 52 - Aerials of Roads with Forestry Blocks Being Harvested in the Next 5 Years.....158 Figure 53 - Stratford District Bridge Map......162 Figure 54 - All Assets Capital Investment Funding Strategy......169 Figure 55 - Annual Roading Budget - Capital vs Operating Expenditure......169 Figure 56- Total Expenditure - Capital vs Operating169 Figure 57: Annual Roading Budget - LoS vs Replacements 2024-2034170

Table of Contents

Figure 58: Capital Expenditure - LoS vs Replacement	170
Figure 59 - Capital Expenditure by Activity - All Assets	
Figure 60 - Asset Management Improvement Process	
Figure 61 - Activity Management Plan Development Process	
Figure 62 - Asset Management System Maturity Index	

List of Tables

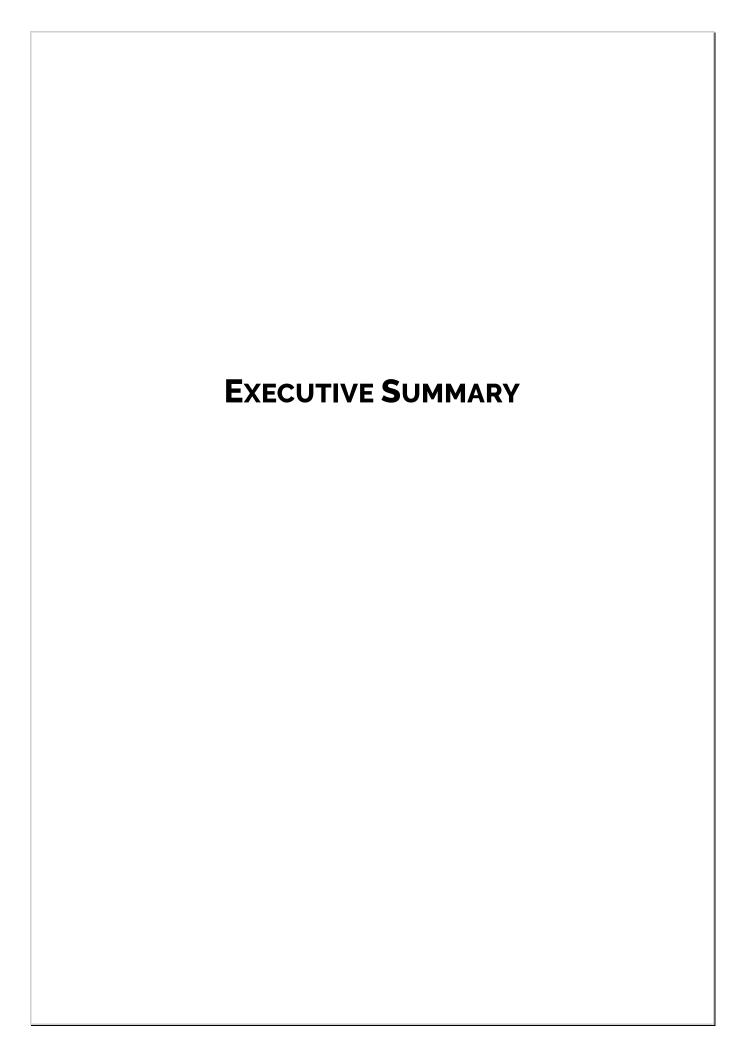
Table 1 - Line of Sight - Problem and Benefit Statements.	12
Table 2 – 2024-2034 National Land Transport Plan Funding at a Glance – Local Roads	
Table 3 - Overview of ONF application to land transport network	
Table 4 - Community Outcomes	
Table 5 - Key Performance Indicators (KPI's) monitored and reported on a monthly basis	43
Table 6 - District Strategic Drivers	
Table 7 - Overview of Infrastructure Assets	50
Table 8 - SDC Road Network Hierarchy	
Table 9 - Operating and Capital Expenditure Annual Plan	
Table 10 - Asset Summary table provided by Beca Projects NZ Limited, comparison of 2021	. and
2018 values	53
Table 11 - Key Roads affected by both HPMV Vehicles and Forestry Activity	54
Table 12 - Roading Network Length	54
Table 13 - SDC Network by ONF Road Classification	55
Table 14 - Boundary Roads	58
Table 15 - Footpaths	59
Table 16 - Estimated costs for General Maintenance retaining wall repairs and replacements	
Table 17 - Roading Asset Management Maturity Index	63
Table 18 - Condition Grading System	
Table 19 - Data Confidence Grading System	
Table 20 - Asset Confidence Grading by Asset Group	
Table 21: 10-Year Critical Bridge Replacement Plan	71
Table 22: Roading Level of Service (LoS) and Performance Measures	
Table 23 - Cost of Chip Sealing	
Table 24 - Cost of Pavement Rehabilitation.	
Table 25 - Expected Customer Outcomes by Road Classification	
Table 26 - Summary of level of service statements	
Table 27 - Actions Identified for Improving Management of the Asset	
Table 28 - Stratford District's Dependency Ratio	
Table 29 - Top Ten Identified Roading Risks	
Table 30 - Risk Response Strategies and Definitions	
Table 31 - Activity Level Criticality Criteria	120
Table 32 - Activity Level Criticality Rating and Examples	
Table 33 - Critical Urban Roading Assets	
Table 34 - Operational, Maintenance and Renewal Delivery Model	
Table 35 - Programmed Works to Address Our Problem Statements	
Table 36 - Addressing Problems	
Table 37 - Relationship Between Works Categories and the ONF Performance Measures	
Table 38 - Option 2 - A Prioritised Programme	
Table 39 - Lifecycle Management Costs	
Table 40 - Key Issues and Risks - Structures	
Table 41 - Bridge replacements in the next 30 years	148
Table 42 - Bridges to be replaced	
Table 43 - Key Management Issues - Drainage	
Table 44 - Strategies to Address Traffic Services Issues	
Table 45 - Current Contracts for Delivery of Traffic Services	
Table 46 – Footpaths replaced in the last Four Years	
Table 47 - Council Level of Service versus Replacement Funding	
Table 48: Roading Expenditure and Funding Projection	
Table 49 - Work Category Summary - Local Roads	
Table 50 – Low Cost Low Risk Workbook LTP 2021-2034 – Local Roads	
Table 51 - Cuttetti attu fulute ittibi ovettiettis	⊥0∠

Glossary of Terms and Acronyms

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

Abbreviation	Description
AADT	
AM	Annual Average Daily Traffic Asset Management
AMP	Asset Management Plan
AMPol BAU	Asset Management Policy 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
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 Programme
NPDC	New Plymouth District Council
NPV	Net Present Value
NZ	New Zealand
NZTA	
NZUAG	New Zealand Transport Agency
	New Zealand Utilities Advisory Group
ODRC	Optimum Depreciated Replacement Cost

Abbreviation	Description
ONF	One Network Framework
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 Fire Authority
TSB	Taranaki Savings Bank
TSA	Treatment Selection Algorithm
WC	Work Category
WK	Waka Kotahi



The Roading Activity Management Plan

The purpose of the Roading 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 roading network for our customers.

- Problem Statement 1 (30%) 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** (20%) The geography and environmental conditions have led to poor drainage controls and the inability of the roading network to cope with intense weather events. This restricts access to road communities and economic impacts.
- Problem Statement 3 (40%) There is pressure on Council to minimise the impact of significant rate increases to the Community which must be balanced with the level of service which this AMP strives to deliver. Following extensive Council LTP workshops our initial funding request to NZTA is \$26.5 million over the three-year period for Maintenance, Operations and Renewals.
- **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.
- We will deliver a flexible investment programme based on the funding approved by Council and NZTA but this may not meet the needs of the community. Their expectations could exceed the level of funding available.

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

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

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. (30%)

Impacts	Consequences of Non-Investment	Benefits of Investments	Investment Opportunity
ecific Problem 1: Increased activ	ity from the forestry industry		
Increased deterioration of the condition of roads affected by forestry. Increases in reactive maintenance and unplanned works. Increases in capital expenditure to remedy faults in routes affected by forestry.	 Poor level of service afforded to the community. Excessive damage to the structure of the road. Increased risk of long term damage to old bridges. Increase in the number of customer complaints. Risk to public safety due to the number of HCVs on low volume roads. 	 Maintain the integrity of the road network. Pro-active/programmed maintenance activities. Reduction of risk for safety and death and serious injuries (DSIs). Ensuring bridges are fit for purpose. Reduce the amount of reactive maintenance. 	 Regular inspections of the roading network generate work programmes. Regular liaison with forestry contractors to identify locations of forests and timing of harvest. Use of low cost/low risk improvement fund for minor network improvements on low volume roads. Planned/programmed pavement maintenance and capital works.
ecific Problem 2: Increased num	ber of High Productivity Motor Vehicles (HPMV) permit vehicles	
ecific Problem 2: Increased num	ber of High Productivity Motor Vehicles (HPMV Consequences of Non-Investment) permit vehicles Benefits of Investments	Investment Opportunities

oecific Problem 3: Bridges and Re	taining Walls			
Impacts	Consequences of Non-Investment	Benefits of Investments		Work Activities
	Failure of bridges or retaining walls resulting in a road closure for prolonged periods of time. Lifeline access to rural communities on "no exit" roads beyond the collapsed bridge or retaining wall. Economic loss to district, agriculture, forestry. Loss of faith in the Council by the community. Chy and environmental conditions have led to possess to road communities and economic impacts.		as part of a ltemised lot timely mar Detailed m from the in Estimates structures for 30-year cycles.	aintenance programme develop spection. for Remaining Useful Life (RUL) o and estimated replacement cost r Infrastructure Plan Long Term P
Impacts	Consequences of Non-Investment	Benefits of Investments		Investment Opportunities
becific Problem 1: Environmental	Conditions - Poor drainage facilities.			
Climatic change has led to increasing intense weather events. Poor drainage has resulted in underslips and localised flooding occurring. Within our network we have 180 culverts which are 225mm in diameter. Our Minimum standard is 375mm. Backlog of watertables need to be cleared. Poor or non-existent outlet	 Flooding of local roads as existing culverts cannot cope with the volume of water. Erosion of culvert outlets leading to slips, pipes falling off. Flooding due to inadequate watertable profiles. These are often blocked with vegetation and slip debris. Pavement layers remain saturated which can lead to failure. 	 Improvements to watertables will pavements will remain dry. This re number of pavement failures that repairing. Replacing undersized culverts to crainfall intensity. Constrict outlet controls at culvert the risk of erosion. 	duces the need combat	 Increased programme for watertabling and culvert replacements. Install outlet controls when replacing culverts. Develop a programme to systematically replace exist 225mm diameter culverts. Fully understand current condition of drainage faciliti Undertake a condition assessment.

Impacts	Consequences of Non-Investment	Benefits of Investments	Investment Opportunities
pecific Problem 1: Roads: Potential	l increases in visitor numbers		
Sealing of State Highway 43 will encourage greater number of tourists to visit Stratford. Taranaki's Economic Development Strategy will impact on Stratford District Council's roading network. Customer expectations are disproportionate to the level of funding provided. Increased pressure on Council to keep the household rates increases to an affordable level. Review the level of service provided to the Special Purpose Roads given that they are no longer 100% funded by NZTA.	 Poorly maintained local road network for visitors at their destination. Increased risk to public health and safety on rural roads. Failure of road pavements due to increased tourism EG: Special Purpose Roads (SPRs). Increase in the number of complaints. Increase in the number of requests for work to be undertaken to meet the community's requirements. 	 Well maintained and resilient local road network. Connectivity for tourism to access visitor offerings. Network will meet current and future needs for tourists. Addresses some of the community requirements but not all. 	 Seek opportunities for exter finding via grants and or Crown funds. Increased tourist numbers wisit Whangamomona and surrounding area. Maintenance of local roads will play a role in the whole visitor experience.
Impacts	Consequences of Non-Investment	Benefits of Investments	Investment Opportunities
Narrow footpaths throughout Stratford.	Lack of width for multiple users of footpaths >50% of network length is less than 1.50m	Provision of 1.50 meter width footpaths as a minimum standard will provide ease of access	 Increased programme for footpath replacement and
Lack of footpaths on some	wide.No provision of footpath to a well-used day	 and use for multiple user groups. Improves level of service for the condition of 	upgrades.Provision of new footpath to
urban streets reduces	care centre, results in parents taking children	Improves level of service for the condition of the footpaths and reduces risk of injury to the	Provision of new footpath to service day care centre.
connectivity. How can we increase the	by car. There are no active modes available.	users.	Development of a five-year
uptake of active modes of	Footpaths width will remain unaltered.Personal injury to frail and elderly users of	Encouraging more active modes of transport with good quality footpaths provided by	programme for footpaths.Seek Crown funding as thes
transport if the infrastructure does not meet standards?	the network.	Stratford District Council.	are released, for example

Transport Choices was a good example.

does not meet standards?

Impacts	Consequences of Non-Investment	Benefits of Investments	Investment Opportunities
nhibits our ability to support sustainable forms of transport for school children, parents, recreational users and including tourism) and others. nhibits the transformation from traditional modes of travel to more sustainable modes, especially for school children. Does not encourage a nealthier lifestyle through active transport systems.	 No uptake in the cycling strategy. No multi-model transport options for residents and visitors. Potential impact on the local economy due to cycling tourists not visiting the area. Road safety implications around encouraging school children to cycle to school and for recreation. 	 Amenity will be improved. Greater use and uptake on active modes of transport. Increase in cycling tourists staying within Stratford. Provision of urban and rural cycle routes for commuting and recreational use. Safer school frontages to encourage the uptake of walking and cycling for school children. 	 Connecting Our Communit Strategy has been endorse by Council. A 30 year plan for infrastructure upgrades to support this strategy has be developed. Educational programmes to encourage greater uptake walking and cycling. Provision of key cycle route throughout Stratford to ser key facilities within the tow. Development of recreation routes for the community atourists visiting Stratford.

Impacts	Consequences of Non-Investment	Benefits of Investments	Investment Opportunities
Specific Problem 1: Increase in the r	number of fatal and serious injury crashes.		
• The number of death and serious injury crashes will not reduce to achieve the national target.	 The number of reported deaths and serious injuries will not reduce. No opportunities to undertake low cost/low risk safety improvements throughout the district. Collective Risk and Personal Risk KPIs will not improve. Less opportunity to encourage active modes of transport if the community feels unsafe. Increase in the number of DSI's in the district. Failure to meet DIA KPI. 	 Reducing the number of death and serious injury crashes, Greater update of active modes as the community will feel safer. Funds targeted to low cost/low risk improvements to provide a safe and resilient network. Improved safety outside urban and rural schools. Corridor safety improvements including roadside barrier, signs and roadmarkings. 	 Continual investment to address crash sites to achieve and assist in the Government Policy Statement (GPS) "Road to Zero" vision. Develop a programme for low cost and low risk safety improvements using Megamaps, Crash Analysis System (CAS) as a guide. 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. A Setting of Speed Limits Rule is being prepared by the new coalition government.

Our Programme Business Case

The Council has developed a programme to address the four strategic priorities outlined in the draft Government Policy Statement 2024/25 – 2033/34:

• Economic Growth and Productivity - Economic growth and social cohesion and is vital to create a competitive, high productivity and a sustainable economy. Therefore, investing in the transport system returns significant benefits to the local economy as well as New Zealand Inc. A well maintained and resilient roading network will allow locally grown produce to reach the markets thereby supporting improved productivity and economic growth.

Stratford's primary economy is agriculture, tourism, and forestry. Whilst oil and gas still play a part in our economy, there is virtually no new oil and gas fields being developed, Forestry is one industry that is taking its toll on the rural roading network of Stratford. Many of the forestry blocks are taking multiple years to be harvested due their size. Wherever possible we liaise with forestry companies to undertake pro-active maintenance on the road network. This will provide more efficient use of funds and resources to keep these toads maintained to a reasonable level of service. The bulk of the timber produced is exported to Asia via Port Taranaki.

- Increased maintenance and resilience The transport system should better support access to markets. This means having a resilient network that is well maintained. This GPS 2024 increases road maintenance funding by \$640 million, compared to the draft GPS released by the previous Government in August 20233, and this Government will be requiring road maintenance to be undertaken with a proactive rather than reactive approach.
- 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. With the new coalition Government taking office on 14 October 2023, the Minister for Transport announce in December 2023, that mandated speed limit changes under The Land Transport Rule: Setting of Speed Limits 2022 are no longer required. The Minister indicated that a new Rule was being developed. Our Council took the stance to pause our Draft Speed Management Plan, to wait for the new Rule. Being a founder of Roadsafe Taranaki we take an active role to improve road safety.
- Value for money Value for money and whole of life cost will be optimised in the delivery of affordable customer levels of service. To deliver value for money and for programme efficiency, the Council will remain flexible in our approach to maintaining the Roading network and the delivery of the services we provide. 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. 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. The RAMP also demonstrates value for money by outlining the asset management processes used for managing our transportation assets and how we will meet regulatory requirements. At the same time, the Government expects us to steward a safe and efficient land transport system that delivers value for money, uses resources wisely and supports New Zealanders living well.

Our Programme Delivery

The Council 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 who provides service in the following areas:

- Developing, managing and administering physical works contracts;
- Preparing feasibility reports, strategies, policies, bylaws and plans;

- Information collation and RAMM data entry;
- Resource and building consents processing;
- Managing Corridor Access requests through "Submitica"; and
- Preparing physical works contracts.

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

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 ONF 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 primarily 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 our focus will be retained on maintaining and strengthening these roads.

Low Cost Low Risk Improvements

With the change in Government in October 2023, the Climate Emergency Response Fund (CERF), was withdrawn by the new Minister of Transport. Stratford District Council were successful in our bid or \$7.8m to be used for school safety projects and constructing connecting cycle paths. This will be used to complete the school safety projects, constructing cycle paths, geometric safety improvements, installation of roadside barriers and widening local roads used by NZTA as alternative routes for planned and un-planned closures of SH3.

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 to extend the life expectancy for our assets.

Our Investment Funding Strategy

The Council's Investment Strategy covers how Stratford District Council plans to plan, operate, maintain and improve the Roading 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 has been reduced by 20% in the level of service aims to keep the increase in household rates to a maximum of 16%. To sustain current levels of service would increase the funding from \$8.4m to \$10.6m per annum. Council clearly saw this as too large an increase on the rate payer, therefore opting for a reduced level of service for affordability purposes.

The maintenance programme for this AMP will increase by 29%, from \$20,523,800 to \$26,509,975 for three years for local roads including the SPR's.

The Council's Low Cost/Low Risk Improvements funding will increase for the three years and for this AMP, this comprises of:

- Safety improvements = \$7,210,000;
- Walking and Cycling = \$1,200,000.

Beyond 2027 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.



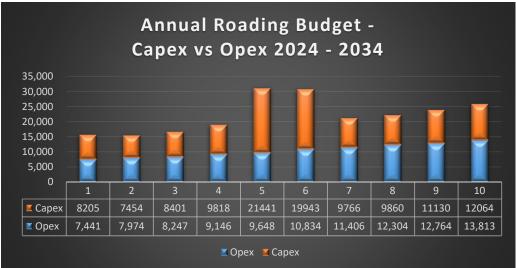


Figure 1 - Total Roading Expenditure

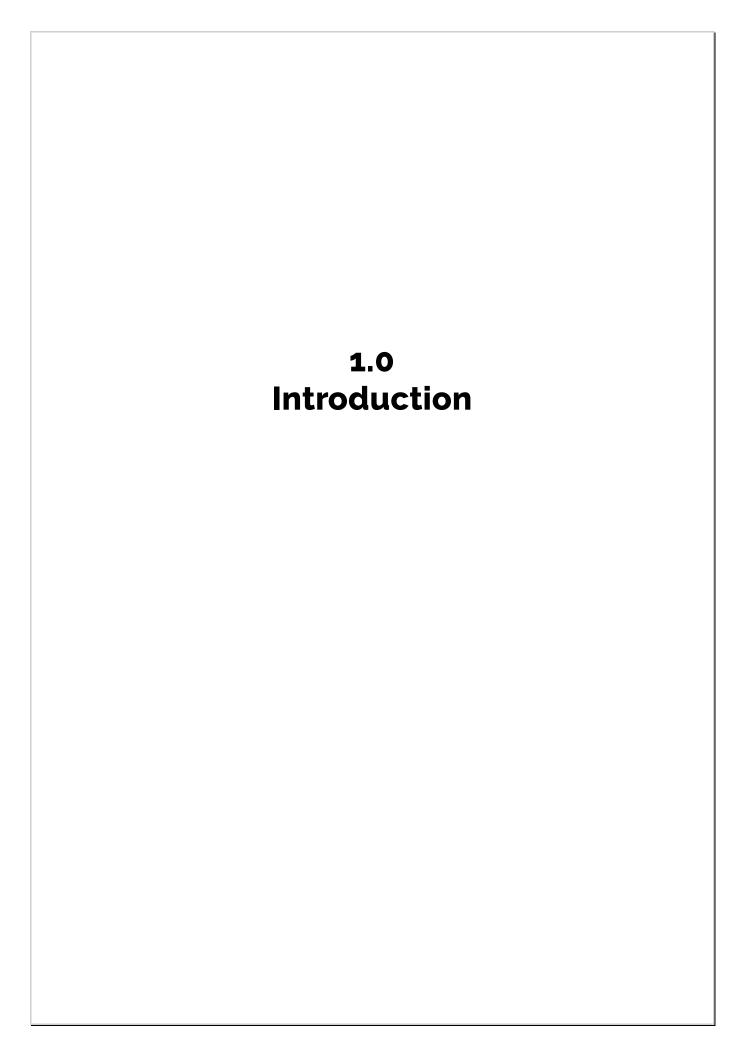
Table 2 - 2024-2034 National Land Transport Plan Funding at a Glance - Local Roads

Roading Activity	2024/25 \$m		2025/26 \$m		2026/27 \$m		2027-2030 \$m		2030-2034 \$m	
	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper
Local Road Maintenance	720	1080	790	1,160	840	1,280	2830	4270	4,120	6,120
Local Road Improvements	150	400	150	400	160	410	500	1,250	710	1,710
Walking and Cycling Improvements	160	330	170	330	170	340	550	950	800	1,340
Safety	500	600	510	610	520	620	1,590	1,890	1,340	2,170

Network Characteristics



Figure 2 - Network Level Overview



1.0: Introduction

1.1	Purpos	se of the Plan	22			
1.2	The St	The Stratford District/ Whakaahurangi				
	1.2.1	Stratford	22			
	1.2.2	Midhirst	23			
	1.2.3	Toko	23			
	1.2.4	Whangamōmona	23			
	1.2.5	Mana Whenua / Tangata Whenua - Whakaahurangi District	23			
	1.2.6	District Geography	23			
1.3	Our Mi	ssion, Vision and Values	26			
1.4	The Ro	pading Activity	28			
1.5	The Im	portance of The Roading Activity	28			
1.6	Busine	ss Case Approach	29			
1.7		ommunity Outcomes				
1.8	Activity	y Management Plan Framework	31			

1.1 PURPOSE OF THE PLAN

The Roading Activity Management Plan 2024-2034 ('the RAMP') is a 10 Year Strategic Plan for the Stratford District Council ('the Council'), Te Kaunihera ā Rohe o Whakaahurangi. It details how the Council will manage the Roading activity, assets and services in an efficient, safe, reliable and sustainable manner to provide value for money to our customers and investors.

The RAMP informs the development of the Council's 2024-2034 Long Term Plan ('the LTP') and the New Zealand Transport Agency (NZTA) National Land Transport Programme for 2024-27. 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 / WHAKAAHURANGI

Initial settlements in the Stratford District, Whakaahurangi, were small Māori villages in the forested hills which were used as places of refuge in times of war, and for seasonal activities. While New Plymouth and other coastal regions of Taranaki are settled by Europeans in the 1840s, the densely forested inland Taranaki areas remained relatively isolated until the land wars of the 1860s. Following those wars, the land of Stratford District was both compulsorily purchased and freely sold (see figure 4 for those that hold Mana Whenua in the District.)

The Stratford District is home to many settlements, with the four main centres being Stratford, Midhirst, Toko and Whangamōmona.

1.2.1 STRATFORD

Stratford (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. The town is central Taranaki's main rural servicing centre, and the administrative base of the Stratford District Council and the Taranaki Regional Council.

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

1.2.2 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. Midhirst was a private settlement serving those who took up land in a 2,000-hectare block and made by a settlement promotor, Albert C Fookes. AC Fookes named Midhirst after his wife's family, the Hirst Family. 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.

1.2.3 TOKO

Toko is located 10 km east of Stratford, at the intersection of East Road (State Highway 43) and Toko Road. Toko was established in 1891, to serve as an important centre for access to land east of Stratford.

1.2.4 WHANGAMŌMONA

Whangamōmona is a rural settlement 65km North East of Stratford on State Highway 43, which opened in 1894. Once quite a thriving settlement and the headquarters of the Whangamōmona County Council with a hotel, a number of stores ad a post office, it suffered decline from the mid-20th Century with only the hotel remaining as a business in town. Today an estimated 126 people live in and around Whangamomona (Statistics NZ 2018).

1.2.5 Mana Whenua / Tangata Whenua – Whakaahurangi District

Ngā Iwi/Hapū that hold mana over the whenua in the Stratford District (as defined by the Stratford District Council and central government) are seven of the eight Iwi in the region of Taranaki. Mana whenua and tangata whenua for the purposes of this activity plan can be described as those that hold the customary authority exercised by an Iwi or hapū in a rohe, or area. Tangata whenua, in relation to a particular area, is defined as meaning 'the iwi or hapū that holds mana whenua over that area.

We acknowledge the following seven Iwi as tangata whenua of the Whakaahurangi rohe: Ngāti Maru, Ngāti Mutunga, Ngāti Tama, Ngā Rauru, Ngāruahine, Ngāti Ruanui and Te Atiawa. Council also recognises the role of Whakaahurangi Marae within the district.

Given that the Stratford District Boundaries also abut the Ruapehu, Waitomo, and Whanganui Regions, there are likely more lwi/Hapu from these rohe with customary interest in the district, especially where assets may be close to these boundaries.

1.2.6 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 Whangamōmona Saddle.

Taranaki Maunga, and Te Papakura o Taranaki, 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.*)

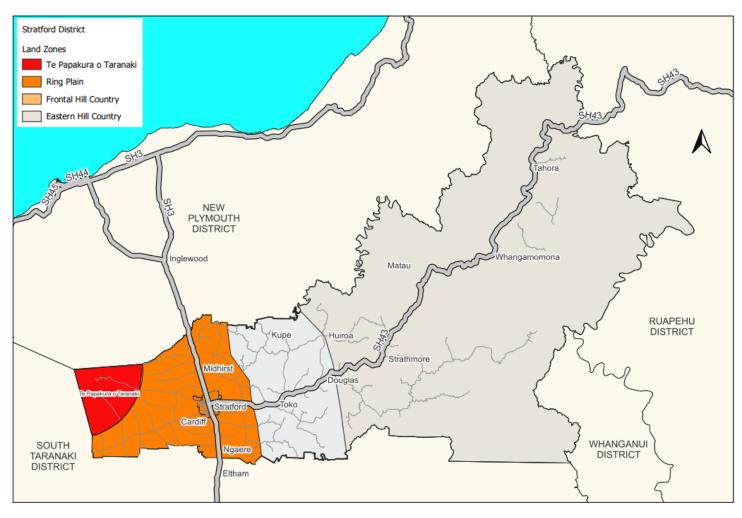


Figure 3 - The Stratford District

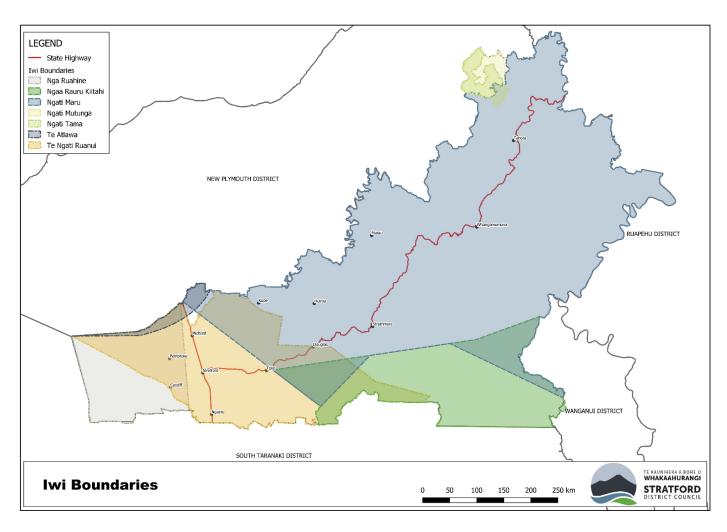


Figure 4 - Iwi Boundaries within the Stratford District

25

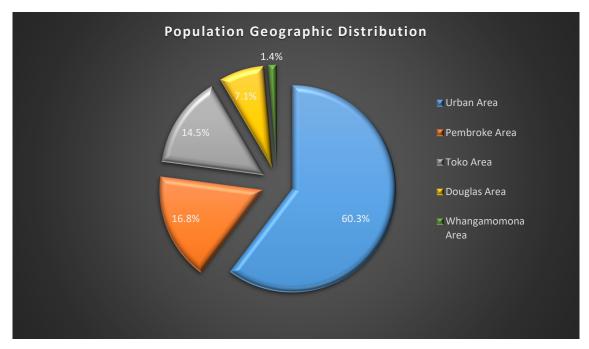


Figure 5 - Current Population Geographic Distribution

1.3 OUR MISSION, VISION AND VALUES

Stratford District Council is the 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 Welcoming, Inclusive, Safe community – Te Pūmanawa o Taranaki"

Te Pūmanawa o Taranaki translates as 'The Beating Heart of Taranaki

26

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 6 and 7.

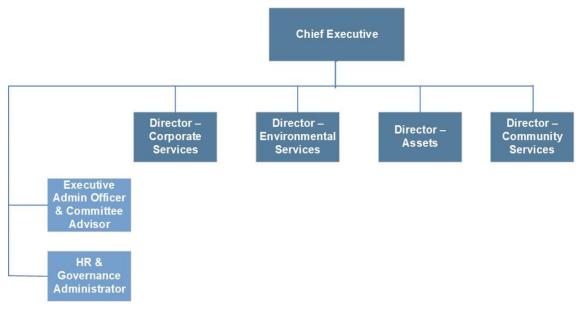


Figure 6 - The Senior Leadership Team

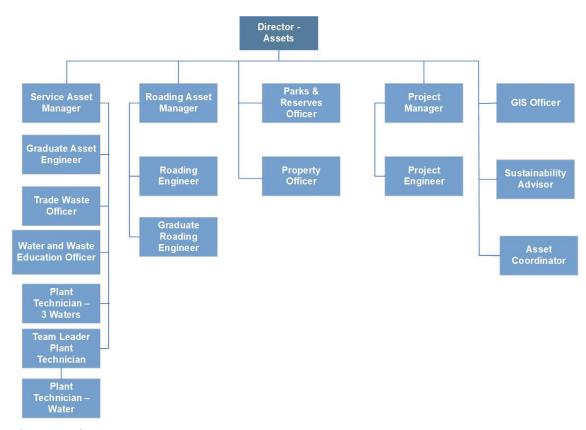


Figure 7 - The Assets Department

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 Roading 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 Framework (ONF) of:

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

A full description of services provided is detailed in Section 8, Life Cycle Management of this RAMP. Table 3 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 Roading activity are proposed to be met through the key performance measures detailed in Section 5 of this Plan. Table 4 shows how the Stratford District Roading activity contributes to the Stratford District's Community Outcomes.

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

1.6 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.

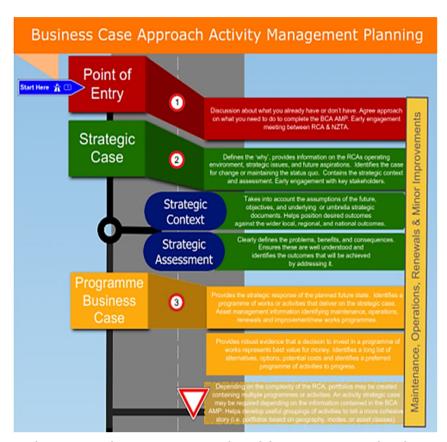


Figure 8 - Business Case Approach Activity Management Planning

Table 3 - Overview of ONF application to land transport network

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

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.

1.7 OUR COMMUNITY OUTCOMES

The Council's vision for the 2024-2034 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:

- Welcoming;
- Resilient;
- Connected; and
- Enabling.

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.

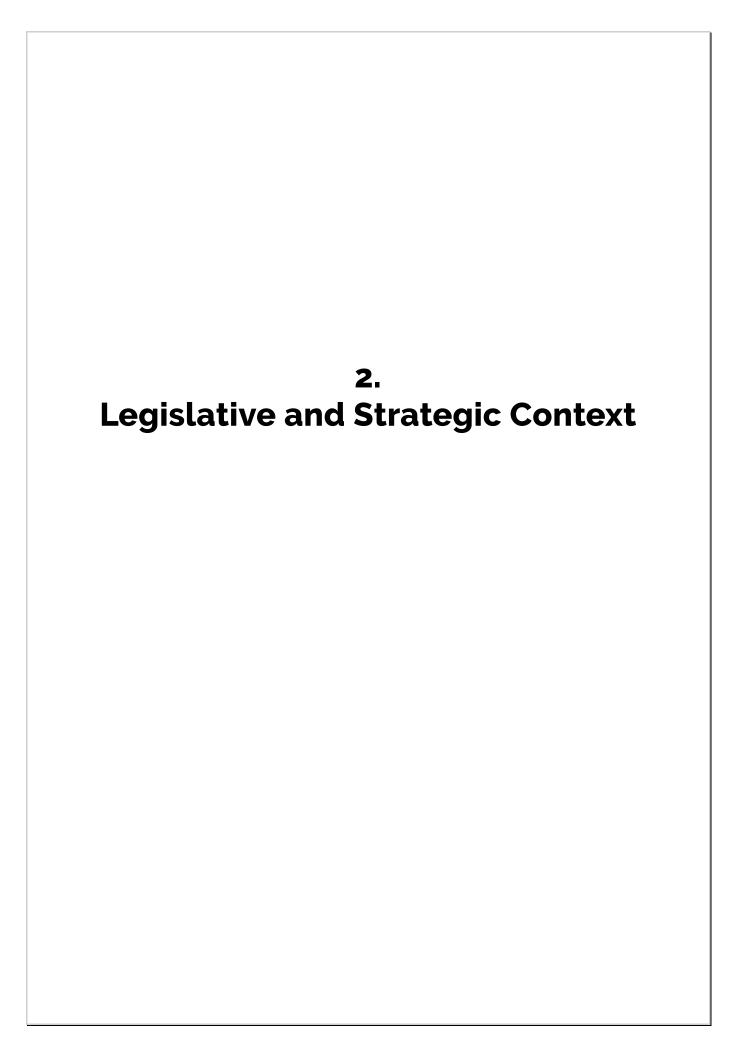
1.8 ACTIVITY MANAGEMENT PLAN FRAMEWORK

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 Lifecycle Management of our assets and how we can demonstrate value for money.

Table 4 - Community Outcomes

	Community Outcomes	Roading Activity Contribution
Welcoming	 We celebrate the unique stories of our district We are inclusive, and value our diversity. Stratford is a friendly place where our visitors feel welcomed Our diverse community feels safe and supported We promote the district as the place to visit, live, play, learn and work. 	Providing a resilient and connected land transport infrastructure network that provides for the movement of people and goods throughout the district.
Resilient	 We consider our natural resources as taonga (treasures) and we will work with our treaty partners and the community to protect and look after them. We support a low-emissions future for our community. We enable our rangatahi (youth) to be sustainable leaders We strive to have resilient infrastructure that meets the current and future needs of the district We respect and apply Te Ao Māori values and Matauranga Māori in our mahi (actions/work). 	Planning a land transport network to protect the natural environment with social and cultural affects managed appropriately.
Connected	We provide opportunities for families and people of all ages to connect with others in the community Our community is engaged and actively participates in democracy We value local knowledge when making decisions We advocate for the services that our community needs to live safe and healthy lives We welcome opportunities to work in partnership with others to help achieve our community outcomes. We are committed to fostering meaningful and genuine partnerships with Mana Whenua.	 Providing access to health, education, social and recreational services and facilities 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. Providing a well maintained transport system to ensure communities are connected and desirable. Leading initiatives for urban growth with well-planned land transport networks which provide connections between centres. Providing good quality land transport infrastructure as a significant part of the regional land transport system.
Enabling	We are a business friendly District We encourage a diverse and sustainable business community We enable economic growth by supporting business investment and development in our district We support the growth of employment opportunities within our community; with a particular focus on our rangitahi (youth) We carefully balance the needs and wants of our district when funding services and infrastructure We encourage partnerships to collaborate with Mana Whenua for the benefits of the Stratford district.	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. Stratford will encourage developers to provide well planned road layouts that allow for the free passage of all forms of transport throughout Stratford Providing good quality land transport infrastructure as a significant part of the regional land transport system.



Legislative and Strategic Context

2.0: Legislative and Strategic Context

2.1	Overvi	ew	35
2.2	Nation	al Drivers	35
	2.2.1	Government Policy Statement on Land Transport 2024 - 2034	35
	2.2.2	The Local Government Act 2002, Amendment Act 2012	39
	2.2.3	The Land Transport Management Act 2003 (LTMA)	39
	2.2.4	The One Network Framework (ONF)	39
	2.2.5	Speed Management Plan	39
	2.2.6	Interim Speed Management Plan	39
2.3	Region	nal Drivers	
	2.3.1	The Regional Transport Network	40
	2.3.2	Regional Land Transport Plan (RLTP) for Taranaki 2022-2028	41
2.4	District	t Drivers	42
	2.4.1	The Long Term Plan (LTP) 2024-2034	42
	2.4.2	The Infrastructure Strategy (IS) 2024-2054	43
	2.4.3	The District Plan	
	2.4.4	The Annual Plan	
	2.4.5	Procurement Policy	44
	2.4.6	Roading Procurement Strategy	45
	2.4.7	Sustainability Policy (Under development)	45
	2.4.8	Connecting Our Communities Strategy 2023 - 2053	45

2.1 OVERVIEW

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

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
- Waka Kotahi
- One Network Framework
- Regional Land Transport Plan

Figure 9 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 Roading 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 Draft Government Policy Statement 2024
- The Local Government Act (2002) Amendment Act (2012)
- The Land Transport Management Act (2003)
- One Network Framework (ONF)
- Speed Management Plan
- Roading Procurement Strategy
- 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.
- Climate Change Response Act 2002

2.2.1 GOVERNMENT POLICY STATEMENT ON LAND TRANSPORT 2024 - 2034

The draft Government Policy Statement (GPS) on Land transport released in March 2024 replaces the GPS that the former Government consulted on in August 2023. It sets out the Government's land transport strategy including:

- what it expects to be achieved from its investment in land transport through the National Land Transport Fund (NLTF)
- what it expects to be achieved from its direct investment in land transport;
- how much funding will be provided and how the funding will be raised;
- how it will achieve its outcomes and priorities through investment in certain areas, known as "activity classes" (eg. the maintenance of state highways or road policing); and
- a statement of the Minister's expectations of how the New Zealand Transport Agency gives effect to this GPS.

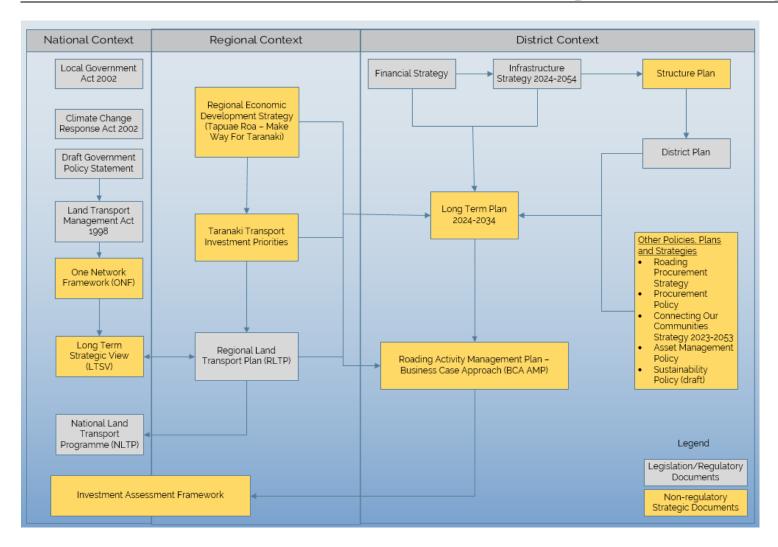


Figure 9 - Business Case Approach Activity Management Planning

The Government expects that this GPS will achieve the following outcomes:

- Economic growth and increased Productivity
- Increased maintenance and resilience
- Improved Safety; and
- Value for Money

The *draft* Government Policy Statement strategic priorities for 2024 sets the balance between investing in new projects and ensuring we maintain and repair our existing infrastructure. It focusses on achieving four key strategic priorities: are:

- Economic Growth and Productivity
- Increased Maintenance and Resilience
- Safety
- Value for Money

The GPS has indicated that there will be major reforms to address the identified challenges with the Ministers of Transport, Infrastructure, and Regional Development working closely together to establish a new framework for investment in New Zealand's infrastructure, delivering on the Government's objectives. Below is a framework for delivering the priorities of the GPS.

The draft GPS is under consultation and can be found here.

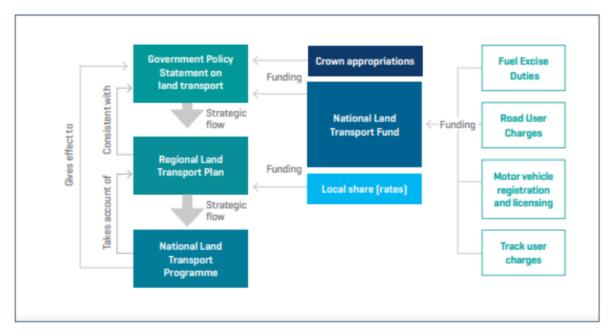


Figure 10: Role of the GPS in the land transport planning and funding system

Strategic Priority – Economic Growth and Productivity

The is the Government's top priority for investment through the GPS. "Efficient investment in our land transport system connects people and freight quickly and safely, supporting economic growth and creating social and economic opportunities including access to land for housing growth.

Core to this priority will be the re-introduction of the Roads of National Significance programme, which was started under the previous National Government in 2009. The Government will also invest in major public transport projects alongside local government to deliver more travel choices and reduced congestion in our major cities."

2. <u>Strategic Priority - Increased Maintenance and Resilience</u>

The Government considers that 'access to markets is essential and this means having a resilient network that is well maintained. This GPS 2024 increases road maintenance funding by \$640 million, compared to the draft GPS released by the previous Government in August 20233, and this Government will be requiring road maintenance to be undertaken with a proactive rather than reactive approach.

The GPS 2024 establishes new activity classes to ensure that maintenance funds are prioritised and ringfenced to fix potholes, and to prevent potholes by ensuring that state highways, local and rural roads are maintained to a higher standard. The State Highway Pothole Prevention and Local Road Pothole Prevention activity classes will ensure that maintenance funds are prioritised and ringfenced, with clear outcomes that must be achieved by both central and local government. Funding from these activity classes will only be available for the following activities: road resealing, road rehabilitation and drainage maintenance.'

3. Strategic Priority - Safety

The GPS 2024 directs investment towards road policing and enforcement, which is one of the most important tools for improving safety on New Zealand's roads. Safety on our transport networks is critically important. The steady decline in deaths and serious injuries we observed between the 1980s and early 2010s has slowed over the past decade.

Road deaths and serious injuries place a substantial burden on families, society, the economy, and the health sector each year, with significant direct costs incurred by the Accident Compensation Corporation (ACC) and other parties.

The Government proposes to make a number of reforms to improve road safety during the timeframe of this GPS. These reforms will be targeted towards the highest contributing factors in fatal road crashes. We will:

- Enact legislation to rollout roadside oral fluid drug testing and set targets for Police to undertake 50,000 roadside oral fluid tests per year once the provisions come into force.
- Increase central government's focus on drink driving and set targets for Police to undertake at least 3 million roadside alcohol breath tests per year.
- Review fines for traffic offences including consideration of indexing the value of infringements to inflation.
- Review the vehicle regulatory system to (among other objectives) enable better management of the safety performance of the vehicle fleet,
- reduce regulatory burden, and ensure our domestic rules are fit for purpose.
- Invest in road policing and road safety promotion to ensure an appropriate level of enforcement while promoting safer driving.

4. Strategic Priority - Value for Money

The GPS 2024 proposes to ensure there is better translation of its significant investments to better outcomes. Therefore, the Government through the GPS 2024 will invest over \$20 billion into the transport network, which is a significant amount of road user and taxpayer money. This investment must deliver better outcomes for present and future generations of New Zealander.

All entities involved in providing for the land transport system are expected to work together to improve the system's performance.

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 FRAMEWORK (ONF)

Within the Stratford District we have five classifications based on the One Network Framework. These are:

- Local Streets
- Activity Streets
- Urban Connectors
- Peri-urban roads
- Rural Connectors
- Rural Roads

2.2.5 SPEED MANAGEMENT PLAN

With the change in government there is no mandated speed management plan. A report was shown to Councillors on the 30th of January 2024 and Option 2 of the report was adopted. This was: 'Wait for the new version of the Land Transport Rule: Setting of Speed Limits to become law. The Minister has advised RCA's to wait for this new Rule before developing or completing Speed Management Plans. This is outlined in the advice provided by Director for Land Transport's letter dated 13 December 2023.'

2.2.6 INTERIM SPEED MANAGEMENT PLAN

In September 2023, the Director for Land Transport endorsed Stratford's Interim Speed Management Plan for all the schools in the district.

All urban schools have 30km/h speed limits outside the school, whilst rural schools are 60km/h. There is one exception to this which is Makahu School, which has been reduced to 30km/h. The reason for this is the school operates on a split site, using Makahu Hall for some school events and classes. The Hall is located on the opposite side of Mangaehu Road.

The speed limits will be changed by 30 June 2024.

2.2.7 CLIMATE CHANGE RESPONSE ACT 2002

National adaptation plan and Aotearoa New Zealand's first emissions reduction plan. From 30 November 2022 local government must 'have regard to' Aotearoa New Zealand's first emissions reduction plan when they prepare or change a regional policy statement, regional plan or district plan. This is a requirement under the Resource Management Act 1991 (RMA), made by the Resource Management Amendment Act 2020 (RMAA). This requirement was introduced to create a stronger link between the Climate Change Response Act 2002 (CCRA) and decision-making under the RMA. Further to this council is also required to report to the Climate Change Minister our adaptation preparedness. (Section 5ZW of the Climate Change Response Act.).

2.3 REGIONAL DRIVERS

2.3.1 THE REGIONAL TRANSPORT NETWORK

The Taranaki region covers an area of 7,258 km². Taranaki lies on the west cost 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 interregional 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.

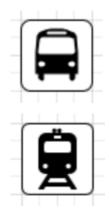


Walking and cycling are growing activities within the Stratford District. The Council have recently adopted the Council's Connecting our Communities Strategy, which is a 30 year plan to promote and provide walking and cycling infrastructure.

This project is for safety features outside, Stratford Primary School, St Joseph's Primary School and Avon School.

The project includes connecting these three schools with cycleways, as well as providing two crossings of State Highway 3 in the CBD and connections to Stratford High School via Fenton Street and Celia Street. The Taranaki Regional Council have undertaken a review of their "Regional Walkways and Cycleways Strategy for Taranaki 2007" by incorporating public transport as well as active modes of transport. This new strategy is called "Better Travel Choices 2023". The public consultation period for this strategy ends on 29 October 2023. Designs have been drafted to develop 3-year, 10-year, and 30-year plans to

upgrade our transport network as part of our Connecting Our Communities Strategy for Stratford.



Urban networks in New Plymouth provide a 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 2022-2028

The Regional Land Transport Plan (RLTP) for Taranaki 2022-2028 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 2024-2034 and that many of the projects listed with the 2022-2027 RLTP have been completed.

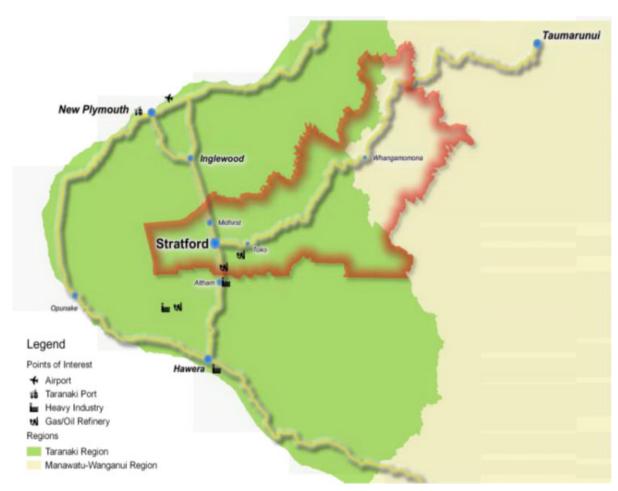


Figure 11 - Regional Connections

2.4 DISTRICT DRIVERS

The Roading Activity Management Plan has connected a number of district strategies. The Roading AMP forms a critical part of the planning framework as shown in figure 8. Table 5 provides a description of the District Strategic Drivers for the Roading AMP and how they influence or relate to the Roading AMP.

2.4.1 THE LONG TERM PLAN (LTP) 2024-2034

The Long Term Plan (LTP) 2024-2034 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) 2024-2054

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 that inform the relevant AMP and is reviewed every 3 years.

2.4.3 THE DISTRICT PLAN

The District Plan was developed in compliance with the requirements of the Resource Management Act 1991 (RMA) to assist Council to carry out their functions of sustainable management of natural and physical resources in a way that enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety. The District Plan specifies land use policies aiming to mitigate and control the detrimental environmental effects of new developments. The RAMP sets out the Roading hierarchy and standards to be achieved including levels of service.

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.

The Annual Plan for 2023 has recently been approved by the Office of the Auditor General and adopted by Council in October 2023.

Within this Annual Plan are roading Key Performance Indicators (KPI's) which are monitored and reported on a monthly basis.

Table 5 - Key Performance Indicators (KPI's) monitored and reported on a monthly basis.

Level of Service	Performance Measure	Target	2023/2024 YTD
Safe Roading Network	Road safety - The change from the previous financial year in the number of deaths and serious injury crashes (DSI) on the local road network, expressed as a number. The number of DSI's for 2021/2022 was 6. Our target is 5 a reduction of 1.	-1	Achieved to date = 0 There were no DSI crashes in September
Road Condition	Urban Road condition – The average quality of ride on sealed urban road network, measured by smooth travel exposure.	≥ 60%	Not Achieved - 54% (as at 2022/23). NZTA is undertaking nationwide data collection surveys as a part of their Consistent Data Collection Strategy.

Level of Service	Performance Measure	Target	2023/2024 YTD
	Rural Road condition- The average quality of ride on sealed rural road network, measured by smooth travel exposure.	≥ 91%	Achieved - 92% (as at 2022/23). See comment above.
Road Maintenanc e	Sealed Road maintenance – The percentage of the sealed road network that is resurfaced:	≥5%	Not Achieved¹ The reseal programme for the year has not been started.
	Unsealed Road maintenance ² - The percentage of the unsealed road network that has been metal dressed.	≥5%	o.6% Achieved to date. No maintenance metalling was undertaken in September. Given the expenditure on strengthening the main roads used by the forestry industry, it is highly unlikely that we will achieve this target length this year.
Footpaths	Footpaths that fall within LoS Standard - The percentage of footpaths within a territorial authority district that fall within the level of service or service standard for the condition of footpaths that is set out in the territorial authority's relevant document.	>72%	The last survey achieved a result of 89% of the footpaths were above our intervention target of 10% defects per 100m of footpath. No further survey has been undertaken or programmed. We need to determine if another survey is warranted given the financial constraints we are under this year.
Customer Request Managemen t Response	Response to service requests - 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.	>88%	Achieved
Customer Satisfaction	Roading Network	>50%	Not Achieved – The results for the first quarter are 19% satisfied and 50% dissatisfied.
	Footpaths	>60%	Not Achieved - The results of the first quarter are 50% satisfied and 19% dissatisfied.

2.4.5 PROCUREMENT POLICY

Procurement for the purpose of implementing projects identified in the work programmes are undertaken in accordance with the Council's Procurement Policy. The Council's Procurement Policy for the purpose of procuring goods, works and services is aimed at ensuring that Council:

- 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.

¹ Our target length for resealing is 20km per year.

²Our target is to use 10,000m³ of metal or the equivalent of 25km (12%) of unsealed roads, assuming a 100mm overlay on a 4m wide road. To date we have re-metalled 1.3km of the unsealed network.

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.

2.4.6 ROADING PROCUREMENT STRATEGY

The strategy requires a consideration and inclusion of Central Government's four Broader Outcomes for Procurement which are:

- Increasing access for New Zealand businesses;
- Construction skills and training;
- Improving condition for New Zealand workers; and
- Reducing emissions and waste.

2.4.7 SUSTAINABILITY POLICY (UNDER DEVELOPMENT)

The Draft Sustainability Policy is expected to be completed by July 2025. The purpose of this Policy is to:

- Provide a framework and a set of principles to guide our actions to support and improve Council sustainability performance thereby reduce emissions - across all Council assets, activities and services.
- Developing this policy, the Council reinforces its commitment to build on its achievements
 in the efficient management of energy, water and key material resources, the minimisation
 of waste and emissions, and commits to continue to find new and innovative ways to
 demonstrate leadership in operations, partnerships, Te Tiriti obligations, capacity building
 and networking to advance sustainability in the District, by demonstrating leadership the
 policy is expected to
- Enable and build resilience and integrated council response to extreme weather events.

It is expected that there will be a council corporate Green House Gas (GHG) emissions baseline inventory undertaken soon after the Sustainability Policy approval and subsequently a *Sustainability Strategy* that is proposed to be developed with mana whenua and the Stratford Community.

2.4.8 CONNECTING OUR COMMUNITIES STRATEGY 2023 - 2053

The Strategy is shown in Appendix 1 and is a plan of action for walking and cycling in Stratford. Over the next 3 decades, the Council's focus will be on fostering sustainable transport in the Stratford district. This strategy outlines our commitment to creating safe and reliable road transport infrastructure, ensuring that our communities are well-connected and secure.

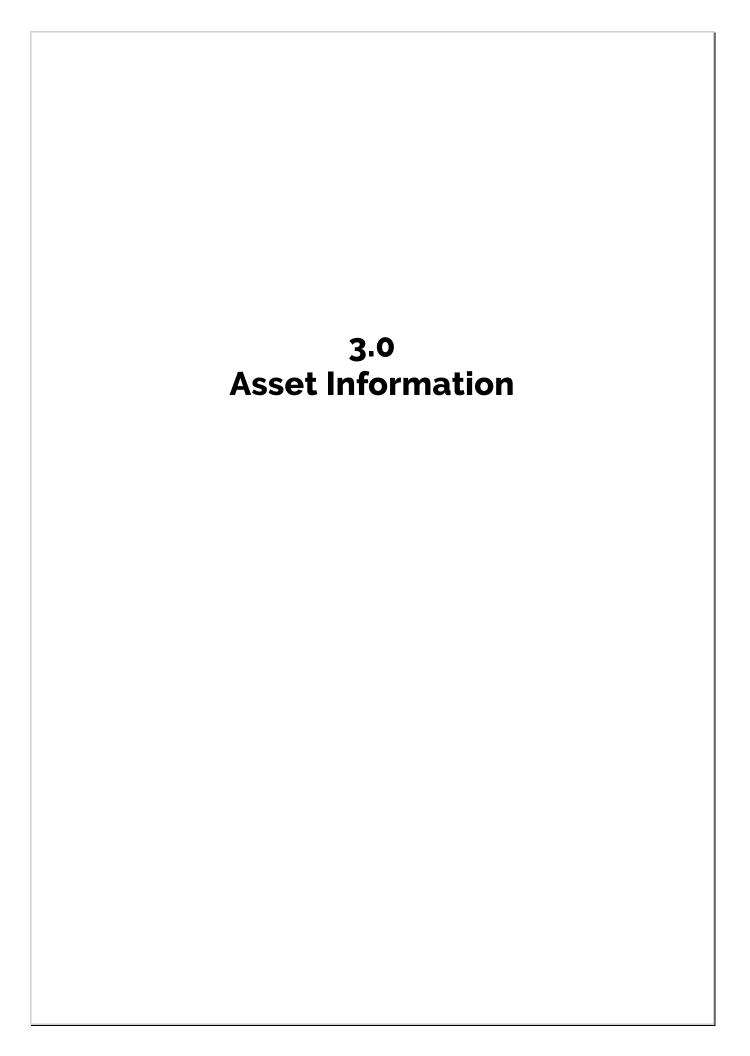
Our commitment to sustainable transport will serve as a cornerstone for the future development of Stratford, fostering a resilient and prosperous community for generations to come. Through a coordinated effort, we aspire to build a greener, more connected, and thriving Stratford district, aligned with the principles of sustainability and environmental stewardship.

Table 6 - 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.

Strategies/ Plans/ Documents	Description	Review Frequency	Relationship to the Activity Management Plan
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 Roading 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.
Procurement Policy	Procurement for the purpose of implementing projects identified in the work programmes are undertaken in accordance with the Council's Procurement Policy. The Council's Procurement Policy for the purpose of procuring goods, works and services.	Three yearly	Provides the framework for the purchasing of goods, works and services for Stratford District Council
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.
Connecting Our Communities Strategy	This strategy outlines our commitment to creating safe and reliable road transport infrastructure, ensuring that our communities are well-connected and secure.	Three yearly	Suggests projects that can be included in the roading work programme where able.
Significance and Engagement Policy	Developed in compliance with Section 76AA to set out Councils approach to: • 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. • Regarding community engagement and the ways the community can influence and participate in the decision-making of the Council.	Three yearly	Determines level of engagement required for asset management planning activities/projects
Sustainability Policy	A tool that guides and directs council officers on how to apply a Sustainability lens to all council functions, activities and planning documentation.	Every 3 years	An internal document to guide officers on sustainability initiativeswhen and how to apply

Strategies/ Plans/ Documents	Description	Review Frequency	Relationship to the Activity Management Plan
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 Appendix 6) Asset Management. Procurement Policy Temporary Road Closures Stock Underpasses Pegging and Maintenance of Roads and Bridges Occupation of Unused Road Reserve Fences on Road Reserves Vehicle Crossings and Culverts Traffic Count Policy	As applicable	Support asset management planning and good practice.



Asset Information

3.0: Asset Information

3.1	Assets Overview	50
3.2		
3.3	Asset Useful Life	
3.4	Asset Management Maturity Assessment	
3.5	Assessment of Asset Condition	
	Data Accuracy and Confidence	66

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

The goals and objectives of the Roading 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 Roading activity contributes to the achievement of national, regional and district goals and objectives:

- Government Policy Statement (GPS).
- One Network Framework (ONF).
- 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 Roading activity is comprised of:

Table 7 - Overview of Infrastructure Assets

Asset Group	Length/Nº	Infrastructure	Length ∕ N°
Sealed Roads	402km	Retaining Walls	259
Unsealed Roads	206	Signs (advisory and safety)	5525
Footpaths	73km	Markings	2,450
Bridges including large culverts	157	Guard Rails	910
Culverts	3976	Streetlights	755
Tunnels	5	Surface Water Channels	827km

Note: Infrastructure asset length/number as at 19 January 2024

From March 2022 the road classification system for the district changed to the One Network Framework. Table 8 below shows the length of roads by their new classification.:

Table 8 - SDC Road Network Hierarchy

Road Classification	Length (km)	% of Network
Local Streets	41.6	6.79
Activity Streets	5.2	0.85
Urban Connectors	1	0.16
Rural Connectors	120.4	19.70
Rural Roads	434.9	70.98
Peri – Urban Roads	3	0.49
Unclassified	6.6	1.08
Total	612.7	100

Note: Road Network Hierarchy 2022/23 from Transport Insights, Te Ringa Maimoa, Transport Excellence Partnership.

Network Characteristics

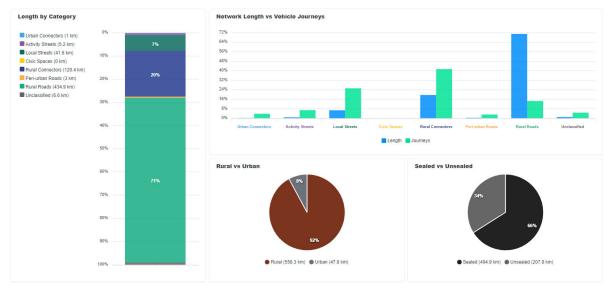


Figure 12 - SDC ONF Network characteristics

The land transport network consists of approximately 613km of roads covering the entire district. Based on market movement valuation undertaken in June 2023 the Optimised Depreciated Replacement cost (ODRC) in \$344,584,889. This is a 2.94% increase in the value of the asset from the 2022 valuation of \$334,746,129.

Included within the network road length is 14km of Special Purpose Roads (Manaia Road and Pembroke Road) located within Te Papakura o Taranaki, formerly Egmont National Park. These two roads provide access to the Maunga for tourism and recreational activities.

Table 9 - Operating and Capital Expenditure Annual Plan

Expenditure	Council \$000	Roading \$000			
Total Operating Expenditure	\$21,431	\$7.474			
Total Capital Expenditure	\$17.415	\$6,260			
Note: As at 30 June 2023 – Annual Report.					

3.2 ASSET VALUATION

The Local Government Act 2002, Section 111 requires that local authorities comply with statement of "General 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.

Table 10 shows the asset valuation as at 01 July 2021. The Roading activity assets were revalued by Beca following a request from Audit New Zealand.

Table 10 - Asset Summary table provided by Beca Projects NZ Limited, comparison of 2021 and 2018 values

			2021			2018			Change 2018-2021		
Asset Class	Component	ORC	ODRC	ADR	ORC	ODRC	ADR	ORC	ODRC	ADR	
Berm	Berm	\$12,246,315	\$12,246,315	\$-	\$11,643,336	\$11,643,336	\$-	5.2%	5.2%		
Bridge	Bridge (Superstructure)	\$35,115,951	\$11,933,394	\$367,518	\$33,377,266	\$12,113,089	\$351,939	5.2%	-1.5%	4.4%	
Drainage	Drainage	\$16,795,540	\$4,363,404	\$209,953	\$15,064,890	\$4,273,904	\$188,321	11.5%	2.1%	11.5%	
Footpath	Footpath formation	\$7,289,078	\$4,118,905	\$88,359	\$6,241,626	\$3,288,230	\$77,510	16.8%	25.3%	14.0%	
Railing	Railing	\$1,053,941	\$285,249	\$20,674	\$894,153	\$202,072	\$18,190	17.9%	41.2%	13.7%	
Retaining Wall	Retaining Wall	\$12,815,123	\$8,296,984	\$160,189	\$4,724,071	\$3,109,080	\$59,051	171.3%	166.9%	171.3%	
SW Channel	SW Channel	\$5,925,153	\$1,298,049	\$74,064	\$5,419,190	\$1,213,358	\$67,740	9.3%	7.0%	9.3%	
Sign	Sign	\$1,495,107	\$466,458	\$98,083	\$1,324,778	\$164,207	\$72,177	12.9%	184.1%	35.9%	
	Sign Post	\$497,579	\$121,244	\$25,483	\$406,521	\$46,413	\$22,616	22.4%	161.2%	12.7%	
	Sign Total	\$1,992,686	\$587,702	\$123,566	\$1,731,299	\$210,620	\$94,794	15.1%	179.0%	30.4%	
Streetlight	Street Light (Bracket)	\$103,322	\$16,086	\$4,135	\$96,745	\$22,401	\$3,870	6.8%	-28.2%	6.8%	
	Street Light (Light)	\$503,456	\$338,991	\$20,507	\$517,110	\$392,189	\$21,284	-2.6%	-13.6%	-3.6%	
	Street Light (Pole)	\$1,918,898	\$423,010	\$76,944	\$1,918,186	\$505,294	\$77,317	0.0%	-16.3%	-0.5%	
	Street Light Total	\$2,525,676	\$778,087	\$101,587	\$2,532,041	\$919,883	\$102,471	-0.3%	-15.4%	-0.9%	
Treatment	Basecourse	\$47,624,187	\$17,322,863	\$893,489	\$44,978,408	\$15,773,982	\$813,143	5.9%	9.8%	9.9%	
Length	Formation	\$115,573,358	\$115,573,358	\$-	\$109,044,585	\$109,044,585	\$-	6.0%	6.0%		
	Land (see note below)	\$53,638,711	\$53,638,711	\$-	\$53,638,711	\$53,638,711	\$-	0.0%	0.0%		
	Subbase	\$59,609,770	\$59,609,770	\$-	\$53,801,878	\$53,801,878	\$-	10.8%	10.8%		
	Top Surface	\$11,673,093	\$5,585,040	\$873,962	\$12,187,973	\$6,352,589	\$926,802	-4.2%	-12.1%	-5.7%	
	TL Total	\$288,119,118	\$251,729,741	\$1,767,451	\$273,651,555	\$238,611,745	\$1,739,945	5.3%	5.5%	1.6%	
Total		\$383,878,582	\$295,637,831	\$2,913,361	\$355,279,427	\$275,585,317	\$2,699,961	8.0%	7.3%	7.9%	

Note: Land values used in the table are those reported in the 2016 Land Valuation. The land under roads component has not been revalued in this 30 June 2021 valuation.

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3.3 ASSET USEFUL LIFE

For the purpose of this report, the useful life (or Base Life) refers to the period over which an asset or component is expected to be available for use by an entity.

The asset **Useful lives** are expressed as years. The asset **Age** is based on construction dates. The *Remaining useful life* is based on age and useful life of the assets.

With the increase in the number of HPMV commercial vehicles using the Stratford District's roading network, we are experiencing the accelerated consumption of the road pavement.

Combined with the acceleration in the forestry industry in the last three years, there are five key rural roads that have had significant repairs undertaken to them.

The key roads affected by both HPMV and forestry activities are:

Table 11 - Key Roads affected by both HPMV Vehicles and Forestry Activity

	Troy Troduct directed by be	iou by bourn in the combine und i or comy				
	HPMV Vehicles	Forestry Activity				
1	Monmouth Road	Beaconsfield Road				
2	Cardiff Road	Junction Road - unsealed				
3	Opunake Road	Puniwhakau Road - unsealed				
4	Beaconsfield Road	Mangaehu Road				
5	Manaia Road	Brewer Road				
6	Palmer Road	Mangaoapa Road – Unsealed				
7	Climie Road	Matau Road				

Roads

Stratford District Council manages 612.7km of roads within the Stratford District, consisting of 47.8km of urban roads, 558.3km of rural roads and 6.6km of unclassified roads as detailed in Table 12 - Roading Network Length

The Stratford District Roading network is a mix of urban and rural roads, under the new ONF the predominant road classification being local streets (urban) and rural roads (rural).

Table 12 - Roading Network Length

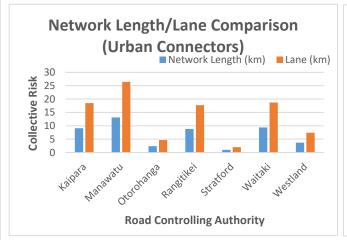
	Urban				Rural				
	Urban Connectors (km)	Activity Streets (km)	Local Streets (km)	Civic Spaces (km)	Rural Connectors (km)	Peri- urban Roads (km)	Rural Roads (km)	Unclassified (km)	Total (km)
Sealed	1	5.2	41.6	0	120.1	2.9	228.9	5.3	404.9
Unsealed	0	0	0	0	0.3	0.1	206.1	1.3	207.8
TOTAL	1	5.2	41.6	0	120.4	3.0	435	6.6	612.7

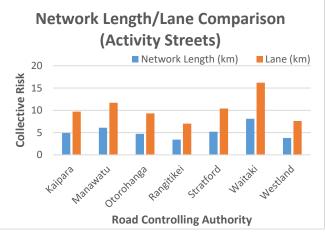
Note: 2022/2023 Roading Network Length from Te Ringa Maimoa. Transport Insights

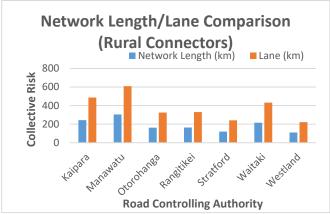
Table 13 - SDC Network by ONF Road Classification

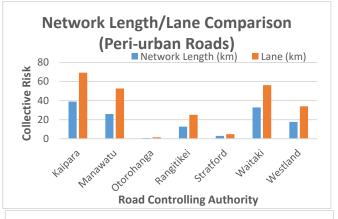
	Classification	Network Length (km)	Lane (km)
	Urban Connectors	1	2
Urban	Activity Streets	5.2	10.4
	Local Streets	41.6	82
	Civic Spaces	0	0
	Rural Connectors	120.4	240.8
Rural	Peri-urban Roads	3	4.8
	Rural Roads	434.9	682.9
Unclassified		6.6	12

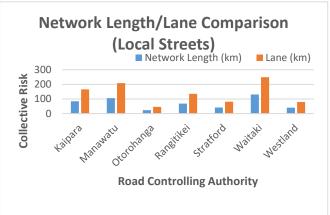
Asset Information

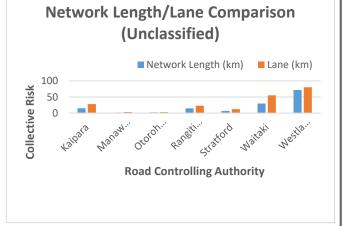












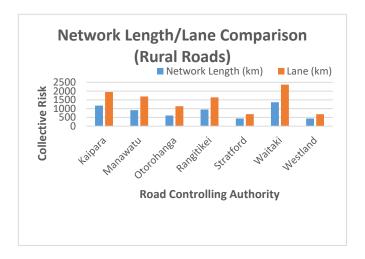


Figure 13 - Network Length/Lane Comparison (by ONF Category)

Note: Network Length/Lane Comparison 2022/23 Te Ringa Maimoa, Transport Insights



Figure 15 - Oru Road

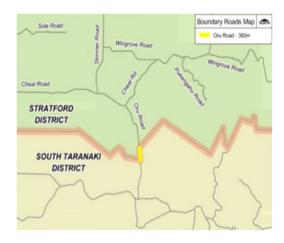


Figure 14 - Hastings, Cornwall and Finnerty



Figure 16 - Okau Road

Figure 17 - Upper Duthie, Rowan and Palmer Roads

Note: Boundary Roads at 01 July 2024 - GIS.

Boundary Roads - The Stratford District Roading network includes ten boundary roads, managed by the Council but maintained in agreement with our neighbouring Territorial Local Authority, as shown in Figures 13-16 and listed in Table 14 below:

District Boundary Road Council New Plymouth Croydon Road District Council Okau Road Junction Road South Taranaki Oru Road District Council Upper Duthie Road Rowan Road Palmer Road Hastings Road Cornwall Road

Table 14 - Boundary Roads

For those roads that cross the Stratford/South Taranaki boundary Stratford District Council invoices South Taranaki District Council a set amount each year for the routine maintenance of these boundary roads. This set amount covers 50% of our maintenance costs.

Finnerty Road

For renewal activities, we discuss the planned works with STDC beforehand, in order that STDC has appropriate funding available to meet their share of the costs.

The Stratford District Roading network also includes two special purpose roads as illustrated in the Figure 17 map. The Special Purpose Roads are:

- Upper Manaia Road (Dawson Falls)
- Pembroke Road

Note: Special Purpose Roads as at 01 July 2024 - GIS.



Figure 18 - 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 15 - Footpaths

Туре	Location	Reason	Width (m)	Length (m)	Network proportion (%)
Asphalt	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
Seal	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
Slurry Seal	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
Concrete	Predominantly residential areas	Offer higher asthetic amenity	1.2 - 1.5	57,270	82.15
Pavers	Located within CBD	Offer higher asthetic amenity	3 - 4	942	1.35
Total				69,704	100

The latest footpath condition rating was undertaken in January 2024 of all the footpaths in the district. We are currently reviewing the survey results to determine the % of footpath that meet our minimum standard.

Structures

Structures include all bridges maintained by Council, culverts (greater than 3.4m² 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.

Following the award of our bridge inspection contract in 2020, the consultant has undertaken an inspection of all our structural assets. From those inspections we have developed a 30 year replacement programme as outlined in the spreadsheet below.

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 19 - Bridges and Estimated Replacement Dates

Bridge Location ID Number	Road Name	Replacement Date
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.

Our current stock of retaining walls are inspected every two years along with the bridge inspections. As we split the district into "Front Country" (West of Douglas) and "Back Country" (East of Douglas) this reduces the workload on the consultant.

Some of the current issues with retaining walls are as follows:

- Their condition ranges from excellent to very poor.
- There is a large stock of retaining walls around the district, in the order of 250.
- The construction of these retaining walls vary from railway iron and timber boards, second hand concrete street light columns, timber poles to corrugated tin sheets.
- Virtually no maintenance has been undertaken on those walls over the last 20 years plus.
- Increasing number of walls will be required following weather vents. We are planning to build three new walls on Whitianga Roads and one on Stanley Road during the term and this LTP period.

We have identified 58 retaining walls that are in a very poor condition, with an estimated replacement cost of between \$5,000,000 - \$6,000,000, over the next 10 years.

Table 16 - Estimated costs for General Maintenance retaining wall repairs and replacements.

	Year	Walls	Replacement Cost
	2024/25	Mangaowata Road, RP1979	\$250,000
1		Mangaehu Road, RP7180	\$100,000
		Tawhiwhi Road RP366	\$80,000
	2025/26	Junction Road, RP3690	\$100,000
2		Mangaoapa Road, RP2324	\$100,000
		Mangaotuku Toad, RP2966	\$120,000
3	2026/27	Walter Road	\$200,000
	2026/27	Mangaotuku Road, RP5000	\$300,000
TOTAL		Incl. contingency	\$1,300,000

In addition to the retaining walls mentioned in Table 16 above, approximately 143 retaining walls have been identified as being 88 years old or older, 38 years past their design life of 50 years. The cost of replacing these retaining walls has been estimated at approximately \$12.7 million. Based on the average spend of \$400,000 per year, it would take 32 years to replace all these walls unless additional funding was received.

Traffic Services

Traffic Services include signs, markers, railings and lighting.

Signs - Stratford District Council manages around 4802 regulatory, advisory and safety signs 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 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

In July 2023 a new streetlight maintenance contract was awarded to NPE-Tech. This contract is a five-year contract with a 2-year extension. This contract is a joint contract with New Plymouth District Council (NPDC), for the reason of economy of scale. Given small expenditure for maintenance, we considered it was more beneficial to SDC to join with NPDC.

State Highway Carriageway Lighting

We continue to maintain the State Highway Streetlighting assets on NZTA's behalf. This is undertaken using NPE-Tech. We invoice NZTA separately for the works undertaken.

Drainage

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

The cost of cleaning water tables has significantly increased over a 10-year period. This has resulted in a reduced quantity being undertaken each year.

Our target length for water table cleaning is 90km/yr or one seventh of the total network length.

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.

3.4 ASSET MANAGEMENT MATURITY ASSESSMENT

The Council has assessed its Asset Management maturity across 5 key disciples 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 17 below provides a snapshot of where the Council is at in its asset management practices and, emphasises 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 17 - Roading Asset Management Maturity Index

	Asset Management Disciplines	Maturity Index	Maturity Description	What we do
1	Strategic Direction	Intermediate	AM System scope is defined and documented.	 This is part of the Strategic Business Case as required by Waka Kotahi in the AMP. The Council has adopted an <i>Asset Management Policy</i> to provide the overall direction for asset management in the district. 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.
2	Defining Level of service	Intermediate to Advanced	 Level of service and cost relationship understood. Customers are consulted on significant service levels and options. Customer communications plan in place. Levels of service are integral to decision making and business planning. 	 The LOS are defined in the AMP for each of the work activities funded by Waka Kotahi. 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. This will part of the LTP consultation process. 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.
3	Forecasting future demands	Core to Intermediate	 Risk associated with demand change broadly understood and documented. Demand management considered as an alternative to major project development. 	 We have a broad understanding of the issues facing SDC. These are included in the AMP as "Problem Statements". Forecasting is based on population and economic growth statistics in addition to regulatory changes at the central government level. 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.
4	Collecting Asset Information	Intermediate	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.	RAMM is the database for the roading assets, including maintenance costs, replacement unit rates and design live. RAMM has the capability of reporting theoretical pavement replacements and reseal sites. 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.
5	Monitoring Asset Performance and Condition	Core	Condition and performance information is suitable to be used to plan maintenance and renewals to meet over the short term.	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.

3.5 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 Roading 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 Roading 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 Roading 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 Roading 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 (2020) 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 18 below.

Table 18 - 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, however the effects of the forestry industry on specific roads in the district have been seen over the last three years and are discussed later in this plan.

In 2022, we spent \$975,000 fixing roads affected by forestry. We have identified \$3.8 million of repairs required to be undertaken to five roads which will be affected by current and future harvesting.

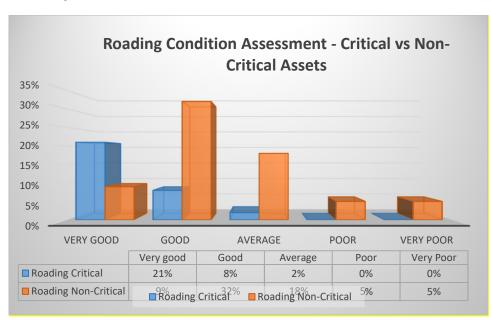


Figure 20: Roading Condition Assessment - Critical vs Non-Critical Assets

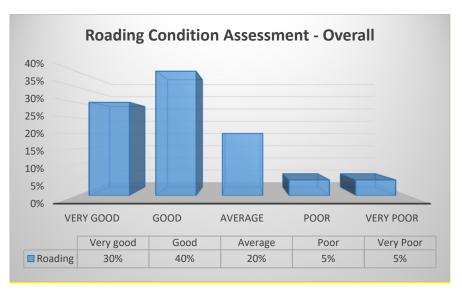


Figure 21: Roading Condition Assessment - Overall

3.6 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 19.

Table 19 - 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 20 - 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	Uncertain
Tunnels	3	Reliable
Critical Assets Assessment	Highly Reliab	ole to Reliable
Non-Critical Assets Assessment	Reliable to U	ncertain

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

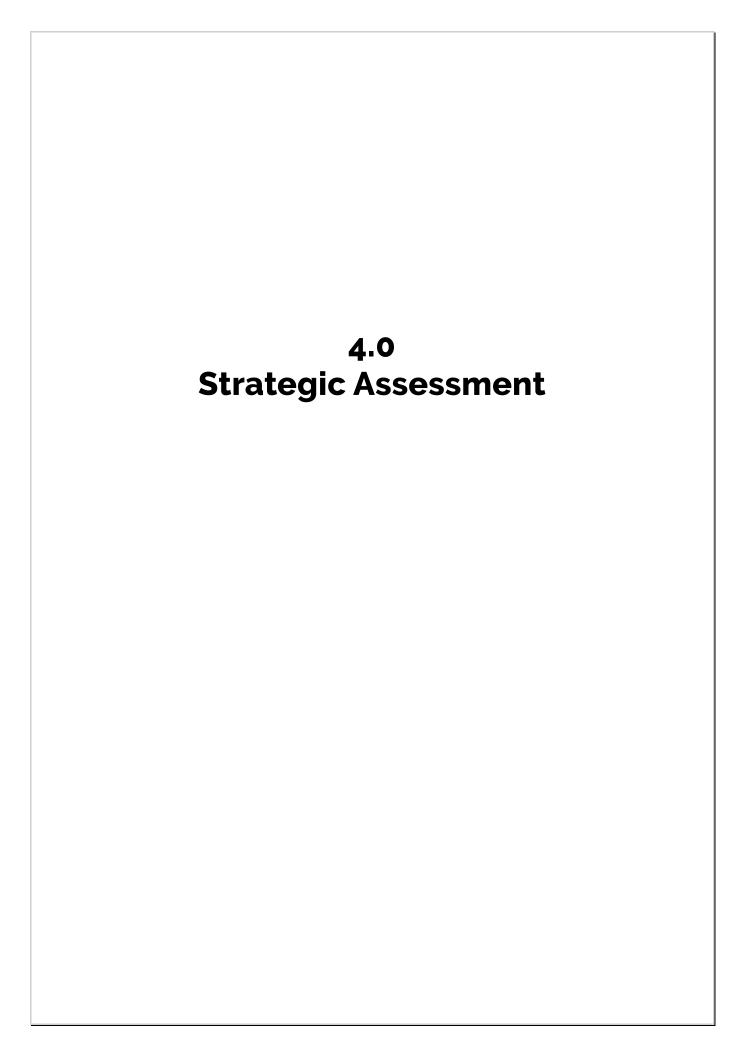
This uncertainty stems from data held around the age of the non-critical assets, which have been deduced from the approximate date of construction, and also from the quality of data held on our service connections. However, given these are non-critical assets, impact of premature asset failure or continued 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*.



Strategic Assessment

4.0: Strategic Assessment

4.1	Overvi	ew70
4.2	Our Bu	siness Case70
	4.2.1	Point of Entry
	4.2.2	Investment Logic Mapping 72

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 2021. The slight change is associated with improvements to the drainage of our network.

The three remaining problem statements still hold true. These are:

<u>Problem Statement Number 1 -</u> 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. (30%).

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.

<u>Problem Statement Number 2</u> - 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 (20%).

With ongoing cost increase due to contract escalations (currently 20%) we can not afford to undertake required volume of roadside drainage cleaning. Coupled with the cost increases in culvert pipes (82% higher now than tender price in 2019), we have increased our funding request for drainage renewals, to maintain the same level of service.

<u>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 (40%).</u>

We continue to upgrade footpaths to improve the level of service and to provide increased opportunity for more active modes of transport.

Council adopted our Connecting our Communities Strategy in August 2023 which promotes active transport within the Stratford District.

There is pressure on Council to minimise the impact of significant rate increases to the Community which must be balanced with the level of service which this AMP strives to deliver. This is at odds with the expectations of the community.

<u>Problem Statement 4 - Challenging Road conditions and unforgiving roads is resulting in death and serious injury crashes to our community.</u> (10%).

In the last five years we have had 21 death or serious injury crashes across our roading network. The speed limit change to Opunake Road (100km/h reduced to 80km/h) has seen a dramatic reduction in the number of DSI's along that road.

We will continue to address road safety through: -

- 1. Our partnership with NPDC and STDC via the Roadsafe Taranaki Roadsafety Promotion
- 2. Targeted intervention treatments via the Low Cost Low Risk Minor Improvements work category.

4.2.1 POINT OF ENTRY

Our point of entry for this activity management plan and 2024-2027 NLTP period is centred on the following points:

- Affordibility of maintaining and renewing the current roading infrastructure in the Stratford District.
- 2. Impacts of forestry on the network, both historical (last 3 years) and the future, next 5 years.
- 3. Maintaining and renewing drainage assets.

Strategic Assessment

- 4. Targeting pavement rehabilitation projects to key HPMV routes.
- 5. Associated Improvements/shoulder widening to road corridors that are used by Waka Kotahi for alternative routes for planned or unplanned closures of State Highway 3.
- 6. Aging bridge stock. We have identified \$5.68million of bridge assets to be replaced in the next 10 years. See table 22 below.
- 7. Connecting our Communities Strategy Providing the investment to encourage a greater uptake in active modes of transport.
- 8. Addressing the DSI crashes by investing in road safety programmes and treatments.

Table 21: 10-Year Critical Bridge Replacement Plan

Item	Road Name	UL Useful Life (years)	RUL Remaining Useful Life (years)	Recommended Replacement Plan	Replacement Cost (\$)
1	Upper Mangaehu Road	50	o	Currently being worked on. To be concrete lined in 2023.	\$20,000
2	Brewer Road	50	o	Currently being worked on. To be concrete lined in 2023.	\$20,000
3	Wawiri Road	50	1	Replace culvert with a bridge.	\$300,000
4	Pembroke Road (2 Rural)	50	1	Invert in very poor condition. Design completed for concrete lining; however full replacement may be more cost-effective long term.	\$400,000
5	Finnerty Road	-	1	Recent water drive failure. Will likely need full replacement.	\$200,000
6	Barclay Road	100	2	Concrete repairs required. Spalling on RB transverse beam.	\$20,000
7	Upper Mangaehu Road	50	2	Structure in good condition. Rock apron at outlet is required.	\$20,000
8	Mcbrides Access	80	2	Floods regularly, generally in poor condition. Will need replacing at a higher level.	\$1,000,000
9	Matau North Road	95	2	Replace the timber land span beams and decking boards	\$300,000
10	Mauku Road	80	3	Structure is in good condition. Repairs to the handrail are required.	\$100,000
11	Lower Kohuratahi Road	100	4	Rebuild entire structure at a lower level but above the 100-year flood height.	\$2,000,000
12	Mount Damper Road	80	8	Paper road bridge. Average condition, fit for purpose.	\$350,000
13	Flint Road (East Of Sh3)	100	Concrete in relatively good condition.		\$600,000
14	Skinner Road	90	10	Concrete in good condition, monitor invert.	\$350,000
	Total				\$5,680,000

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%)

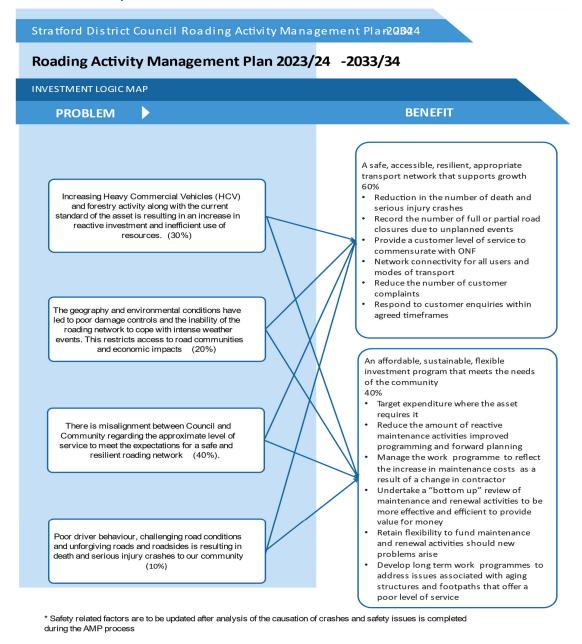


Figure 22 - Investment Logic Map

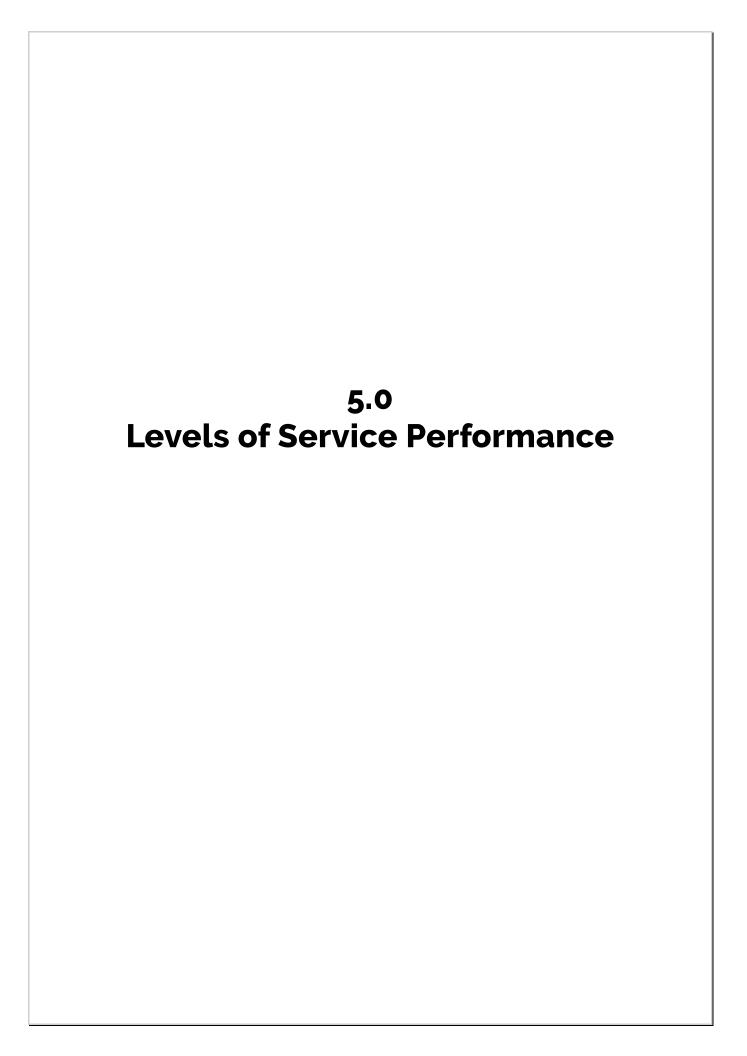
Strategic Assessment

Work Activity	\$\$ Requested	Why we need it	Where we need it	Benefits	Consequences of not doing it
Sealed Pavement Maintenance	\$2,144,000				
Unsealed Pavement Maintenance	\$819,650				
Routine Drainage Maintenance	\$740,750				
Structures Maintenance	\$630,500				
Environmental Maintenance	\$757,000				
Traffic Services Maintenance	\$1,006,000				
Footpath Maintenance	\$157,625				
Minor Events	\$1,261,000				
Level Crossing Maintenance	\$94,600				
Network and Asset Management	\$2,760,000				
Unsealed Road Metalling	\$2,868,800				
Sealed Road Resurfacing	\$4,175,000				

Strategic Assessment

Work Activity	\$\$ Requested	Why we need it	Where we need it	Benefits	Consequences of not doing it
Drainage Renewals	\$2,884,550				
Sealed Road Pavement Rehabilitation	\$2,049,100				
Structures Components Replacements	\$1,103,400				
Bridge and Structures Renewals	\$1,891,500				
Traffic Services Renewals	\$504,400				
Footpath Renewals	\$662,100				

The figures shown above are for 2024/25-2026/27 LTP period.



5.0: Levels of Service Performance

5.1		ew	
5.2	Perforn	nance Monitoring and Reporting	77
5.3	Current	t Performance	79
	5.3.1	Safety	
	5.3.2	ONF Performance Tool	83
	5.3.3	Economic Prosperity	89
	5.3.4	Economic Prosperity	_
5.4	Desired	d Performance	
	5.4.1	Expected Outcomes By Road Classification	90
5.5	Level o	of Service Statements	
	5.5.1	Sealed Pavement Maintenance	
	5.5.2	Unsealed Pavement Maintenance	94
	5.5.3	Routine Drainage Maintenance	
	5.5.4	Structures Maintenance	
	5.5.5	Environmental Maintenance	
	5.5.6	Traffic Services Maintenance	95
	5.5.7	Footpath Maintenance and Renewals	95
	5.5.8	Minor Events	96
	5.5.9	Unsealed Road Metalling	96
	5.5.10	Sealed Road Resurfacing	96
	5.5.11	Drainage Renewals	97
	5.5.12	Sealed Road Pavement Rehabilitation	97
	5.5.13	Structures Component Replacement	98
	5.5.14	Bridge and Structures Renewals	98
	5.5.15	Traffic Services Renewals	99
	5.5.16	Low Cost/Low Risk Improvements	99

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.

Based on our ability to meet our share for the next NLTP (37%) we amend our level of service to what is affordable. Considering the current maintenance contract rates are 19% higher than when tendered in 2019, we are getting less for our dollar.

The One Network Framework makes recognition to the Importance of Place when considering the function of a road. Within this framework are differential levels of service, whereby we can exercise a change to the service we provide, based on the ONF road classification.

Given both of these considerations, some low volume unsealed roads will have a different level of service to an Urban Activity Street.

With recent deterioration in the ride quantity for urban streets, latest STE = 54%, a greater focus will be made on improving the ride quality for our urban residents.

This is likely to come at the expense of some rural roads, which may not receive the current LoS into the future.

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".

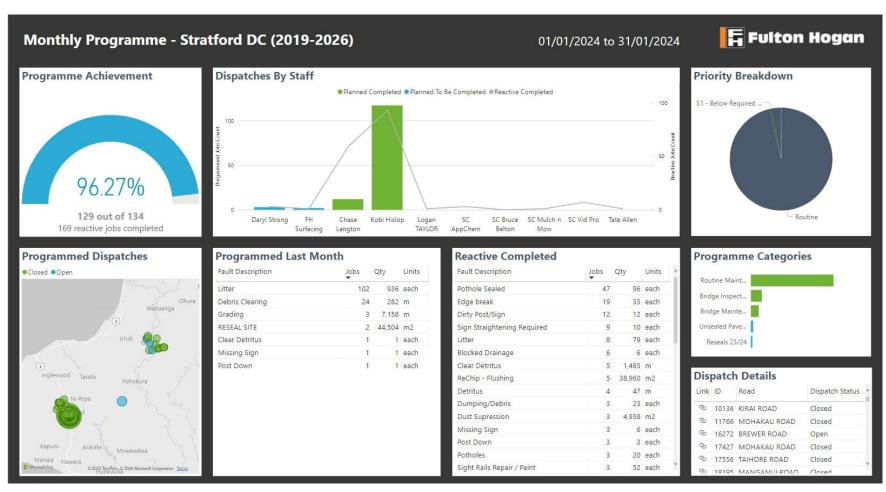


Figure 23 - Fulton Hogan Programme Achievement January 2024

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 two main sources:

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

In maintaining its roads, the Council must deliver on three Outcomes indicated below:

- Healthy and Safe People;
- Inclusive Access; and
- Economic Prosperity.

The Department of Internal Affairs (DIA) Performance Measures: These measures are shown in Table 24. There is a cross over for some of these measures with ONF, 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. Roading Network >80%
 - II. Footpaths >80%
- Death and Serious Injury crashes expressed as a number each year.
- Smooth Travel Exposure for urban and rural roads.

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 23 is Stratford District's results.

WAKA KOTAHI

97.5%

We are.

LGNZ.

Te Ringa Maimoa 2021/22 Stratford District Council RCA Report Transport Excellence Partnership 10,150 \$431 \$7.3 \$723 \$24.1 613 \$256 61% 0.40 161 **Activity Management** Indicator **Activity Management Planning** Asset management at expected Co-investment planning quality Smart buyer self-assessment standard (%) and Score 2.5 out of 3.0 1.8 out of 3.0 0 out of 70 A smart buyer Developing 2022 Fit for numose Good Limited Basic Room for improvement Not assessed National AM Score Peer Group Source: Te Ringa Maimoa AMP Assessment, Waka Kotahi AMP Assessment 2021-24 LTP Service Performance Targets Achieved Annual Targets Achieved 2018-28 Long Term Plan 2021-31 Long Term Plan 2018/19 2019/20 2021/22 Provision of roads and footpaths 2020/21 Road safety Condition of the sealed road network Maintenance of the sealed road network Condition of the footpaths within the local road network Response to service requests Source: TA Annual Reports Target achieved Partially achieved Target not achieved Not reported Co-Investor Assurance Investment Audit (Four Grades) Technical Audit (Four Grades) Three grades: Contract Management Activity Management Planning Effective Improvement needed Financial Management **Data Quality** Unacceptable Not available Procurement Network Condition and Management

Four grades:

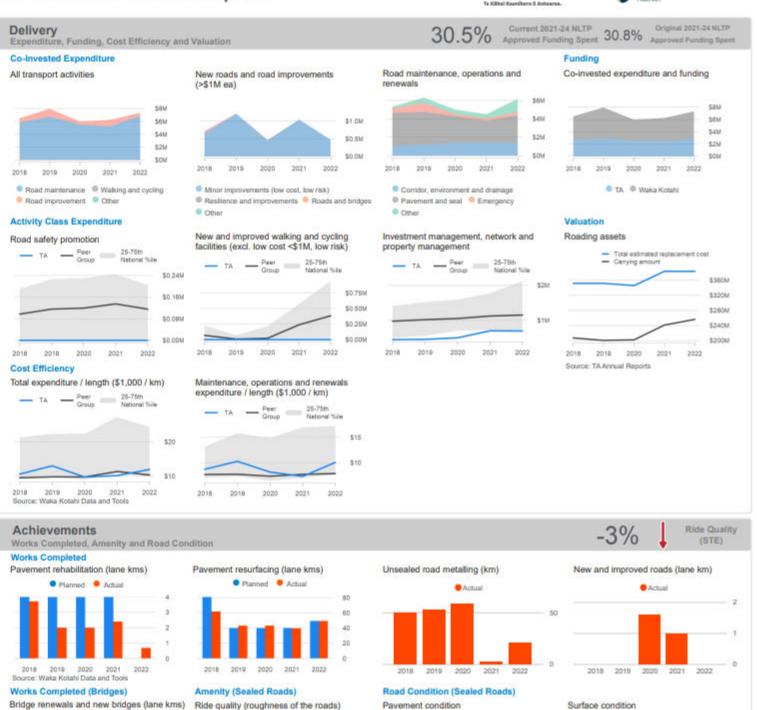
• Effective

Unacceptable

Not available

Some improvement needed

Significant improvement needed



2018

2019

2020

2021

2019

2020 2021

Status: Final for Publication Page 1 of 2

V4.0.0

2018 2019 2020 2022

Source: Waka Kotahi Data and Tools

New Bridges Bridge Renewals

0.010

0.005

0.000

2019 2020 2021 2022

Road Safety

Previous Audit Issues

Technical Audit Report Sep-20

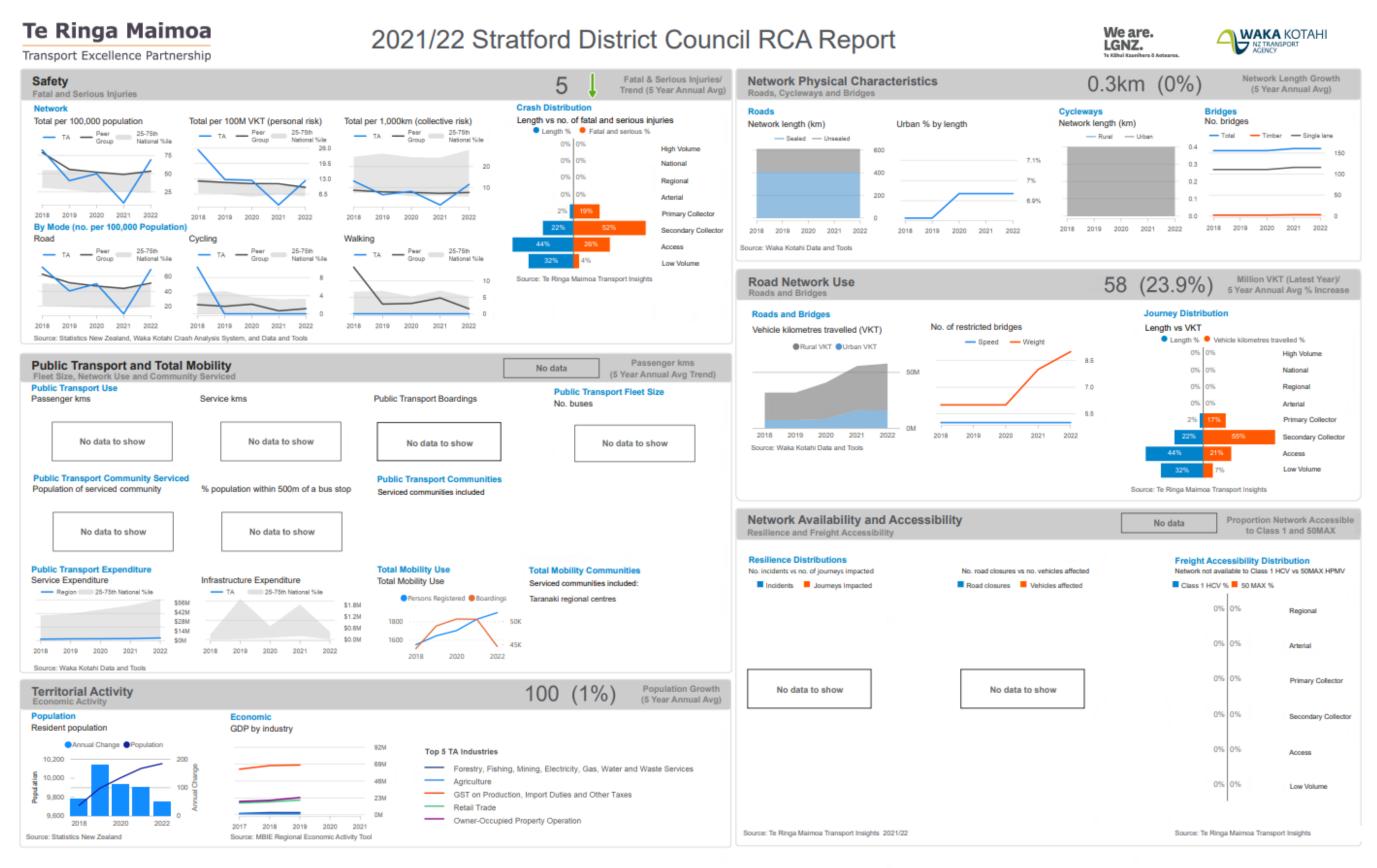
Source: Waka Kotahi, Audit and Assurance.

Professional Services

Previous Audit Issues

Investment Audit Report Dec-20

Source: Waka Kotahi, Audit and Assurance



Status: Final for Publication Page 2 of 2 May 2023 v4.0.0

Figure 24 - Road Controlling Authority (RCA) Report 2021/22

Table 22: Roading Level of Service (LoS) and Performance Measures

Level of Service	Performance Measure	Target	2023/2024 YTD
Safe Roading Network	Road safety - The change from the previous financial year in the number of deaths and serious injury crashes (DSI) on the local road network, expressed as a number. The number of DSI's for 2021/2022 was 6. Our target is 5 a reduction of 1.	-1	Achieved to date = 0 There were no DSI crashes in September
Road Condition	Urban Road condition – The average quality of ride on sealed urban road network, measured by smooth travel exposure.	≥ 83%	Not Achieved - 54% (as at 2022/23). Waka Kotahi is undertaking nationwide data collection surveys as a part of their Consistent Data Collection Strategy.
	Rural Road condition- The average quality of ride on sealed rural road network, measured by smooth travel exposure.	≥ 91%	Achieved - 92% (as at 2022/23). See comment above.
Road Maintenanc e	Sealed Road maintenance – The percentage of the sealed road network that is resurfaced:	≥5%	Not Achieved ³ The reseal programme for the year has not been started.
	Unsealed Road maintenance ⁴ - The percentage of the unsealed road network that has been metal dressed.	≥7%	0.6% Achieved to date. No maintenance metalling was undertaken in September. Given the expenditure on strengthening the main roads used by the forestry industry, it is highly unlikely that we will achieve this target length this year.
Footpaths	Footpaths that fall within LoS Standard - The percentage of footpaths within a territorial authority district that fall within the level of service or service standard for the condition of footpaths that is set out in the territorial authority's relevant document.	>72%	The last survey achieved a result of 89% of the footpaths were above our intervention target of 10% defects per 100m of footpath. No further survey has been undertaken or programmed. We need to determine if another survey is warranted given the financial constraints we are under this year.
Customer Request Manageme nt Response	Response to service requests - 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.	>88%	Achieved
Customer Satisfaction	Roading Network	>80%	Not Achieved – The results for the first quarter will not be known until October.
	Footpaths	>80%	Not Achieved - The results of the first quarter will not be known until October.

5.3.1 SAFETY

With the recent change in government, the Road to Zero initiative has been incorporated into Low-Cost Low Risk Improvements under the umbrella of Safety Improvements.

³ Our target length for resealing is 20km per year.

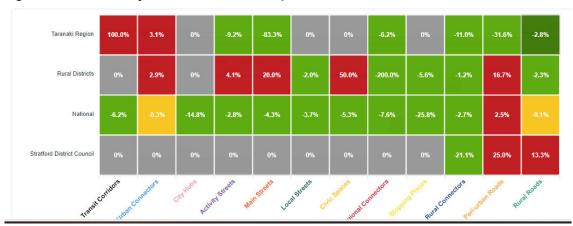
²Our target is to use 10,000m³ of metal or the equivalent of 25km (12%) of unsealed roads, assuming a 100mm overlay on a 4m wide road. To date we have re-metalled 1.3km of the unsealed network.

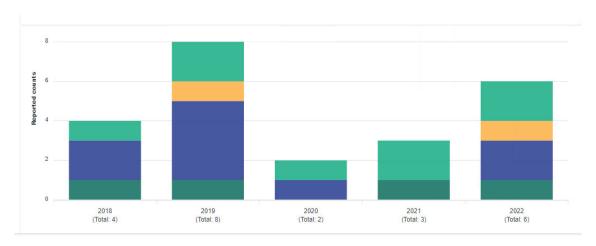
5.3.2 ONF PERFORMANCE TOOL

Healthy and Safe People - Death and Serious Injuries



Figure 25 - Road Safety - Death and Serious Injuries





Following a peak in Death and Serious Injury (DSI) crashes in 2019 there was a marked drop in number, mainly due to the Covid-19 pandemic. Although the numbers have risen in the last two

years, our target remains to reduce the DSI's by -1 per year. To date for 2023/24 there has been one DSI, which is a marked reduction in the number from 2022.

When looking at the trends, rural roads is where the crashes are occurring. This is potentially due to the low volume of traffic on these roads and the road geometry.

Any potential safety improvements will form part of our Low Cost/Low Risk Safety Improvements programme for 2024-2027.

Healthy and Safe People - Safe Travel - Personal/Collective Risk



Figure 26 - Personal and Collective Risk

Looking at the charts above, Activity Streets and Peri-Urban Roads appear to have an increasing trend. We have nominated safety improvement projects in our Low Cost Low Risk Improvements work category to address this issue.

Healthy and Safe People - Wet Roads/Nights/Intersections

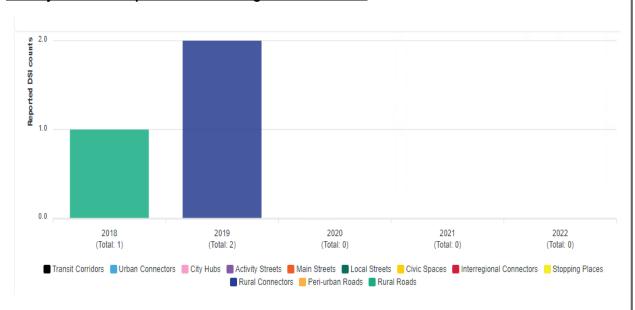




Figure 27 - Wet Roads/Nights/Intersections

The data shown above show a reducing trend for this type of crash. The crashes that do occur on our network are very random with few crash "hotspots" developing. 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.

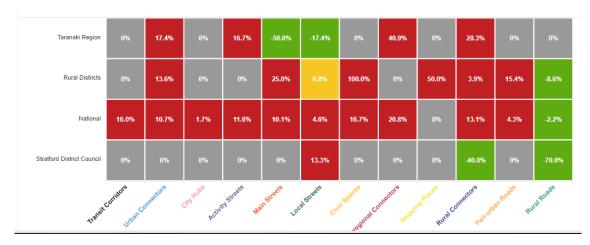
Healthy and Safe People - Vulnerable Road Users



Figure 28 - Vulnerable Road Users



Trend Heatmap



Based on the result indicated above urban streets shows an increasing trend. With urban road safety projects nominated in the LCLR Improvement work activity, these projects will address this trend.

Healthy and Safe People - Infrastructure Risk Rating

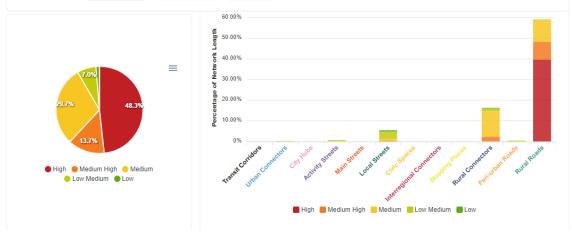




Figure 29 - Infrastructure Risk Rating

The above graphs clearly show that Stratford District has a safety issue on our rural roads. As mentioned above, we have nominated several safety projects for the rural road network in our requested funds for the LCLR Improvements work category.

Inclusive Access - Smooth Travel Exposure



87

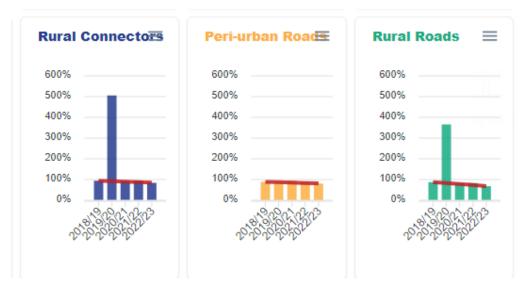


Figure 30 - Smooth Travel Exposure

For this performance indicator, we can clearly show that the smooth travel exposure across all of the ONF road classifications are deteriorating. This is clearly a sign of the under investment in pavement maintenance and renewals over successive LTP's driven by the lack of funds, both within SDC and those from NZTA.

To address this trend we have increased our funding bid for sealed pavement maintenance.

With the increase in forestry activity across the district many of the access rural roads are, or have been, affected by HCV traffic.

Inclusive Access - Peak Roughness

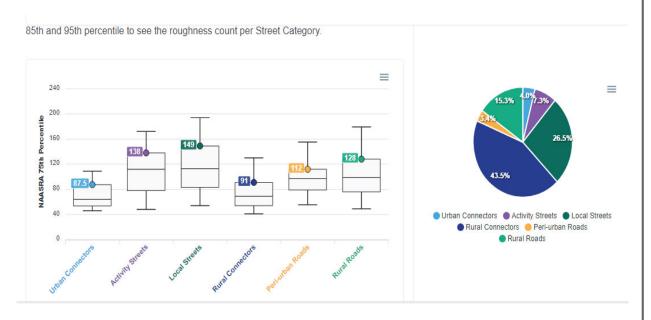




Figure 31 - Peak Roughness

Our Peak Roughness results can be attributed to two contributing factors:

- The increase in the number of HPMV permitted vehicles using the network;
- The other factor is the forestry industry and the escalation in timber production. Many of the forestry blocks are located on the rural roads.

Stratford District Council's programme for sealed pavement maintenance will concentrate on some of the pre-approved HPMV routes in the first instance, along with repairing the damage caused by the forestry industry.

Given the level of funding for Stratford District Council, we have budgeted for one kilometre of sealed pavement rehabilitation per annum, as identified via routine inspections.

5.3.3 ECONOMIC PROSPERITY. Heavy Vehicle Accessibility

Based on our current knowledge of our bridge stock, there is 99% accessibility to class 1 heavy vehicles. We currently have seven posted bridges which restrict access. There are a further 26 50Max restricted bridges that will require specific assessment for HCV's to cross these structures. This is likely to be the case for the foreseeable future, as there insufficient funds locally and nationally to embark on a bridge strengthening programme.

5.3.4 ECONOMIC PROSPERITY

Economic Prosperity - Sealed Road Pavement Rehabilitation and Resurfacing

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 NZTA. 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)
2019/2020	\$ 773,858.00	43.2	\$17,913.00	18.9
2020/2021	\$ 636,879.00	39.6	\$16,083.00	20.5
2021/2022	\$ 1,058,046.00	49.2	\$21,505.00	16.5
2022/2023	\$ 648,510.00	33.1	\$19,592.00	25.1

Sealed Pavement Rehabilitation.

The table below is extracted from the achievement returns for the previous four years.

Table 24 - Cost of Pavement Rehabilitation.

Year	Cost	Lane KM's	Cost Per Lane KM	Average Life (years)P)
2019/2020	\$ 871,484	2.0	\$435,742	20-25
2020/2021	\$ 553,351	2.40	\$230,563	20-25
2021/2022	\$ 450,653	0.70	\$585,850	20-25
2022/2023	\$ 1,167,026	1.50	\$778,017	20-25

Note: The cost for 2022/23 is high relative to previous years as this was a pavement rehab on Monmouth Road which is one of the main HPMV routes around Stratford.

5.4 DESIRED PERFORMANCE

A summary of the Council's targets/desired performance levels are presented in Tables 27 and 28. 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 Roading 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 Framework System (ONF) 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 aim of the One Network Framework (ONF) is to provide a consistent level of service which is commensurate with the form and function of the road classifications.

The level of service provided to a rural road with a rating of P5/M5 would be different to that of an Activity Street P2/M3.

The following benefits will be achieved by embedding the 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.

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

Table 25 - Expected Customer Outcomes by Road Classification

ONF Outcome Area	Local Streets	Activity Streets	Urban Connectors	Rural Connectors	Rural Roads	Peri- Urban Roads		
	Variable road stan	Variable road standards and alignment.						
	Lower speeds and greater driver vigilance required on some roads/sections particularly depending on topography, access, density, and use.							
Healthy and Safe People	Road user safety g	Road user safety guidance may be provided at high-risk locations.						
Copic	Active road users mixed use environ some variability in environment, incluspeed.	ments with the road	All road users should expect mixed use environments with some variability in the road environment, including vehicle speed.					
	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.					
Inclusive Access	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 infol lowest priority.		have the		
Economic	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).					
Prosperity	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.					

ONF Outcome Area	Local Streets	Activity Streets	Urban Connectors	Rural Connectors	Rural Roads	Peri- Urban Roads	
	Urban roads reflections and contribute to I						
	Specific provision road users presen		Strong shared space philosophy between active rousers (if present) and vehicular traffic. Active road u expect environment appropriate to their needs.			e road users	
	Clean, safe and se reasonable cycle i accessible parking	numbers,	Urban areas clean, safe (low vehicle speed) and secure (lighting).				
	Land use access f generally permitte restrictions may ap	ed but some	Access to all adjacent properties for road users.				
	Road user connection at junctions with Arterial or Collector roads, and some restrictions may apply in urban areas to promote Arterials.	Road user conn	onnection 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.					on roads.	
	Provision of quality relevant to Collect needs.		Provision of qu	ality information.			
	Efficiency measure coordinated and is work we do is don	delivering value	for money. We w	vill improve efficie	ency by ens	suring the	

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 26 - Summary of level of service statements

Activity	Description	Level of Service Statement
111	Sealed Pavement Maintenance	Pavement repairs to reseal sites, HPMV routes, other ONF road hierarchy roads as identified via inspections. Given the increase in forestry activity, there are Rural Roads that will require a significant level of investment to maintain a "basic" level of service for our community.
112	Unsealed Pavement Maintenance	Grading rounds to meet ONF road classification, pavement defects. The level of funding requested provides for 1.5 grading rounds per annum.
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, painting 60% of all road markings, repairing signs, replacing wooden posts with steel poles, clean and paint sight rails.
125	Footpath Maintenance	Removal of trip hazards by replacement of damaged sections of footpaths that are less than 10m long.
140	Minor Events	Removal of large slips, retreating from underslips where practicable, clearing fallen trees following significant storms. Where affordable construct small retaining walls. Larger events may qualify for Emergency Works (WC141) funding, providing the criteria is met for this funding stream.
211	Unsealed Road Metalling	Metalling 15km of the network, improvements to roads affected by logging traffic. The requested funds address some of this damage/strengthening works
212	Sealed Road Resurfacing	Our target is 20km/annum, however a recent usual audit of our sealed network suggested 60km per annum. This is clearly un-affordable to our community, therefore we are proposing to seal 25km per year for the next three years.
213	Drainage Renewals	With recent increases in kerb and channel replacement we have reduced the quantity to 1000m per annum. Our target of 90km of water tabling remains, along with 400m of culverts to be replaced each year.
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.
216	Bridge and Structures Renewals	This is for the complete replacement of bridges, large culverts (waterway area >3.40m²) and retaining walls. We have identified \$5.68m of structures to be replaced in the next 10 years.
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	School safety and other road safety improvements, Walking and Cycling initiatives. This work activity includes geometric improvements such as intersection upgrades, road re-alignments and the installation of roadside barriers. Speed limit changes are carried out under this work activity.

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,
- Roads damaged by the forestry industry which has been significant in the last three-year period.

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:

- In general terms every unsealed road is graded twice a year. We have allowed in our funding request to increase this frequency on some of the more heavily trafficked unsealed roads.
- Pavement repairs such as potholes, removal of corrugations, removal of soft spots, digouts 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, 5 tunnels, 34 large culverts (≥3.4m² 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.

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 sight rails as identified by routine inspections. We will restrict the amount undertaken due to budgetary constraints. Our target will be 1000m 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

Stratford District Council will continue with our long-term replacement programme for upgrading old footpaths throughout the district.

This programme will be focussed on two factors:

- 1. Condition of the asset
- 2. Usage pedestrian/traffic

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

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
- 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.

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
- 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. This recognises the diverse nature of our district from the ring plain around Taranaki Maunga to the eastern hill country in the Whangamomona area of the district.

Within the maintenance contract, the schedule for this activity indicates to the Contractor a typical volume of metal spread in each area. The purpose of this was to reflect the travel distance involved, allowing the Contractor to price the schedule separately to reflect the additional travel time required.

Our key performance indicator is to re-metal 7% or 14km of unsealed roads per year. With the recent increase in forestry activity our focus for 2023 has been to strengthen the unsealed roads used by the forestry industry. This will have the knock on effect of reducing the amount of remetalling that we can achieve this year.

Within the Stratford District we have many unsealed roads with few residents living along them. We aim to offer a modest level of service to our rural community, therefore the amount of metalling undertaken will be based on visual inspections.

5.5.10 SEALED ROAD RESURFACING

Within the Stratford District, the average age of reseals is 13 years across all five road categories. Currently we have approximately 25% of our sealed network that have seals which are 15 years or older, in some cases the seal age is 20 years or more, for very low volume roads.

Our aim is to address this backlog over the duration of the next two or three Long Term Plan periods. We have indicated in our funding request to increase our annual sealing quantity form 20km/annum to 30km/annum.

We will continue to focus on HPMV routes, such as Opunake Road, logging routes, second coat seals and urban roads for this 2024-27 period.

5.5.11 DRAINAGE RENEWALS

Following the change in our maintenance Contractor, in 2019, we have reviewed the quantity of water tabling that we can achieve. Our intention is to clean 90km of water table per annum. This is the equivalent of one seventh of the network length.

Given cost escalations over the duration of our maintenance contract, we have reviewed the level of service and requested an increase in funding to meet this level of service.

Our level of service for this activity is:

- 90km of watertabling per annum
- 500m of 375mm diameter culverts installed annually to replace 225mm diameter culverts. This builds resilience into our networks.
- Replace 1000m of kerb and channel each year
- Replacement of a 1200mm diameter culvert on Wairiri Road with a 2m x 2m box culvert, to meet the new environmental standards for freshwater.

Should larger size culverts need replacing or we are required to install larger culverts to meet current fish passage requirements, the above quantities will be reduced in order to stay within budget.



Existing culvert that was removed



Newly installed culvert

Figure 32 - Hollard Garden Culvert Renewals

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

With a reduced budget for the next NLTP period Stratford District Council will undertake 1km sealed pavement rehabilitation a year, focussing on key HPMV routes, such as Opunake Road, Cardiff Road, Beaconsfield Road.

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.

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

5.5.14 BRIDGE AND STRUCTURES RENEWALS

This work category is for the complete replacement of Stratford District Council's structural assets. We have identified 12 bridges which require replacement in the next 10 years.



Figure 33 - Lower Kohuratahi Road Bridge

Included in that list is a wooden swing bridge located on Lower Kohuratahi Road. Whilst this is not a heritage structure, our desire is to retain this bridge for historical purposes and to be used as a walking/cycling bridge.

A new bridge will be constructed alongside the existing. Due to the span of the bridge and the depth of the gorge, we estimate the cost will be in the order of \$2million.

5.5.15 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.

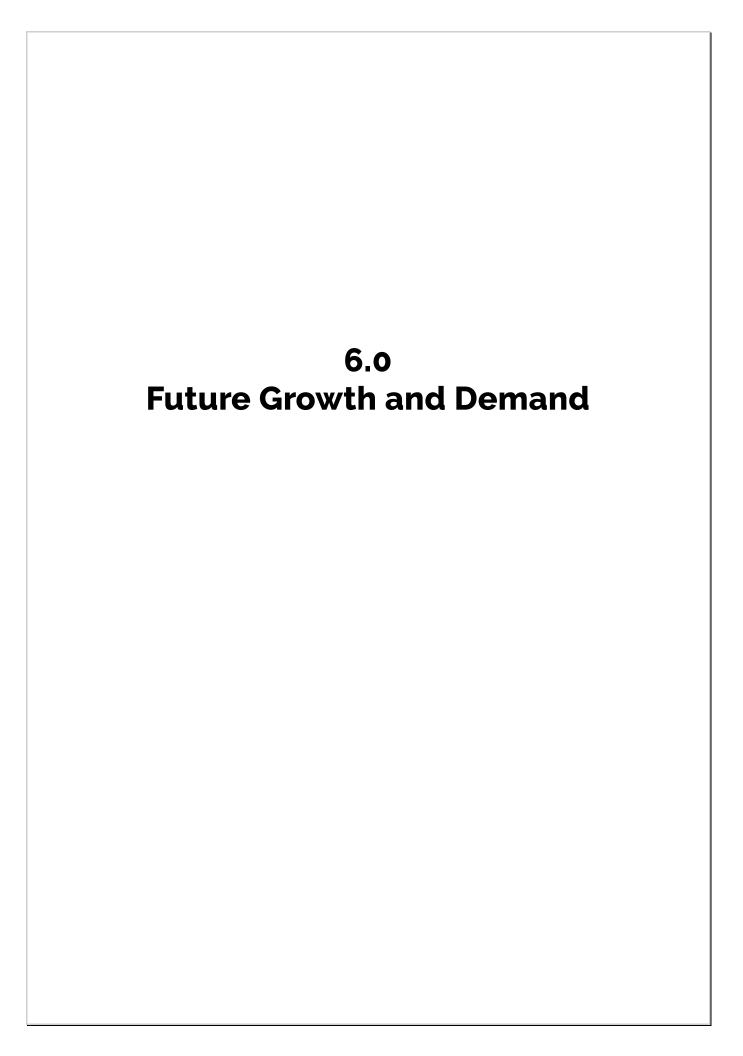
In general terms this work activity provides for the replacement of:

- 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.

5.5.16 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:

- Safety improvement projects; such as minor geometrical re-alignment or intersection upgrades
- Walking and Cycling Strategy initiatives and projects



Future Growth and Demand

6.0: Future Growth and Demand

6.1	Overvie	9W	102
6.2	Deman	d Forecasting	102
6.3	Deman	d Drivers and Impacts	103
	6.3.1	Population Growth	103
	6.3.2	Demographic Changes	104
	6.3.3	Economic Development	105
	6.3.4	Economic History and forecast	106
	6.3.5	Climate change	106
	6.3.6	Tourism	107
	6.3.7	The (draft) Structure Plan for Stratford	108
	6.3.8	Changing Customer Needs and Expectations	108
	6.3.9	Regulatory changes	109
	6.3.10	Land Use Changes	110

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 Roading 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 Roading services to the community at the agreed level of service.

The demand for the provision of Roading 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.

<u>Section 14 of the Local Government Act 2002</u> 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 Roading 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.

6.3 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;
- Economic Development;
- Tourism;
- Changing Customer Needs and Expectations
- Regulatory Changes; and
- Land Use Changes

6.3.1 POPULATION GROWTH

The Council is forecasting the district's population will grow from 10,295 in 2024 to 10,679 by 2034, at an average of 0.4% per year. This level of growth is unlikely to put significant pressure on council infrastructure. There is a low risk that growth may exceed these projections and Council may need to invest in additional urban growth infrastructure which will impact on capital budgets and revenue. There is also a low risk that growth is lower than the projections and Council over invests in infrastructure and services.

The growth in the Māori population of the district has been consistently higher than the growth of all other ethnicities for each of the last ten years. Stratford district's Māori population was 1,550 in 2022, up 2.6% from the previous year.

Table 27 and Figure 33 shows total population projections over ten years, against the growth projections of the total New Zealand population.

Table 27 - Actions Identified for Improving Management of the Asset

	Stratford	d District	New Zealand		
Year	Value	Growth	Value	Growth	
2022	10,150	0.5%	5,123,100	0.3%	
2023	10,256	1.0%	5,141,837	0.4%	
2024	10,295	0.4%	5,185,924	0.9%	
2025	10,334	0.4%	5,230,348	0.9%	
2026	10,373	0.4%	5,275,448	0.9%	
2027	10,414	0.4%	5,321,561	0.9%	
2028	10,455	0.4%	5,369,026	0.9%	
2029	10,497	0.4%	5,418,006	0.9%	
2030	10,539	0.4%	5,467,976	0.9%	
2031	10,579	0.4%	5,518,235	0.9%	
2032	10,617	0.4%	5,568,085	0.9%	
2033	10,650	0.3%	5,616,826	0.9%	
2034	10,679	0.3%	5,663,921	0.8%	

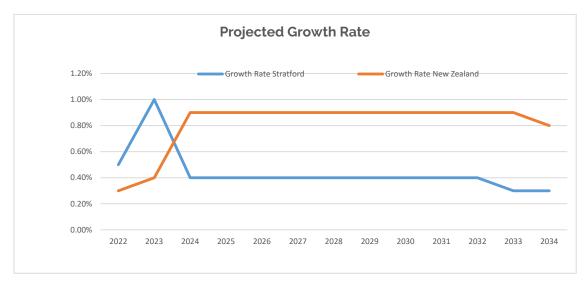


Figure 34 - Projected Growth Rate

6.3.2 DEMOGRAPHIC CHANGES

The below graph shows the current population by age group. The Stratford district is generally trending higher than the New Zealand average in the 60+ year age brackets, and much lower in the 20-29 year age bracket. However, the district is much higher than the national average in the 0-9 year age bracket showing positive signs of households choosing to raise their families in this district, and supporting the claim that the increase in population is largely driven by natural increase.

The gap in the 20-50 year old age brackets is not new, and is likely to be a result of the lack of tertiary level training opportunities and graduate employment opportunities in the district. With the change in working and studying environments due to enhanced technology and online access, and the increased acceptance that employees can work from anywhere in the country, and even the world, it is likely that we will see changes in the age demographics in the future. Due to the uncertainty of the impact, it has not been factored into the projections.

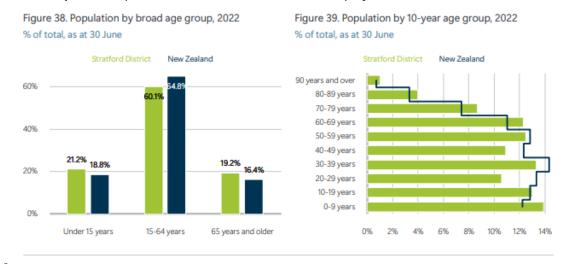


Figure 35 - Stratford District's Population Age Structure

The Dependency Ratio calculates the average number of economically dependent population (0-14 year olds, and 65+) per 100 economically productive population at a specific point in time. A high ratio may indicate that the economically active population and the overall economy face a greater burden to contribute towards the rates requirement for the district.

Table 28 and figure 35 shows the Stratford District's Dependency Ratio is 67%, compared to the national average of 54%. This is something Council must be mindful of when determining funding sources (increased reliance required for user pays and exacerbator pays funding sources), and areas (prioritisation) and levels of expenditure (affordability).

Table 28 - Stratford District's Dependency Ratio

	Stratford	d District	New Zealand		
Age Decade	Level	% of total	Level	% of total	
(years)					
0-9	1,410	13.9%	625,490	12.2%	
10-19	1,320	13.0%	655,720	12.8%	
20-29	1,080	10.6%	679,450	13.3%	
30-39	1,350	13.3%	733,760	14.3%	
40-49	1,110	10.9%	631,220	12.3%	
50-59	1,270	12.5%	654,040	12.8%	
60-69	1,250	12.3%	561,800	11.0%	
70-79	880	8.7%	380,170	7.4%	
80-89	410	4.0%	167,640	3.3%	
90 years and	100	1.0%	34,790	0.7%	
over					
Dependency	67.2%		54.4%		
ratio					
Total	10,150	100.0%	5,124,100	100.0%	

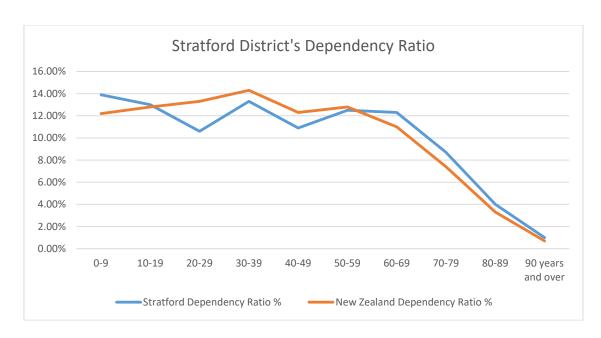


Figure 36 - Dependency Ratio Stratford District and New Zealand

6.3.3 ECONOMIC DEVELOPMENT

The four local authorities of the Taranaki region in association with Venture Taranaki, local business leaders, iwi and central government (the Ministry of Business, Innovation and Employment (MBIE)), have developed a new regional Economic Development Strategy and Action Plan for Taranaki. The Taranaki Regional Economic Development Strategy became official in August 2017 and is known as "Tapuae Roa - Make Way for Taranaki" - Working together across the region to unlock opportunities for a thriving and successful Taranaki.

This strategy sets a direction for economic development and identifies priorities and measurable goals for the region as a whole. It is anticipated that the Strategy will enable and support economic growth and development in the Stratford District.

While economic growth for the Stratford District is desirable Council is aware that growth can have an impact on infrastructure and the services delivered by that infrastructure.

Anticipated impacts of the Regional Economic Development Strategy and any resulting growth in the Roading activity and infrastructure are expected to include:

- Increased demand for property services
- Increased pressure on existing infrastructure.
- Increased maintenance and renewal costs.
- Increased pressure to reduce emissions.

6.3.4 ECONOMIC HISTORY AND FORECAST

Economic growth in the Stratford district is generally lower than the national average – averaging 1.7% per year over the 10 years to 2022, compared with an average of 3% in New Zealand. The estimated GDP for the district in 2022 of \$575m, makes up less than 1% of New Zealand's GDP.

There is some concern that the district is less diverse than average, with the largest industry being agriculture and forestry at 27%, the second largest industry being utilities (electricity, gas, water and waste) at 13%. The more concentrated a district's economic activity is within two or three industries, the more vulnerable it is to adverse effects such as those arising from climate conditions, or commodity price fluctuations.

Council intends to make significant investment in Economic Development over the life of the LTP to encourage diversification and provide opportunities to promote the Stratford District as a great place to do business. Under the Enabling Community Outcome, Council has committed to the following strategic goals:

- We are a business friendly district
- We encourage a diverse and sustainable business community
- We enable economic growth by supporting business investment and development in our district
- We support the growth of employment opportunities within our community; with a particular focus on our rangatahi (youth)
- We carefully balance the needs and wants of our district when funding services and infrastructure
- We encourage partnerships to collaborate with Mana Whenua for the benefit of the Stratford district

6.3.5 CLIMATE CHANGE

Scientific evidence indicates the earth's climate is changing because of increases in greenhouse gases caused by human activities.

Anticipated impacts for New Zealand over the next 100 years include:

- Changes in temperature
- Projected changes in rainfall
- Extreme weather events
- Decreased frost risk
- Increased frequency of high temperatures
- Increased frequency of extreme daily rainfalls
- Higher snow lines and possible reduced snow coverage
- Possible increase in strong winds
- An increase in average sea level.

At the regional and district level research indicates Taranaki could experience more extreme and varied rainfall patterns and severe weather events.

Extreme weather events and heavy rainfall would see increases in flooding, landslides, avalanches and mudslides during heavy rainfall events while on the flip side a lack of rain during summer months could see prolonged periods of drought. Both extremes place increased pressure on government, private flood insurance schemes, and disaster relief.

The Government's principal policy response to climate change is the New Zealand Emissions Trading Scheme (ETS). In various sectors (such as energy), the Government is also undertaking a range of other policies and measures that are contributing to reducing greenhouse gas emissions while achieving other policy goals.

Council responds to and plans for impacts of climate change as part of asset management practices by monitoring NIWA data in order to plan for and make adjustments to infrastructure where and when needed. Where adjustments are needed, they are undertaken through New Works and/or Renewal/Replacement.

6.3.6 TOURISM

The Visitor Sector Action Plan is one of six action plans developed as part of the "Make Way for Taranaki" Tapuae Roa 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.

Council welcomes the Stratford District being seen as a visitor destination but is mindful that increases in visitor numbers may have an impact on infrastructure and the services it provides. Anticipated impacts of the Visitor Sector Action Plan and any increases in visitor numbers on the Water Supply Activity and infrastructure are expected to include:

- Increased demand for water services
- Increased pressure on existing infrastructure.
- Increased maintenance and renewal costs.

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. The road has national recognition as a 4 x 4 7 owners club route. It is also widely used by mountain bike riders and trampers who stay at the Whangamomona Hotel. With the sealing of the Tangarakau Gorge, there is an expectation that more visitors from central north island will visit the district and region.

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 Manaia 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.

6.3.7 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 infiling. Roading, 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 lost 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 as well as nationally.

6.3.8 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, which is clearly shown in the poor customer satisfaction survey results, shown in table 5 above.

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 no 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. There are members of the local rural community who are quite vocal regarding the condition of the roads, but the majority are supportive of what we aim to achieve given the funding levels available to us.

Footpaths

There is roughly 70km of footpath in the Stratford District. Approximately 65% of these are equal to or less than 1.4m wide with the remainder being equal to or wider than 1.5m wide.

With increase in micro-mobility the current footpath width is insufficient to meet the community needs.

Today our footpaths must cater for cyclists, skateboarders, scooter riders, wheelchair users and mobility scooter riders as well as the traditional pedestrian.

Footpath maintenance and renewal budgets are based on an assumed useful life expectancy of 60-80 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 improve the footpaths within Stratford to meet the communities' requirements. SDC is proposing \$820,000 for footpath maintenance and renewal for the term of this LTP.

Bridges

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, but these are also 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.

In November 2009, the Council passed a resolution to continue to maintain bridges that provide access to individual landowners. These "un-economical" bridges are:

- Lower Kohuratahi Road wooden suspension bridge
- Buchanan's Access wooden suspension bridge
- 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 installation of LED luminaires in 2018, 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,

To address these concerns SDC would have to undertake a streetlight improvement programme. At present Stratford District Council has not budgeted for the installation of additional lighting columns.

Our focus for this LTP is to replace the severely corroded lighting columns.

Drainage

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.

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. As drainage is a vital activity to keep the road pavements dry to prolong it's life, we have recognised this and increased the funding for drainage maintenance and renewals throughout the term of this AMP.

Vegetation

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.

6.3.9 REGULATORY CHANGES

Changes to regulatory requirements and funding allocations (i.e. ONF and FAR) are resulting in uncertainty around funding for maintenance, renewal and improvement of the network. Where there is an increased demand for Roading services. A key change driver is NZTA's Arataki, and the Government Policy Statement for Land Transport. With a change in the government in October 2023, the draft GPS is being reviewed. At the time of writing this AMP, the outcome of this review is not known.

Future Growth and Demand

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 parts and other gatevage. A cafe, reliable and regiliant nativers

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.

National Rail Network National rail network: Shows active lines and some unused or inactive (mothballed) lines currently managed by KiwiRail. Some lines shown as unused by KiwiRail may be used for tourist purposes by private sector operators using very light rail vehicles, for example the Whakaahurangi

Stratford to Okahukura line.

6.3.10 LAND USE CHANGES

One of our key problem statements 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 Roading network to varying degrees.

Forestry

Further to the map shown in Figure 36, there has been an increase in forestry planting since 2020 for the purposes of carbon farming. However, as far as SDC is concerned, we take the view that this could be a potential forestry block which could be harvested as some time in the future. We have introduced a targeted roading rate for forestry block owners, to assist with the cost of repairs. In 2022/23 SDC spent \$975,000 repairing roads affected by forestry. We have identified a further \$3.8m of work required, of which \$3.125m remains outstanding. Our funding bid incorporates some of these repair costs.

The total accumulated area of pine forestry which could affect the rural road network is estimated to be 14,271 hectares. Commentary from Port Taranaki has indicated that there is log security (revenue for the port) until the early 2030's. This would indicate that there is a further eight to ten years of harvesting in the region, a good proportion of which will be within the Stratford district.

Oil and Gas and Agriculture

At present the oil and gas industry is going through a quiet period and agriculture is reasonably stable. With the focus on renewable energy sources, Contact Energy have submitted planning applications for solar panel farms which are near the Stratford Power Station. This will generate short term increases in traffic flows during the enabling phase of the sites.

The Council is aware that it needs to continue road strengthening works on identified roads during the 2024-2034 planning period to ensure affected roads remain fit for purpose and meet ONF Levels of Service requirements.

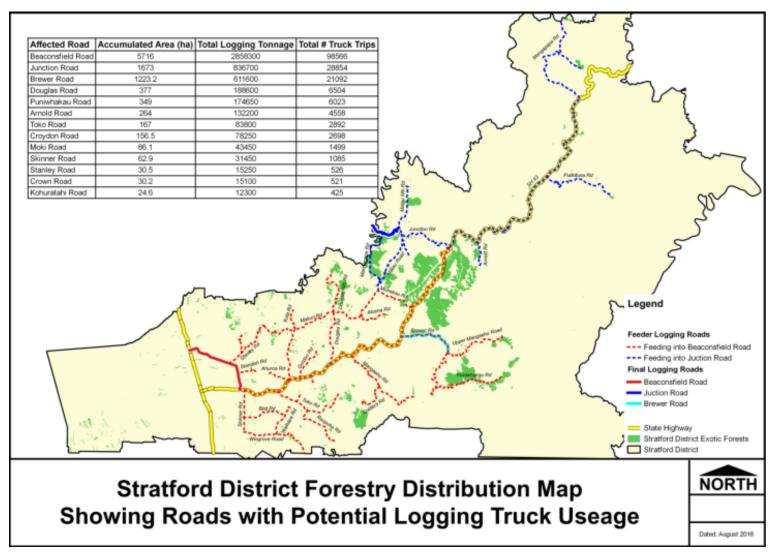
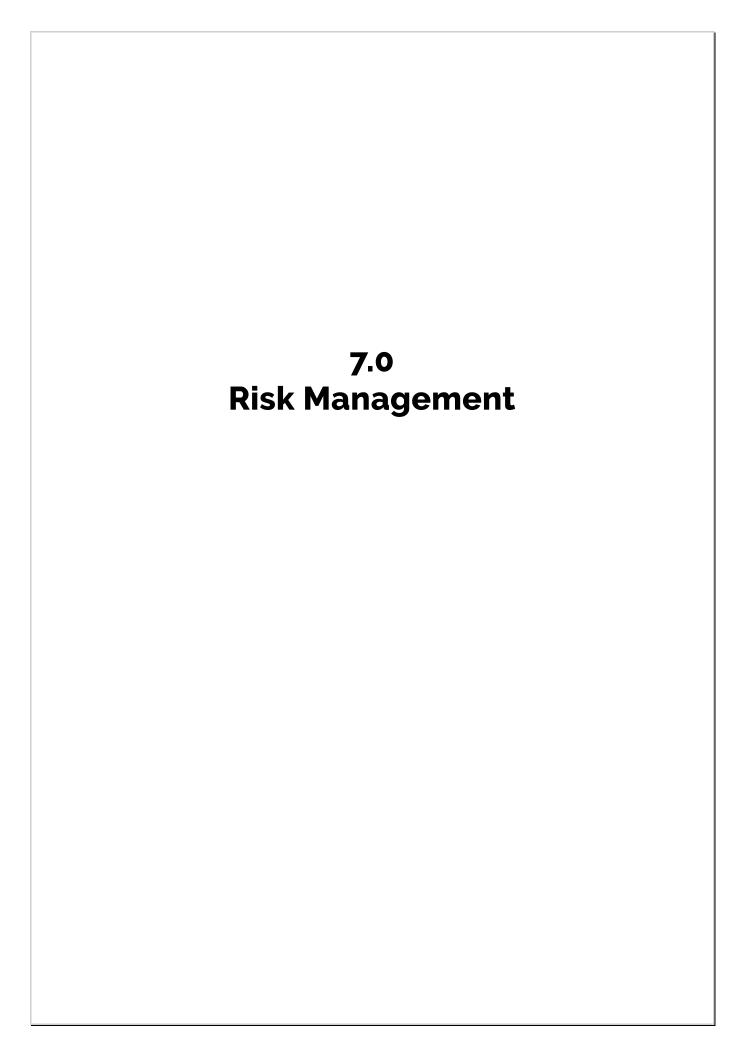


Figure 37 - Stratford Forestry Distribution Map as at 30 June 2016



7.0: Risk Management

7.1	Overview						
7.2	Risk Management Framework						
7.3	Risk Assessment Process						
7.4	Potential Risks						
	7.4.1	Top Ten Risks	116				
7.5	Risk Re	esponse	118				
7.6	Signific	ant Negative Effects	119				
7.7	Critical	ity	120				
	7.7.1	Criticality Evaluation	120				
	7.7.2	Critical Assets	121				
7.8	Emerge	ency Response	122				
	7.8.1	Civil Defence	122				
	7.8.2	Fire	122				
	7.8.3	Lifelines	123				
		Incident Response Plans					
7.9	Risk Ins	surance	124				
7.10	Safety	of our Community	125				
	7.10.1	Road Safety	125				
	7.10.2	Roadsafe Taranaki	125				

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 37 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.

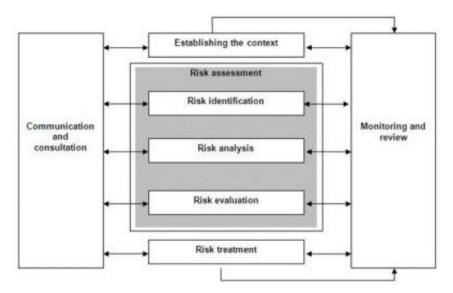


Figure 38 - Risk Management Process

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		
Liketinood	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 39 - The Risk Matrix

7.4 POTENTIAL RISKS

The Stratford District Council has made a number of risk assumptions⁵ 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 <u>Appendix 2</u>.

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 (<u>Appendix 2</u>), in Table 29.

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 29 - Top Ten Identified Roading Risks

	Risk Subject Risk Descriptions		Risk Score Raw	Control Description	Residual Risk Score
1.	Activity Managemen t Plans	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.	Heavy/Extr eme Rainfall incidents	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.	Maintenanc e Contractor fails to deliver	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 preapproval process must not be bypassed.	3 Moderate
		If Government Policy or Legislation significantly	12 Very High	Where a policy change may have a	8 High

⁵ statements that are presumed to be true without concrete evidence to support them

	Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
4.	Government Policy or Legislation Impacting on Local Government TOP 10 RISK	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.		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 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.	Natural Disaster - Response preparedne ss	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, Roading 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.	Revenue Increasing age demographi c on fixed income, how does SDC meet the cost of providing the level of services into the future?	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.	Road Closures - unplanned	If there are un-planned road closures due to collapse of culvert/bridges/landslides and so forth e.g. Wingrove Rd culvert collapse then	4 High	Asset criticality review to identify critical roading assets and increase monitoring activities. Ensure quality workmanship	

	Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
		access in/out of district could be lost and people could be injured as a result.		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 inspection regime of structures within road reserve.	3 Moderate
8.	Attracting Qualified Staff	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.	Elected Members - Decision Making	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
10.	Solvency of Contractor	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 30 - 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 Roading activity can have negative effects on the social, economic, environmental and cultural wellbeing of the District. The potential adverse effects from Roading 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 32; Table 33 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 34 below.

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

Table 31 - 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 32 - Activity Level Criticality Rating and Examples

Rating	Rating	Description	Roads	Example
1	Very High	Critical, no redundancy - Failure of equipment compromises H&S directly (impact, explosion) or indirectly (failure to supply drinking water to hospital). Note: In Civil Defence Emergencies, all roads leading to the critical lifelines - as identified in the Critical Assets GIS layer by the Taranaki Lifelines Vulnerability Study (2018), escalates to Criticality 1 - Very High	Access to key facilities such as: Water Treatment Plant (WTP) and Stratford Trunk Water Main (375 mm) from the Reservoirs to the Hunt Rd connection; Wastewater Treatment Plant and pipe main with no redundancy – leading to the Oxidation Pond; Police Station; Fire Service; Health Centres;	Swansea Road bridge Cardiff Road bridges
2	High	Critical, no redundancy - Failure of equipment does not compromise H&S but affects production or Level of Service	Secure access to rescue vulnerable people/assets including: Rest Homes; Schools; Evacuation/Refuge Centres including Memorial Hall, churches; Escape/Detour routes, e.g. Pembroke to Mountain Road; Skinner Road; Parks used as Helicopter landing bases, e.g. cricket pitch; Bridges over Patea River; Collector Roads;	Juliet Street Bridge

Rating	Rating	Description	Roads	Example
			As per 3-Waters Criticality Rating	
3	Medium	Critical with redundancy - Failure of equipment does not compromise H&S but affects production or Level of Service	 Secure Evacuation routes; Secondary Collector Roads; Junction Road; As per 3-Waters Criticality Rating 	Regan Street (West of Brecon Road)
4	Low	Not critical, no redundancy - Failure of equipment has no effects on H&S and/or production/Level of Service but cost of repair/replacement is above \$100k	All Access Roads	Hamlet Street
5	Very Low	Not critical, no redundancy - Failure of equipment has no effects on H&S and/or production/LoS and cost of repair/replacement is below \$100k	All Local Roads including cul-de-sacs	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 33 - Critical Urban Roading Assets

Activity Priority	Criticality Rating				
Filonity	Functiona l Criticality	Activity Criticali ty	Corporat e Level	Asset Description	Criticality Description
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 Roading 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 Plan⁶ for the Roading 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 39.

LEVEL 1	Localised impact with road access affected but not severed. Contractor responds fixes and reports this incident later to the Roading Asset Manager, Senior Roading Engineer, or Roading Engineer,
LEVEL 2	Increasing impact with road access to a small community severed. Contractor responds, fixes, keeps the Roading Asset Manager, Senior Roading Engineer, or Roading Engineer fully informed.
	Contractor accepts direction from the Roading Asset Manager, Senior Roading Engineer, or Roading Engineer.
LEVEL 3	Considered more serious with a wider impact; potentially severing road access to multiple smaller communities or a single large community.
	Contractor responds and takes emergency action with direction from the Roading Asset Manager.
	Roading Asset Manager informs the Director of Assets and keeps the Director Assets informed of developments.
	Media communication through Stratford District Council may be required.
LEVEL 4	Considered to have serious implications; severing road access to multiple large communities or areas. Event could escalate to a wider event involving CDEM Co-ordination.
	Contractor responds and takes action in order of priority as directed by Director Assets, Roading Asset Manager, Senior Roading Engineer, or Roading Engineer.
	Director Asserts informs the Chief Executive and keeps the Chief Executive informed of developments.
	Extensive dialogue with the media and affected parties is anticipated.
LEVEL 5	Considered to have extensive and prolonged implications; severing of road access widespread within the District's roading network.
	Event highly likely to have escalated to a District Emergency under the CDEM Act 2002, requiring the activation of, or direction from the Civil Defence Emergency Management Group, with significant costs involved.
	All events at this level are likely to involve decision making at the level of the Group Controller.

Figure 40 - Incident Response Plan

⁶ 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 2023 are as follows:

Figure 41 - Asset Insurance Valuations

	CARRYING VALUE (as at 30 June 2023) \$000
ASSETS FROM STATEMENT OF FINANCIAL POSITION	
Property, plant and equipment	462,427
Investment property	303
Total	462,780
LESS	
Land component of operational assets	-9.374
Land under roads	-54,384
Land – restricted assets	-12,928
Total	-76,686
NET NON-FINANCIAL ASSETS (EXCLUDING LAND)	386,094

	INICHIDED VALUE	
	INSURED VALUE	
	(as at 30 June	
	2023)	
	\$000	
INSURANCE ARRANGEMENTS		
Material damage cover for buildings, plant, contents	-66,313	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)	-216	Insured for market value – carrying value assumed for this purpose.
RISK SHARING ARRANGEMENTS		
Cover for infrastructure assets as a member of LAPP Central Government assistance	-44,441	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
Council arrangements for covering deductibles and/or uninsured assets	110,970	
SUM NOT SPECIALLY INSURED	275,124	Note the 60% of the ORV of infrastructure assets which may be funded by central government equates \$6.6m.

The Council has no insurances relating to financial or intangible assets. The uninsured assets consist of the Roading 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 Roading 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:

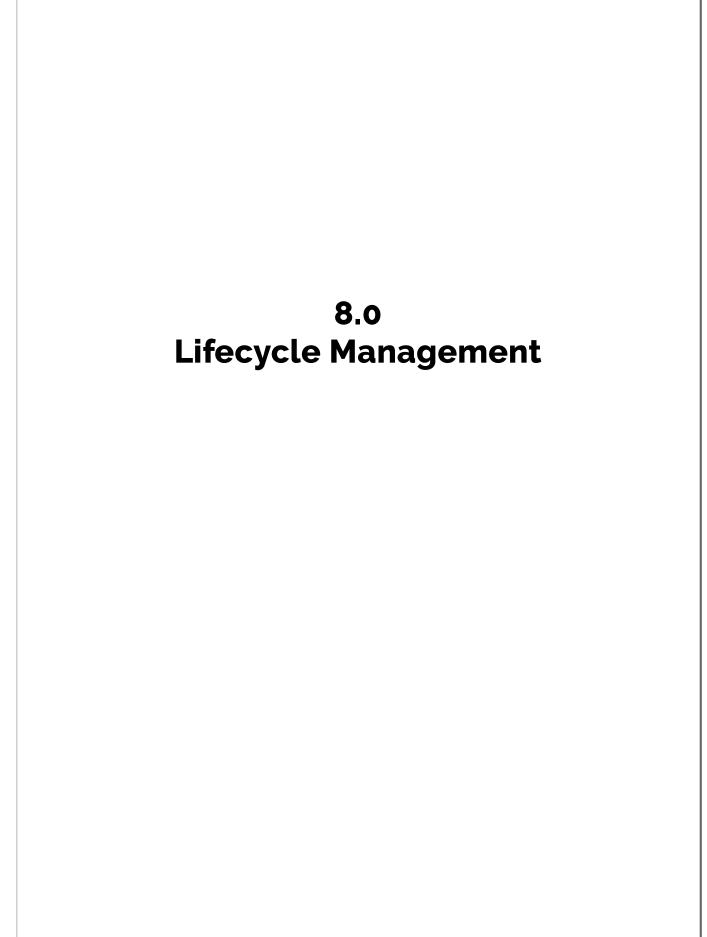
- Safer road use:
- Safe roads and roadsides:
- Safer speeds; and
- Safer vehicles.

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 ROADSAFE 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:* <u>Appendix 3 - 2021-2024 Roadsafe Taranaki Strategic Plan</u>



8.1	8.1 Ove	rview	128
8.2	Procure	ement	
	8.2.1	The Procurement Policy	128
	8.2.2	Roading Network Procurement Strategy	129
8.3	Contrac	ctual Arrangements	129
8.4	Prograr	mme Business Case	
	8.4.1	Delivering Cost Effective Road Infrastructure	137
	8.4.2	Options For Delivering the Programme	137
8.5	Road M	1anagement Strategies	139
8.6		ation and Cost Efficiency	
8.7	Detaile	d Business Case	
	8.7.1	Operation and Maintenance	140
8.8	Renewa	al/Replacement	
	8.8.1	Pavement Renewals	
	8.8.2	Reseals	156
	8.8.3	Sealed Pavement Rehabilitation	156
	8.8.4	Unsealed Road Metaling	157
	8.8.5	Drainage Renewals	159
	8.8.6	Renewal of Roadside Watertables	159
	8.8.7	Kerb and Channel Replacement	159
	8.8.8	Culverts	159
	8.8.9	Structures	159
	8.8.10	Traffic Services	159
	8.8.11	Footpaths	159
8.9	Low Co	ost Low Risk Improvements	161
8.10		als	

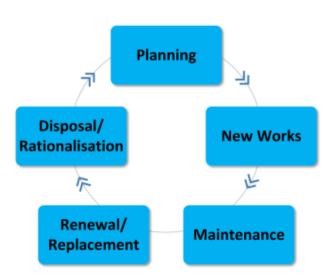
8.1 OVERVIEW

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, Waka Kotahi Procurement Manual as well as the Roading Network 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 Waka Kotahi'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 NETWORK PROCUREMENT STRATEGY

The Roading Network Procurement Strategy 2022-2025 (attached as Appendix 4) is based on a prescribed format provided in Appendix A of Waka Kotahi's own Procurement Manual.

The strategy requires a consideration and inclusion of Central Government's four Broader Outcomes for Procurement which are:

- Increasing access for New Zealand businesses;
- Construction skills and training;
- Improving condition for New Zealand workers; and
- Reducing emissions and waste.

The purpose of the strategy is to demonstrate to Waka Kotahi how the Stratford District Council intends to procure its contracts, through robust procurement processes to achieve value for money for ratepayers and support the optimised delivery of our contracts.

The strategy covers various aspect of procurement including:

- Strategic objectives of the approved organisation;
- Competitive markets;
- Value for money;
- Details of current maintenance contracts size, scale, term of contract;
- Other activities that can be bid by Contractors who are not the main maintenance Contractors;
- Delivery model and supplier selection methodology;
- Capacity and capability to deliver the programme of works;
- A communication plan; and
- An Implementation Plan.

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 Geometric Improvements.
- Red Jacket Consultants Structures Inspections, School Safety projects, Transport Choices.
- AMTANZ Traffic Counts and Traffic Impact Assessments.

Physical Works, which do not form part of the Roading 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 ≥3.40m² in area
- Road safety projects ≥ \$100,000
- Works in a technical nature that cannot be undertaken by our maintenance Contractor.

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

• Road General Maintenance

This contract includes all routine maintenance and renewal work categories for roading assets. The contract has further separable portions, these being Sealed Pavement Resurfacing, Sealed Pavement Rehabilitation and Annual Road Marking. The contract is currently in its fourth year, with the type of contract being a Measure and Value contract.

With the increase in cost escalation since Covid-19, the current contract rates are in the order of 18% higher than tendered in 2019. There are also instances where specific items in the contract cannot be delivered for the rates therein, for example culvert renewals. Since the contract was awarded in 2019, the price to supply culvert pipes has increased by 82%.

Such an increase is unsustainable by the Contractor, therefore we have agreed to use the contract rate for removal, excavation and backfill, plus the actual cost of the culvert pipe.

With the contract coming to a close in 2026, we will be trialling a cost reimbursable model for the last 2 years of the contract duration.

• Streetlight Maintenance Contract

We have renewed this contract, commencing 1 July 2023. In order to find economy of scale, the new contract is a joint contract with New Plymouth District Council. The new contract covers the maintenance and renewals of all local road streetlights, as well as the routine maintenance of State highway Streetlights.

As all of our Sodium Oxide streetlights have been changed to LED's, the next issue for SDC is to focus on replacing old or poor condition streetlight poles. Given the relatively small budget for this activity, it is likely that we will be replacing no more than five streetlight columns per year.

Table 34 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 34 - Operational, Maintenance and Renewal Delivery Model

Work Type	Asset Group	Delivery Form	Terms of Contract
	Sealed pavement: Maintenance repairs; Drainage maintenance; Environmental maintenance. Limited structural maintenance and Traffic services.		
General Maintenance, operations and renewals	Unsealed pavement: Maintenance and renewal; Vegetation control; Drainage and Traffic Services	Measure and Value Contract. Programme currently delivered by Fulton Hogan.	3+2+2
	Emergency Works: Business as usual events ≤10% approved allocation value.		
	Minor repairs, cleaning, removing obstructions, replacing bridge ends markers, Bridge signs.	Measure and Value Contract. Programme currently delivered by Fulton Hogan.	3+2+2
Structures Maintenance	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). Maintenance and renewal of under veranda lighting.	Measure and Value Contract.	3+1+1
Street Cleaning	Routine cleaning of CBD and sweeping of urban streets. Annual clean of all roadside drainage sumps.	Measure and Value Contract. Included in Roading General Maintenance Contract.	3+2+2

Work Type	Asset Group	Delivery Form	Terms of Contract
Reseals	Sealed pavement resurfacing.	Included in General Roading Maintenance Contract. Programme currently delivered by Fulton Hogan.	3+2+2
Pavement Rehabilitation	Sealed and unsealed pavement rehabilitation projects.	Included in General Roading Maintenance Contract. Programme currently delivered by Fulton Hogan.	3+2+2
Structural Component Replacement	ural Replacement of components of bridges, onent large diameter culverts and retaining As required. Specific contract for the bridge,		As required
Low Cost Low	Minor safety improvements across the	Small projects included in the General Roading Maintenance Contract. Typically < \$75,000.	3+2+2
Risk Improvements	transport nétwork.	Large scale >\$100,000 contract documents prepared for the specific project.	As required
Minor Events	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
and Emergency Works	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	Pavement designs, geometric designs, safety improvement designs	Short form agreement	As required
Services	Structural asset replacements, inspection of structural assets	Measure and value. To be tendered	2+2+2

Table 35 - Programmed Works to Address Our Problem Statements

			Consequences of
Problem Statement	Planned Works	Benefits	Not Undertaking
No. 4 Ingressing LICVs	Pavement	Maintains the	the Works
No: 1 – Increasing HCVs and forestry activity	rehabilitation to:	structural integrity of	Large maintenance costs to continue in
and forestry delivity	Monmonth Rd	key HPMV routes to	order to provide a
	Beaconsfield Rd	provide a reasonable	level of service to
	York Rd	level of service for	the community.
	Opunake Rd	our community.	
	Heavy maintenance	Due ve sete foutle en	Excessive number
	and metaling of	Prevents further deterioration of the	of pavement failures, potholes
	unsealed roads:	road pavements.	and corrugations
	Puniwhakau RdMangaehu Rd		that will affect our
	Upper Mangaehu	Maintain the	performance
	Rd	waterproofing of the	targets for ONF
	Mangaoupa Rd	sealed network.	technical KPIs
	Junction Rd	Reduced number of	Potholes, poor skid
		faults generated by	resistance, loss of
	Increase in reseal	the ingress of water	control crashes,
	programme	into the pavement.	increased seal
		·	pavement
			maintenance costs
No: 2 – Poor drainage and water tables	Through routine	Improves the ability for the network to	Poor pavement
water tables	inspections, identify 90km of watertables	cope with intensive	condition leading to reduced pavement
	to be cleaned or re-	rainfall events.	life.
Supprist I	constructed per year.		
Company of the Compan		Reduces the	Pavement failures,
	Replace 500m of	likelihood of	both sealed and unsealed networks.
	culverts per year.	underslips occurring.	urisealeu rietworks.
	Replace 1500m of	Ensures the road	Flooding occurs
	kerb and channel per	pavement is dry to	more frequently.
	year.	maximise road	
	Address underslips.	pavement lifestyles.	Loss of amenity valve for urban
	Address understips.	Provides a level of	streetscape.
		service in the urban	Streetscape.
		environment for	Blocked or
		stormwater control.	damaged culverts
		Danlas	could result in
		Replacement of culverts to cater for	underslips occurring thus
		climate change and	putting the road at
		remove flooding	risk and higher
		hazards.	repair costs.
Nac Castrollo and	Danisanasitat	Ca a d avval!	Deterioretica
No: 3 – Footpaths and safe and resilient roading	Replacement of footpaths throughout	Good quality footpaths to cater for	Deteriorating footpaths leading to
networks	the urban areas based	multi-model	trip hazards and an
	on the following	transport options.	increase in personal
	criteria:		injury through falls
	Use = highly used	Support our Walking	5
	footpaths identified	and Cycling Strategy.	Poor ride quality for
	from surveys with the community.		mobility scooter users.
	the community.		40010.

		4	
7			
		1	
'n			1

 Key corridors leading to community services eg: Medical Centre, doctors, CBD, schools. Encourages increased use for active modes of transport.

High quality amenity valve for streetscapes

Reduced uptake of active modes throughout Stratford.

Increasing number of customer complaints.

Poor results from customer satisfaction surveys for footpaths.

Problem Statement

No: 4 – Poor driver behaviour and challenging road conditions



Planned Works

Safety improvements to Opunake Road will continue throughout the 2024/27 LTP period. These will complement the 80km/h speed limit introduced in June 2022.

Other minor safety improvements across the network as they are identified.

Geometrical improvements undertaken in conjunction with pavement rehabilitation projects.

Benefits

Reducing the road toll on Stratford's roads to assist in meeting the GPS Strategic priority of Minor Improvements.

Reduced social costs associated with Death and Serious Injury crashes.

ONF KPIs for safety will improve.

Consequences of Not Undertaking the Works

We will not achieve our DIA targets for reducing DSI crashes annually.

We will not meet the Safety KPIs for ONF.

8.4 PROGRAMME BUSINESS CASE

This section covers how the problems identified in <u>Section 4.2</u> will be addressed through our planned works programme for the 2024-2027 period.

Table 36 shows how the proposed work programmes or renewal projects deliver on the ONF Customer Outcomes.

Table 36 - Addressing Problems

Problem Statement	Planned Projects	Timeframe	Benefits	Consequences of not doing
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 Road pavement rehabilitation – Stanley Road to SH43 Opunake Road Pavement Rehabilitation Mangaotuku Road Heavy Maintenance of unsealed roads Flint Road East – Level Crossing to A&P Showground entrance 	2024-27 2025-26 2026-27 2027-28 2024-34 2024-25	HPMV defined routes and used by forestry. HPMV defined routes Used by forestry Used extensively by forestry industry	Pavement failures Extensive Maintenance will be required Significant deterioration of unsealed pavement Rutting Potholes Pavement failure
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 Replacement of steel culvert on Wairiri Road with a concrete box culvert.	2024-27	Improvements to roadside drainage. Replacing misaligned or blocked culverts. Replacement of old kerb and channel to improve drainage. Existing culvert is failing. This new "bridge" is the minimum to meet new environmental standards.	Failure of the existing culvert will require emergency replacement which is un-budgeted.
There is misalignment between Council and Community regarding the	Continue with footpath replacement programme.		Improvement to customer satisfaction survey results.	Access, Amenity

Problem Statement	Planned Projects	Timeframe	Benefits	Consequences of not doing
appropriate level of service to meet the expectations for a safe and resilient roading network	Target length is 1500 meters per annum. Sites to be confirmed through inspections and customer surveys.		Improvement in the level of service provided. Removal of narrow footpaths	
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. District Wide Speed Management Plan A six year programme to review the speed limits throughout the District.		Assist in the Minor Improvements vision	Road Safety

Table 37 - Relationship Between Works Categories and the ONF Performance Measures

Work		ι	Jrban Street	:s	Rural Roads		
Catego		Description	Local Streets	Activity Streets	Peri-Urban Streets	Rural Connectors	Rural Roads
	111	Sealed Pavement Maintenance	X	X	X	X	X
	112	Unsealed Pavement Maintenance				X	X
ė,	113	Routine Drainage Maintenance	X	X	X	X	X
enanc	114	Structures Maintenance		X		X	X
/Maint	121	Environmental Maintenance	X	X	X	X	X
Operations/Maintenance	122	Traffic Service Maintenance	X	X	X	X	X
Opera	125	Footpath Maintenance	X	X	X		
	131	Level Crossing Warning Devices	X	X			X
	140	Minor Events				X	X
	151	Network and Asset Management	X	X	X	X	X
	211	Unsealed Road Metalling					
ŧ	212	Sealed Road Resurfacing	Х	Х	Х	Х	Х
eme	213	Drainage Renewals	X	X	X	X	X
Replace	214	Sealed Road Pavement Rehabilitation	X	×	×	X	X
Renewal/Replacement	215	Structures Component Replacement		×		X	Х
ž	216	Bridge and Structures Renewals		X		X	X
	222	Traffic Services Renewals	X	X	X	X	Х
Level of Service Improvemen	341	Low Cost/Low Risk Improvements	X	X	X	X	Х

8.4.1 Delivering Cost Effective Road Infrastructure

The draft Government Policy Statement (GPS) 2024/25 - 2033/34 has six focus areas:

- Maintaining and Operating the system
- Increasing resilience
- Reducing emissions
- Safety
- Integrated freight system
- Sustainable urban and regional development.

In order to deliver a cost effective level of service to our community, our Corporate Procurement Policy / Strategy and the Roading Procurement Strategy provides the guidance to achieve this goal.

We use the following guiding principles for our delivery:

- Robust planning to identify forward work programmes
- Appropriate selection procedure for specialised works that cannot be undertaken through the maintenance contract.
- Maintaining the local supply chain market using local contractors and suppliers.
- Delivery of the works at the right time within the approved allocation to deliver a quality product.
- Packaging similar work types together to provide cost efficiencies.
- Staged approach to larger scale projects over multiple financial years.

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 38 - Option 2 - A Prioritised Programme

Transport Activity	How Desired Outcomes Will Be Delivered	Level of Investment	Risk Impact	Key ONF CLoS Impact
	Sealed pavement maintenance increases on roads affected by HCVs	Increase of \$260,000 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	This will remain at a similar level of expenditure as previous years.	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
management	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 \$25,000 per annum	Increase to address backlog of maintenance to bridges and retaining walls	Provides for specific maintenance repairs and corrosion treatments
es and freight ord District.	Unsealed pavement maintenance on roads affected by forestry	This will remain at a similar level of expenditure as previous years.	Increase in contract rates for this work category	Addresses issues on roads used by logging traffic e.g.: Puniwhakau Road – soft spots. Pavement repairs.
Movement of passenger vehicles and freight management within the Stratford District.	Bridge replacement of old structures	A new work category for Bridge and Structure Renewals to replace structures noted in our 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
Movement o	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
	streetlights has been maintenance and		Reduced streetlight maintenance and power changes have been achieved	Improved value for money for operating the streetlight network
	Walking and Cycling	Increase in budget to replace and maintain footpaths.	Reduces the total length of footpaths that are less than 1.5 meter wide.	Improved CLoS for all user groups

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 41 are either under review or currently being prepared and include:

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



Figure 42 - Roading Management Strategies

8.6 Prioritisation and Cost Efficiency

An important factor in the delivery of our maintenance, operations and renewals (MOR) programmes will be to ensure we prioritise the work flow in order to stay within our approved allocation.

There will never be sufficient funds to maintain the Land Transport System, so we must focus on what's important based on the ONF road classification system.

There will always be reactive work, generated by customer service requests, or following routine inspections. Our aim is to work effectively and efficiently with our Contractor by pre-approving work programmes jointly.

Moving towards a cost reimbursable contract, if we can be more efficient in our programming and planning, then there will be savings in time and cost. This can be achieved by undertaking several work activities simultaneously when working in an area or on a road within the District.

For example a section of Opunake Road was closed for six weeks to facilitate some bridge repairs. We took the opportunity to undertake water table cleaning during this time, thus avoiding the need for temporary traffic management.

8.7 DETAILED BUSINESS CASE

8.7.1 OPERATION AND MAINTENANCE

Our long term goal is to develop along with our Contractor a Maintenance Intervention Plan. This will call on best practice and local knowledge to help work crews to use the right treatment in the right situation, e.g. Crack sealing verses a dig-out. If we can squeeze a bit more life out of the assets, we can make the dollar go further.

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 previously in this AMP, the continuing issue of forestry and its effects on our roading network is taking valuable resources (money, labour & plant), away from other planned works. In 2022/23 we spent in the order of \$975,000 repairing roads damaged by forestry. We have identified \$3.8million of repairs that are necessary to five low volume rural roads, all affected by forestry.

This year alone we have spent \$500,000 on strengthening unsealed roads that are currently or will be impacted by forestry.



Figure 43 - Photo of Mangaehu Road



Figure 44 - Photo of Mangaoapa Road



Figure 45 - Photo of Mangaoapa Road



Figure 46 - Photo of Mangaoapa Road



Figure 47 - Photo of Puniwhakau Road



Figure 48 - Photo of Puniwhakau Road

The table below provides an overview of our funding proposal for the 2024/27 NLTP period. The level of funding is to address some of the \$3.8million required for forestry, to replace old bridges, address the replacement of culverts and to keep up with cost escalations.

Table 39 - Lifecycle Management Costs

Activity	2024/25	2025/26	2026/27	2027-34	Total
Sealed Pavement	\$680,000	\$714,000	\$750,000	\$6,411,832	\$8,555,832
Maintenance Unsealed Pavement	\$260,000	¢272.000	¢206.650	¢2.450.602	¢2.270.252
Maintenance	\$200,000	\$273,000	\$286,650	\$2,450,602	\$3,270,252
Routine Drainage	\$235,000	\$246,750	\$259,000	\$2,214,219	\$2,954,969
Maintenance	Ψ255,000	φ240,750	φ259,000	\$2,214,219	ΨΕ,954,909
Structures Maintenance	\$200,000	\$210,000	\$220,500	\$1,885,079	\$2,515,579
Environmental Maintenance	\$240,000	\$252,000	\$264,600	\$2,262,094	\$3,018,694
Traffic Services Maintenance	\$320,000	\$336,000	\$352,800	\$3,016,126	\$4,024,295
Footpath Maintenance	\$50,000	\$52,500	\$55,125	\$471,270	\$628,895
Level Crossing Warning Devices	\$30,000	\$31,500	\$33,075	\$282,762	\$377,337
Minor Events	\$400,000	\$420,000	\$441,000	\$3,770,157	\$5,031,157
Network and Asset Management	\$875,000	\$918,750	\$964,688	\$8,247,218	\$11,005,656
Unsealed Road Metalling	\$910,000	\$955,500	\$1,003,275	\$8,577,107	\$11,445,882
Sealed Road Resurfacing	\$1,260,000	\$1,323,000	\$1,389,150	\$11,875,995	\$15,848,145
Drainage Renewals	\$915,000	\$960,750	\$1,008,788	\$8,624,234	\$11,508,772
Sealed Road Pavement Rehabilitation	\$650,000	\$682,500	\$716,625	\$6,126,505	\$8,175.630
Structures Component Replacement	\$350,000	\$367,500	\$385,875	\$3,298,887	\$4,402,262
Bridge and Structures Renewals	\$600,000	\$630,000	\$661,500	\$5,655,236	\$7.546,736
Traffic Services Renewals	\$160,000	\$168,000	\$176,400	\$1,508,063	\$2,012,463
Footpath Renewals	\$210,000	\$220,500	\$231,525	\$1,979,332	\$2,641,357
Low Cost Low Risk Improvements	\$3,720,000	\$2,820,000	\$2,770,000	\$18,955,000	\$28,265,000
Overall Totals	£42.065.000	\$44 FP2 252	\$44.070.576	\$07.644.74°	\$435.064.450
Overall Totals	\$12,065,000	\$11,582,250	\$11,970,576	\$97,611,718	\$125,061,459

Notes:

1. A cost escalation percentage of 20% has been included in the proposed funding request.

Road Pavement

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



Figure 49 - 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.

For the unsealed roading network located in the most eastern area of the Stratford District, we do use the Awakino metal supplied by Jones Quarries. This metal has been extensively used by NPDC in recent years, as the metal forms a hard crust on the unsealed road which proves to be very durable.

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 ONF 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 40.

Table 40 - 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 inverts 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 a significant increase in the number of HPMV permits issued during the 2021/24 LTP period. The 32 bridges which are 50 max restricted are likely to remain as such, due to the unavailability of funds to strengthen them.
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 41 - Bridge replacements in the next 30 years

Time for Replacement	Number of Bridges to Replace	Estimated Cost for Replacement
0-10 years	7	\$7.8m
11-20 years	14	\$7.0m
21-30 years	36	\$18.2m

The Stratford District Council has identified 14 bridges which we consider critical in accordance with our Criticality Risk Profile. The cost of replacing these structures has been estimated to be \$7.78m. Table 42 Lists the bridges.

Table 42 - Bridges to be replaced

Item	Road Name	UL Useful Life (years)	RUL Remaining Useful Life (years)	Recommended Replacement Plan	Replacement Cost (\$)
1	Upper Mangaehu Road	50	o	Currently being worked on. To be concrete lined in 2023.	\$20,000
2	Brewer Road	50	o	Currently being worked on. To be concrete lined in 2023.	\$20,000
3	Wawiri Road	50	1	Replace culvert with a bridge.	\$300,000
4	Pembroke Road (2 Rural)	50	1	Invert in very poor condition. Concrete lining has been completed. In order to meet the NES for freshwater the culvert is likely to be replaced with a bridge.	\$1,500,000
5	Finnerty Road	-	1	Recent water drive failure. Will likely need full replacement.	\$200,000
6	Barclay Road	100	2	Concrete repairs required. Spalling on RB transverse beam.	\$20,000
7	Upper Mangaehu Road	50	2	Structure in good condition. Rock apron at outlet is required.	\$20,000
8	Mcbrides Access	80	2	Floods regularly, generally in poor condition. Will need replacing at a higher level.	\$2,000,000
9	Matau North Road	95	2	Replace the timber land span beams and decking boards	\$300,000
10	Mauku Road	80	3	Structure is in good condition. Repairs to the handrail are required.	\$100,000
11	Lower Kohuratahi Road	100	4	Rebuild entire structure at a lower level but above the 100-year flood height.	\$2,000,000
12	Mount Damper Road	80	8	Paper road bridge. Average condition, fit for purpose.	\$350,000
13	Flint Road (East Of Sh3)	100	10	Concrete in relatively good condition.	\$600,000
14	Skinner Road	90	10	Concrete in good condition, monitor invert.	\$350,000
	Total				\$7,780,000

Retaining Walls

To date SDC has recorded/inspected 251 retaining walls. We believe there are more retaining walls on the Roading 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.

Included in the Structural Assets Inspection Contract are the 251 retaining walls. These are inspected every six years, therefore approximately one sixth are inspected each year as the inspection contract is a six year contract.

A report from Calibre commissioned in 2020, identified that 58 retaining walls were in a very poor condition and should be replaced within the next 10 year period.

We have estimated the cost to replace these walls will be in the range of \$5.50m to \$6.0m.

We have allowed a nominal amount in our funding proposal for the maintenance of our retaining walls, as identified by the inspections. Figure 49 shows examples of retaining walls that require replacement.

Figure 50 - Examples of retaining walls to be replaced



Wall #382: Mangaowata Road



Wall number 227: Mangaehu Road



Wall #280: Tawhiwhi Road



Wall #305: Junction Road



Wall #332: Mangaoapa Road



Wall #178: Mangaotuku Road



Wall #196: Walter Road



Wall #236: Mangaotuku Road

<u>Drainage</u>

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.

Some of the key lifecycle management issues that affect drainage facilities are described in Table 43.

Table 43 - Key Management Issues - Drainage

Key Issue	Strategy to Address Issue
Undersized culverts	Increased capacity as part of renewal programme. Where a resource consent is required to replace a failing culvert, we are encountering a requirement to significantly increase the size of culverts.
	A culvert that was washed out by Hollard Gardens on Manaia Rd is a prime example of the impacts of the new environmental standards.
	A previously 900mm culvert had to be replaced with either a 2m diameter culvert or a 2m by 2m box concrete culvert.
	Due to the unavailability of these units we installed a 2.40m diameter culvert as these were available at very short notice.
Deep drain adjacent to road	Reposition in conjunction with pavement rehabilitation projects when these are undertaken. It will take a long time to relocate these drains.
edge	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 zoned 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 44 - 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. Replace any damaged signs to meet the current design guide.
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 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	As the paint deteriorates consider re-painting over the period of the 2024-2027 LTP period. The first priority will be islands at known crash sites / intersections. For example, Fenton St/Juliet St and Regan St/Miranda St. These need to be painted to highlight their presence at night.

Delivery

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

Investment in traffic services assets is required as these assets provide safety features on the road network, including streetlighting of intersections, and delineation on the rural roading network.

Table 45 - Current Contracts for Delivery of Traffic Services

Contract Name	Activities
General Roading Maintenance	 Sight rail cleaning and paint Repairs and replacement of road signs Annual roadmarking Painting of pedestrian refuges Replacement of roadside markers Painting wooden sign posts
Streetlight Maintenance and Renewals	 Replacement of streetlight columns Replacement of streetlight cabling Maintenance of under veranda lighting Maintenance of LED streetlights

Streetlighting

The Stratford District Council has completed the installation of LED streetlights. We have undertaken a visual inspection of the free standing streetlight columns, assessing their condition from good to very poor. From this inspection we have identified 12 very poor condition streetlight columns.

These will be replaced during the 2024-27 period.

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 NZTA have expressed a desire to take this role back in-house however, this is still to be confirmed.

Road Signs and Road Markings

With the increasing cost of maintenance activities, we cannot afford to replace all of the road markings every year. Therefore, we are taking a targeted approach to focus on road markings which are key for road safety, for example intersection control markings.

Other road markings such as parking restrictions and on-road parking bays, will be re-marked every two years.

Any damaged or faded road signs will be replaced, whereas signs which are "functional and legible" but are dirty can be cleaned or replaced as budgets allow.

Environmental Services

In the main, the asset group to which this work category applies in roadside berms. SDC maintains approximately 1100 turn of roadside berms for three main purposes:

- Drainage control
- 2. Safety visibility
- 3. Reduction of fire risk

Our problem statement number two refers to poor drainage that will lead to pavement failure of the road network. Therefore, it is vital that we clear vegetation from the invert of water tables, the mouths of culverts and stormwater structures to ensure we provide adequate roadside drains. Other activities which are part of environmental services are:

- Removal of small slips from water tables. These are < or equal to 10m³ in size.
- Removal of roadside litter or "fly tipping".
- Removal of graffiti.
- Removal of fallen trees which are not a result of a storm event.
- Treatment of "pest plants "as designated by the Taranaki Regional Council.
- Spraying around roadside furniture.
- Spraying of kerb and channels.
- Trimming of high banks on the roadside for example, sections of Opunake Road.
- High trim of the roadside vegetation on Manaia Road and Pembroke Road SPR's.

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 formal 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.

The funding level requested is an increase on previous years as it is evident that New Zealand is subject to more short but intense rainfall events than in previous years. The increase is to reflect these climatic changes to deal with regular small scale 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
- 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
- Undertaking 50 traffic counts per annum

Managing the Asset through ONF

With the funding restrictions we are all facing, we have to take a more risk based approach to maintenance, operations and renewals. In simple terms, there is not enough money to go around. We have delayed rehabs and reseals in the past to focus on sites that are crying out for treatment. This approach will unfortunately have to continue.

Our biggest issue for next NLTP is the increase in the number of heavy haulage freight across the district. This is either HPMV traffic on defined routes or logging traffic on the minor rural roads. During the last two financial years (2022/23 and 2023/24) we have spent \$1.5m on repairing damage to minor rural roads affected by forestry/logging traffic.

We have identified \$3.8m of work to be undertaken, some has been completed, but \$3.125m remains.

Our community are not concerned about the purists of Te Ringa Maimoa, all they concern themselves on are:

- Potholes are repaired in a timely manor
- Drains are kept clear of leaves, silt and debris
- The streets are swept
- Rural roadside berms are mowed
- Unsealed roads are graded regularly to remove corrugations.

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 community outcomes or problem statement number 3 – Customer Expectations. As shown below, the customer satisfaction survey for footpaths is average with a score of 60% over the four quarters of the 2022/23 year. Our target is greater than or equal to 80% satisfied. Clearly there is a long way to go. As shown in Table 47 on page 167 you can see the footpaths that we have replaced in the last four years.

This programme of work was underwritten by additional funds from SDC to accelerate the footpath replacement programme. At the beginning of 2021 we had 49.50km of footpath less than 1.50m wide. This has now been reduced to 45km.

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.

Key Issues

Investing in our footpaths is one of Stratford's core assets to provide safe walking corridors for multi-model transport. With an aging population, more elderly residents are continuing to remain mobile, even though they are using mobility scooters.

Many of these footpaths will from the walking and cycling routes as defined in Stratford's "Connecting Our Communities" Strategy.

A map of these routes can be found in Figure 52 on page 174.

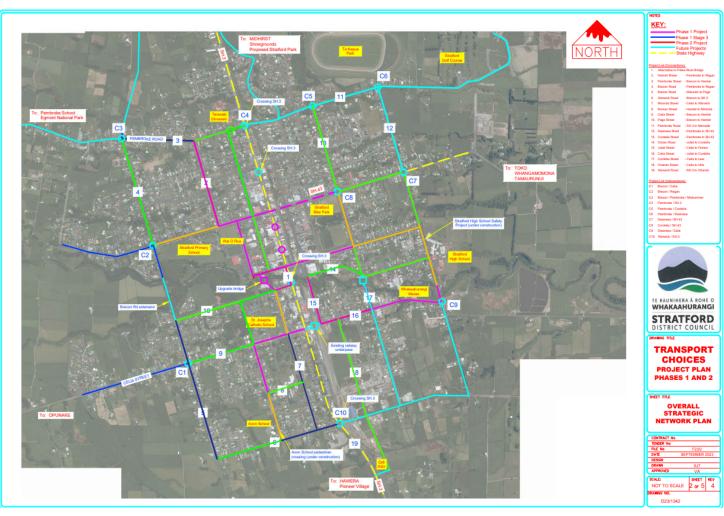


Figure 51 - Proposed Walking and Cycling Strategy Map - Stratford Town

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 1st 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

Currently the average age of our reseal is 13 years. Following a technical in 2019, the auditors informed SDC there was a significant proportion of our sealed road network which was more than 15 years old.

This has also been verified by a visual inspection undertaken by Craig McKay Consulting. This report can be found in the appendices.

One of the recommendations from this report was to increase the length of road resealed each year. The recommended length was 60km/yr, however this is not affordable (Approx \$3m/pa based on current contract rates).

A more modest approach is to increase the length of reseals over time. Therefore, we are proposing to undertake 30km or 60 lane km's per annum for the duration of this LTP period.

If funds permit we can increase this length slightly but not to the extent suggested in the report.

8.8.3 SEALED PAVEMENT REHABILITATION

The focus for SDC over this NLTP period will be key for HPMV corridors. These are:

- Beconsfield Road SH3 to SH43
- Cardiff Road Pembroke Road to Opunake Road
- Opunake Road Elizabeth Grove to Manaia Road
- Flint Road East Outside the A & P Showground
- Orlando Street Outside New World Supermarket

These roads nominated above are primarily our pre-approved HPMV routes. There are other rural roads such as Mangaotuku Road that have suffered from logging activity, but at this stage we are taking the approach to maintain them until forestry work has been completed.

Potential future rehabilitation sites could be:

- Mangatuku Road
- Brewer Road
- Mangaehu Road
- Matau Road

All of these are currently used extensively by logging / forestry traffic. This is likely to continue for the next five years.

We will apply the following criteria to determine our pavement rehabilitation programme for this LTP period.

- 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.

Whilst the criteria listed above is generalised and could apply to any sealed road on our network, we will be very targeted in the sites we choose. This is due to the costs involved and the level of funding we have requested, \$700,000 per annum.

Our focus is on unsealed roads (metalling to be covered later) and sealed road resurfacing.

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.

8.8.4 UNSEALED ROAD METALING

Stratford District Council's unsealed network is 207km long. Our own KPI reported to the Department of Internal Affairs states that we will re-metal a minimum of 7% by length of the network.

This equates to 15km of road or 6000m³ of metal assuming 4m width and a 100mm overlay.

This is a modest target given the funding level we are requesting. However, our current issue, as with the previous activity management plan, is forestry.

The majority of the funding requested is to repair and to keep on top of, the pavement failures on a few known forestry roads. These are:

- Mangaehu Road
- Puniwhakau Road
- Mangaoapa Road
- Junction Road this is an inter-district road joining New Plymouth District at the Waitara
- Douglas North Road





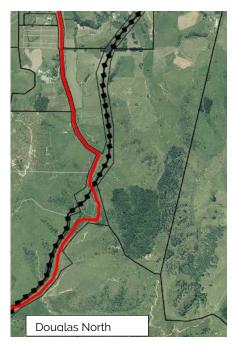


Figure 52 - Aerials of Roads with Forestry Blocks Being Harvested in the Next 5 Years

8.8.5 Drainage Renewals

This activity allows for the renewal of our drainage structures including:

- Urban kerb and channels
- Rural water tables
- Rural culverts
- Urban sumps and sump tops
- Manholes / Risers

8.8.6 Renewal of Roadside Watertables

We have approximately 1000km of watertables along the rural roading network. Our programme and level of funding allows for the renewal of 90m of watertables per year.

8.8.7 KERB AND CHANNEL REPLACEMENT

The replacement of our kerb and channel will be based on either:

- The condition of the existing kerb and channel
- Does the kerb and channel form an integral part of the footpath i.e. no roadside berm between the footpath and kerb.

When the kerb is part of the footpath, if the footpath is being replaced, then we will replace the kerb and channel at the same time.

Our planned and budgeted programme is to replace 1000m of kerb and channel per annum where necessary.

8.8.8 CULVERTS

The Stratford District Council maintains 2950 culverts of various sizes. Of these, there are 100 that are 225mm in diameter. With current climatic conditions these culverts are not capable of conveying large volumes of water during heavy rainfall events. This is particularly true for the culverts located in the eastern hill country.

Our plan is to start replacing these 225mm culverts but only if they are in a poor or very poor condition following a visual inspection. To date we have noted that nine are in poor or very poor condition, the remainder will be inspected over the next 12 months.

As Stratford district is split into six geographical areas, we inspect all the culverts in one area each year. This spreads the workload for the Contractor and the cost of the inspections.

8.8.9 STRUCTURES

Having completed an inspection of our entire bridge stock, we have developed a 30-year bridge replacement programme. This has been included in Appendix 5.

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.

8.8.10 TRAFFIC SERVICES

Having replaced our 70 watt sodium oxide streetlights with LED's, our next asset to look at are the free standing light columns.

From a recent inspection undertaken by NPE-Tech, there are 12 streetlight columns that are in very poor condition.

These will be replaced throughout the duration of the 2024-27 LTP period.

8.8.11 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.

Table 46 - Footpaths replaced in the last Four Years

		Location	Length (m)
1	Essex Street	Both sides of the street – full length	250
2	Fabian Street	Both sides of the street – full length	400
3	Montjoy Street	Both sides of the street – full length	220
4	Ferdinand Street	Margaret Street to Montjoy Street	208
5	Elsinore Street	Both sides of the street – full length	224
6	Miranda Street	Regan Street to Seyton Street - Western side	276
7	Fenton Street	Both sides from Cordelia Street to Swansea Road	850
8	Swansea Road	Fenton Street to Patea Bridge – Western Side Cloten Road to Patea Bridge Eastern on School side	220
9	Broadway - Northern Dairy	Seyton Street to just north of the dairy	180
10	Lysander Street	Both sides of the street – full length	317
11	Seyton Street	Cul-de-sac end	397
12	Cordelia Street	Regan Street to Fenton Street - Victoria Park side	348
13	Ajax Street	Both sides of the street – full length	284
14	Archilles Street	Both sides of the street – full length	817

		Location	Length (m)
15	Regan Street	opposite Stratford Primary School Hamlet Street to Brecon Road	405
16	Surrey St	Essex Street to Hamlet Street south side	154
17	Broadway South	Outside railway station	
18	Regan Street	Hamlet Street to Miranda St – North side	
19	Juliet St	Seyton St to Pembroke Rd – Western side	
20	Cordelia St	Fenton St to Cloten Rd – Western side	

8.9 Low Cost Low Risk Improvements

This work category will be used to undertake the following work activities:

- Walking and Cycling Upgrades
- School safety improvement projects Stratford Primary School, St Joseph's Primary School, Avon Primary School, Midhirst School.
- Road Safety Improvements including:
 - o Roadside barrier installation along Opunake Road
 - o Shoulder widening on Opunake Road
 - o Geometric improvements on Cardiff Road
 - o Speed limit signage
 - o Intersection upgrade of Fenton Street and Juliet Street
 - o Geometric improvements on Palmer Road
 - Construction of a roundabout at Pembroke School
 - o Construction of three retaining walls on Whitianga Road underslip sites
 - Construction of retaining walls on Stanley Road and Opunake Road (opposite the possum factory) – underslip sites
 - Shoulder widening of Salisbury Road, Climie Road and Brookes Road. These roads are used as State Highway 3 diversions for both planned and un-planned events on SH3.
 - Geometric improvements on Junction Road and interdistrict road connecting SH43 to New Plymouth District.
 - o Generally minor geometrical improvements as identified.

Bridge Strengthening

Given the current financial climate with restricted budgets, it is unlikely that SDC will begin a bridge strengthening programme.

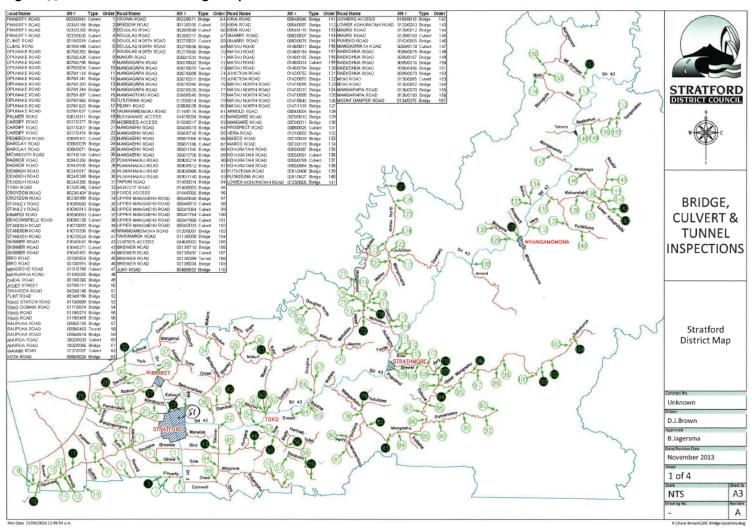
Should the Government release funding for bridge strengthening programmes we will consider strengthening the bridges listed in Figure 52 below.

For any detailed structural assessments required on the 50Max restricted bridges will require additional funding in work category 151 or 216, before any physical works can be undertaken, It is highly likely that such funding for structural assessments will not be forthcoming in the 2024/27

LTP period or for any subsequent LTP's, due to financial constraints.

Therefore, any strengthening work required can be incorporated into the 30-year bridge replacement programme.

Figure 53 - 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.

Connecting our Communities Strategy

Stratford's walking and cycling strategy known as "Connecting our Communities" was adopted by Council in September 2023 and is included in Appendix 1.

The *Connecting our Communities Strategy* (the Strategy) is developed in alignment with the Government Policy Statement (GPS) to guide the Stratford District Council (the Council) in several key areas, including:

- Developing a transport system where no-one is killed or seriously injured.
- Providing transport options to our communities for accessing social and economic opportunities.
- Developing a low carbon transport system that supports emissions reductions, safety, and inclusive access.
- Facilitating improvements in freight connections to drive economic development.

Over the next three decades, our focus will be on fostering sustainable transport in the Stratford district. This strategy outlines our commitment to creating safe and reliable road transport infrastructure, ensuring that our communities are well-connected and secure.

By promoting sustainable transport, we aim to contribute significantly to the realisation of the Stratford district's social, environmental, cultural, and economic objectives. This approach will not only enhance the overall well-being of our residents but also positively impact the surrounding environment, preserving our cultural heritage, and supporting local businesses and industries.

Our commitment to sustainable transport will serve as a cornerstone for the future development of Stratford, fostering a resilient and prosperous community for generations to come. Through a coordinated effort, we aspire to build a greener, more connected, and thriving Stratford district, aligned with the principles of sustainability and environmental stewardship.

This Strategy focuses on the gradual implementation of enhanced sustainable transport facilities in the district, with a priority on connecting schools to key community destinations and urban residential areas. It also prioritises improvements for vulnerable road users who do not rely on private vehicles (cars, motorbikes, trucks, vans, etc.). This Strategy is designed to increase connectivity, accessibility and the safety of our road infrastructure such as footpaths, cycle lanes, cycleways and roads.

The costs for this project are \$400,000 per annum for the next 10 years.

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:

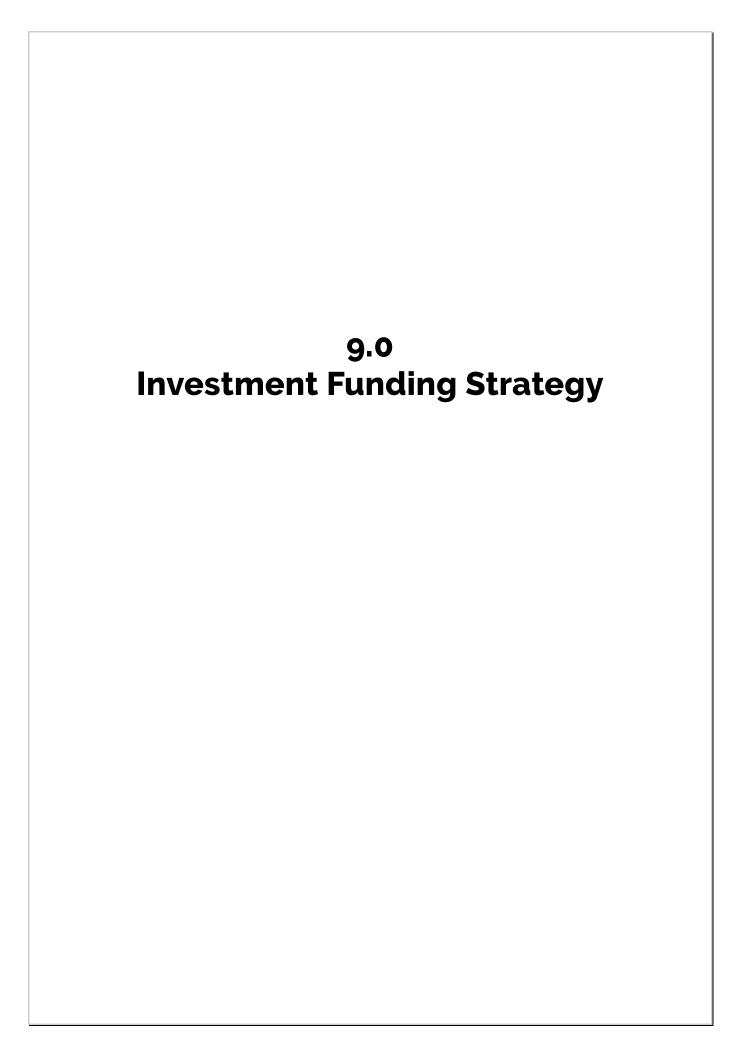
- Underutilisation;
- Obsolescence;
- Cost Inefficiency;
- Policy change;
- Provision exceeds required Levels of Service;
- Service provided by other means (e.g. private sector involvement); and
- Potential risk of ownership (financial, environmental, legal, social).

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

Lifecycle Management

has no plans to dispose of any Roading asse of renewal or upgrading works.	



Investment Funding Strategy

9.0: Investment Funding Strategy

9.1	Overvi	ew	167
9.2		ial Standards	
9.3	Fundin	ng and Financial Policies	167
		Revenue and Financing Policy	
	9.3.2	Treasury Management Policy	167
	9.3.3	Development and Financial Policy	168
9.4	Fundin	ng Our Investment Strategy	168
9.5		ility of our Investment Strategy	
9.6		ial Statements and Projections	

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 Roading Activities.

This IFS provides the long term financial forecasting for all Roading 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 Roading 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 Roading 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 in December 2017. The funding sources are detailed in the LTP 2024-2034 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 Roading Activity projects will continue to be 100 % funded through NZTA Subsidies and Reserves. Presently, the NZTA Financial Assistance Rate (FAR) is 63%. The remaining 37% is funded by the Council through rates and other revenue streams such as fees and charges. From 1 July 2024, the two Special Purpose Roads (Manaia and Pembroke Roads), will be funded at the new FAR of 63%.

For Emergency Reinstatement (Work Category 141) the Business as Usual (BAU) level of funding is at our base FAR rate of 63%. However, should a significant storm event occur, the Council may apply for an increase in financial assistance depending on the severity of the damage. This will be specific to the event where the cost to respond and repair the roading network is greater than 10% of the approved allocation.

A summary of Council's Investment Funding Strategy is shown in Figures 53 - 58. Tables 47 - 50 provide the financial projections for the Roading 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 Roading Activity:

- NZTA has confirmed the short-term funding at a FAR of 63% for the 2024- 2027 year. This is a reliable funding source;
- The Council's remaining funding source of 37% is largely from rates. Rates will be confirmed for the 2024-2027 period via the appropriate processes for inclusion in the LTP 2024-2034. Once adopted, the rates in the LTP 2024-2034 will constitute a reliable funding source for the delivery of Roading services;
- The short-term budget for Years 1-3 (2024 2027) are as approved by NZTA; funding forecast for Years 4 10 (2028 2034) has been escalated using the 5% inflation rates; and
- The Council does not rely on *Fees and Charges* or *Development Contributions* to deliver Roading 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.

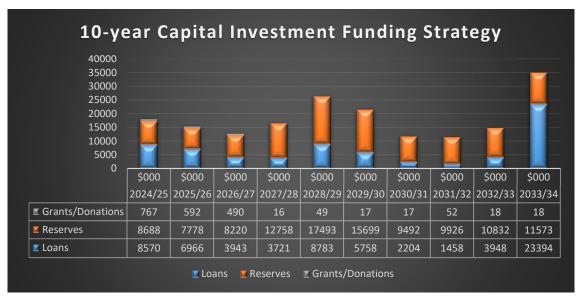


Figure 54 - All Assets Capital Investment Funding Strategy

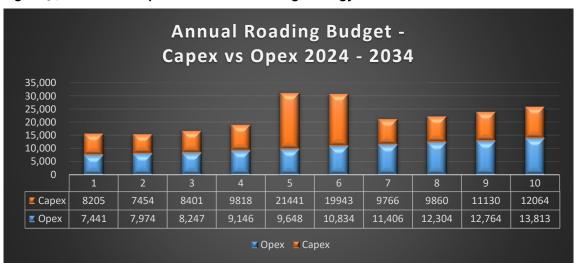


Figure 55 - Annual Roading Budget - Capital vs Operating Expenditure



Figure 56- Total Expenditure - Capital vs Operating

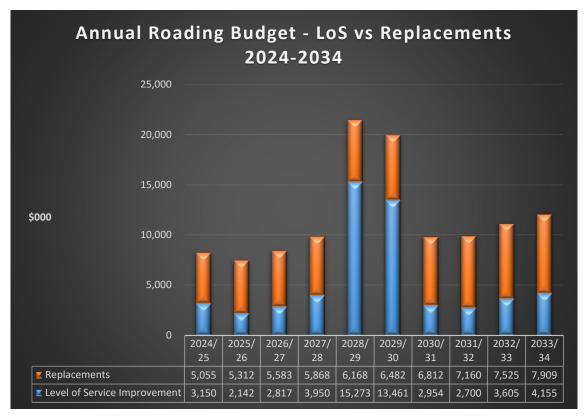


Figure 57: Annual Roading Budget - LoS vs Replacements 2024-2034

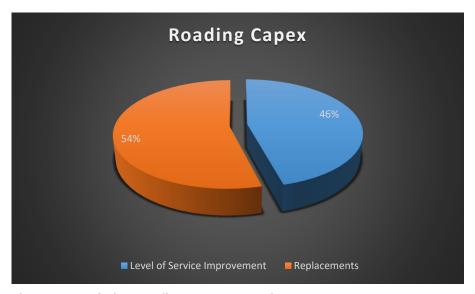


Figure 58: Capital Expenditure - LoS vs Replacement

9.6 FINANCIAL STATEMENTS AND PROJECTIONS

Table 47 - Council Level of Service versus Replacement Funding

	Forecast					Projection				
	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Roading										
Level of Service	3,150	2,142	2,817	3,950	15,273	13,461	2,954	2,700	3,605	4,155
Replacements	5,055	5,312	5,583	5,868	6,168	6,482	6,812	7,160	7,525	7,909
Stormwater										
Level of Service Improvement	450	0	158	0	0	198	116	0	181	0
Replacements	100	103	126	108	111	113	139	118	121	247
Water Supply										
Level of Service Improvement	1,367	246	0	1,026	166	119	0	0	1,330	12,466
Replacements	2,770	2,229	211	427	244	289	487	231	266	833
Solid Waste										
Level of Service Improvement	20	20	162	330	1,098	11	0	0	0	596
Replacements	40	10	10	11	11	11	0	0	0	0
Wastewater (Sewerage)										
Level of Service Improvement	50	513	158	216	0	0	232	118	725	6,418
Replacements	735	343	363	3,602	426	413	400	633	647	475
Parks and Reserves										
Level of Service Improvement	220	490	52	53	0	55	226	57	0	60
Replacements	45	102	104	341	239	22	45	46	23	24
Property					_					
Level of Service Improvement	629	587	1,790	197	1,614	94	39	75	99	1,472
Replacements	315	240	110	138	619	72	79	75	123	95
Community Development	2.020	2055	005							
Meet Additional Demand	2,600	2,655	835	0	0	0	0	0	0	0
Level of Service Improvement	70	77	26	27	27	28	28	29	29	30
Replacements	0	0	0	0	0	0	0	0	0	0
<u>Administration</u>										
Replacements	408	267	148	202	330	105	156	192	122	205
TOTAL PROJECTS (excl GST)	18,024	<u>15.336</u>	12,653	<u>16,496</u>	<u>26,325</u>	21,474	11,713	11,435	14.797	34.985
FUNDING	0	0 - 00			0 =0			6		
Loans	8,570	6,966	3,943	3,721	8,783	5,758	2,204	1,458	3,948	23,394
Section sales (subdivision loan- funded)	0	0	0	0	0	0	0	0	0	0
Cash from Investments	0	0	0	0	0	0	0	0	0	0
Reserves	8,688	7,778	8,220	12,758	17,493	15,699	9,492	9,926	10,832	11,573
Grants/Donations	767	592	490	16	49	17	17	52	18	18
Rates	0	0	0	0	0	0	0	0	0	0
NZTA Financial Assistance	0	0	0	0	0	0	0	0	0	0
TOTAL (excl GST)	18,024	15,336	12,653	16,496	26,325	21,474	11,713	11,435	14.797	34,985

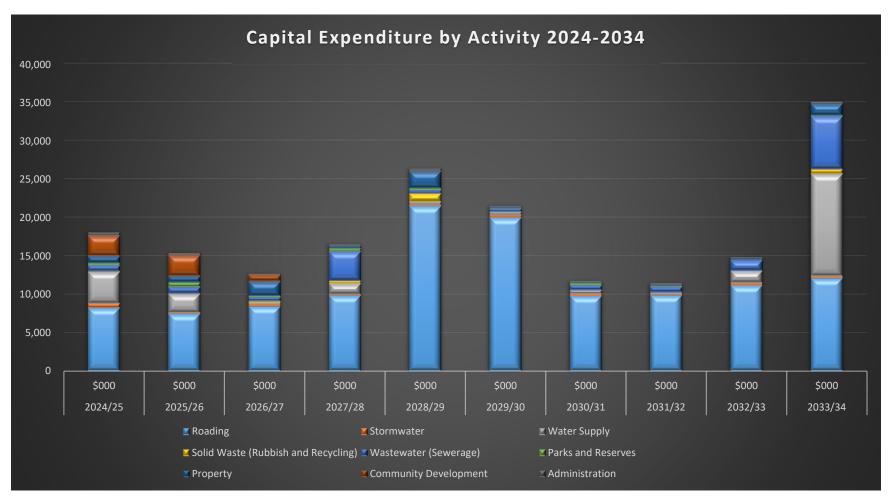


Figure 59 - Capital Expenditure by Activity - All Assets

Table 48: Roading Expenditure and Funding Projection

Budget		Forecast					Projection				
2023/24		2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
\$000		\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
7,176	Operating Expenditure	7,441	7,974	8,247	9,146	9,648	10,834	11,406	12,304	12,764	13,813
4,738	Revenue	7,586	7,223	7,935	9,107	16,623	15,882	9,686	9,974	11,020	11,867
<u>2,494</u>	Net Cost of Service	(146)	<u>751</u>	312	<u>39</u>	<u>(6,975)</u>	(5,048)	1,720	2,330	1,744	1,946
	EXPENDITURE										
3,436	Operating Costs	3,906	4,086	4,277	4,727	5,043	5,374	5,722	6,096	6,496	6,917
39	Interest	92	120	146	183	302	482	573	584	601	632
3,493	Depreciation	3,171	3,540	3,576	3,980	4,046	4,705	4,840	5,353	5,380	5,979
208	Allocated Overheads	272	227	248	255	257	273	271	271	287	286
7,176	Total Operating Expenditure	7,441	7,974	8,247	9,146	9,648	10,834	11,406	12,304	12,764	13,813
45	Principal Loan Repayments	90	125	157	201	335	534	634	651	671	702
12,311	Capital Expenditure	8,205	7,454	8,401	9,818	21,441	19,943	9,766	9,860	11,130	12,064
<u>19,532</u>	<u>Total Expenditure</u>	<u>15,735</u>	<u>15,553</u>	<u>16,805</u>	<u>19,165</u>	31,424	<u>31,312</u>	<u>21,806</u>	<u>22,815</u>	<u>24,566</u>	<u>26,579</u>
	FUNDED BY:										
168	Charges for Services	160	161	163	165	167	169	171	173	175	177
4,570	NZTA Financial Assistance	7,427	7,062	7,772	8,942	16,455	15,713	9,515	9,801	10,845	11,690
4,738	Revenue	7,586	7,223	7,935	9,107	16,623	15,882	9,686	9,974	11,020	11,867
3,410	Targeted Rates	4,229	4,893	4,864	4,611	5,534	5,966	6,531	6,844	6,845	7,451
1,941	Depreciation funded from Reserves	1,823	2,038	2,061	2,297	2,338	2,732	2,817	3,117	3,134	3,486
1,774	Transfer from Reserves - Capital	1,586	2,091	2,223	2,372	2,617	2,933	3,155	3,300	3,456	3,628
(446)	Transfer (to) from Reserves	(669)	(1,501)	(1,334)	(695)	(1,352)	(1,192)	(1,483)	(1,425)	(1,226)	(1,391)
1,696	Loan Funding - Capital	1,166	793	1,042	1,461	5,651	4,981	1,093	999	1,334	1,538
6,160	Grants/Donations - Capital	0	0	0	0	0	0	0	0	0	0
250	Grants/Donations - Operating	0	0	0	0	0	0	0	0	0	0
8	Other Funding	15	15	14	12	12	10	8	5	3	1
19,532	Total Funding	15,735	15,553	16,805	19,165	31,424	31,312	21,806	22,815	24,566	26,579

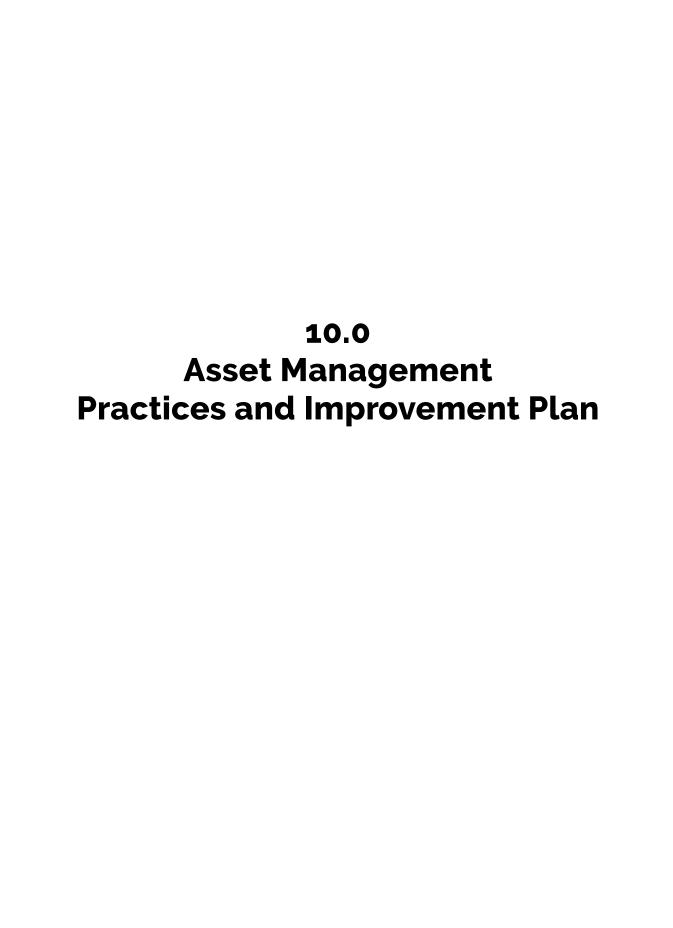
Table 49 - Work Category Summary - Local Roads

79% Budget - Maintenance and Renewals - This is the Draft LTP Scenario Maintenance and Renewal Budgets - Proposed Year 1 Budget

	Work Category	Maintenance and Renewal Budget	Comments	SPR Component
	Operational Activities			
1	Unsealed Pavement Maintenance	\$260,000	Based on 1.5 grading rounds per year, contract LS items, reducing forestry damage repairs from 11,000m2 to 3000m2 per year.	\$10,000
2	Sealed Pavement Maintenance	\$680,000	Contract LS items, halving pavement repairs to sealed network.	\$20,000.00
3	Routine Drainage Maintenance	\$235,000	No real savings in this work activity without adversely affected the network.	\$10,000.00
4	Structure Maintenance	\$200,000	Contract monthly LS items, plus an allowance of \$80,000 for repairs identified by inspections	\$0.00
5	Environmental Maintenance	\$240,000	Contractual monthly LS for vegetation control, halving the amount of additional work.	\$50,000.00
6	Traffic Services Maintenance	\$320,000	Contractual monthly LS items for roadside signs, 60% of roadmarking, streetlight maintenance and power.	\$5,000.00
7	Level Crossing Warning Devices	\$30,000	As invoiced by KiwiRail	\$0.00
8	Footpath Maintenance	\$50,000	Halve the programme of work.	\$5,000.00
9	Minor Events	\$400,000	For recovery from more frequent heavy rainstorm events - climatic change. Similar level of expenditure as previous year.	\$20,000.00
10	Network and Asset Management	\$875,000	Contract LS items for inspections, reports, RAMM fees, Bridge Inspection Contract fees, traffic counts, Business Unit fees	\$5,000.00
	Total	\$3,290,000		\$125,000
	Renewals			
1	Unsealed Road Metalling	\$910,000	Metalling to cover 15km of road (current KPI), halve the repairs to forestry damage identified.	\$10,000
2	Sealed Road Resurfacing	\$1,260,000	Sealing 25km per year	\$50,000
3	Drainage Renewals	\$915,000	90km of watertable renewals, replacement of culvert on Wawiri Rd, replacement of 750m of K&C, replacing 400m of culverts	\$10,000
4	Sealed Road Pavement Rehabilitation	\$650,000	1 km of rehab per year	\$0
5	Structures Component Replacement	\$350,000	Replacement of bridge components as identified by inspections	\$0
6	Bridge and Structures Renewals	\$600,000	Replacement of 3 Retaining walls one on each of the following Mangaowata, Mangaehu and Tawhiwhi Rds.	\$0
7	Traffic Services Renewals	\$160,000	Replacement of 3 streetlight columns per year and damaged roadside signage as required.	\$5,000
8	Footpath Renewals	\$210,000	Replacement of 1300m of footpaths per year.	
	Total GRAND TOTAL	\$5,055,000 \$8,345,000		\$75,000 \$200,000

Table 50 – Low Cost Low Risk Workbook LTP 2021-2034 – Local Roads

Project Name	Estimated Budget	2024/25	2025/26	2026/27
Midhirst school safety project	\$300,000			\$300,000
St Joseph's school safety project	\$400,000		\$400,000	
Avon School Safety Project	\$250,000		\$250,000	
Stratford Primary School safety project	\$600,000	\$600,000		
Opunake Rd RP7530 - RP7560 - Roadside barrier	\$35,000			
Opunake Rd RP5085 - RP5350 - Shoulder widening Poto Rd to Hastings Road	\$600,000			
Opunake Rd - RP980 - RP1200 - Shoulder widening	\$150,000			
Beaconsfield Rd RPo - RPo.8 - Safety improvements	\$300,000			\$300,000
Cardiff Rd RP0.5 - RP1.0 - Geometric safety improvements - out of context curve	\$300,000			
Juliet St/Fenton St intersection upgrade	\$1,000,000			
Opunake Rd RP1220 - RP17580 - Roadside barriers at multiple locations.	\$900,000			\$200,000
Palmer Rd RP0.1 - RP0.4 - Geometric realignment of the road - DSI Crash site	\$400,000	\$400,000		
Pembroke Rd/Monmouth Rd/Cardiff Rd - Roundabout	\$1,500,000			
Salisbury Rd - Croydon Rd to Beaconfield Rd - Shoulder widening for SH3 traffic diversion	\$3,500,000	\$300,000	\$300,000	\$300,000
Skinner Rd/Bird Rd - intersection safety improvements	\$100,000			
Whitianga Rd - RP0.58, RP0.65, RP0.92 - New retaining walls at slip sites	\$650,000			\$250,000
Stanley Rd RP4.97 - New retaining wall at slip site	\$250,000		\$250,000	
Opunake Rd RP9.50 - Opposite the Possum Factory - New Retaining wall	\$600,000	\$600,000		
Warwick Rd RP2.6 - 2.8 - Shoulder widening over blind brow	\$80,000			
Climie Rd RP2.7 - 6.35 - Shoulder widening for SH3 traffic diversion	\$1,200,000			\$200,000
Junction Rd RP0 - RP15.0 - Bank trimming and sight benching safety improvements	\$1,200,000			
Brookes Rd RP1.4 - RP4.40 - Shoulder widening for SH3 traffic diversion	\$1,000,000			
District Wide Minor safety improvements as identified by inspections or DSI's	\$6,000,000	\$600,000	\$600,000	\$600,000
Walking and Cycling Infrastructure	\$4,000,000	\$400,000	\$400,000	\$400,000
Monmouth Rd RP1.44 - Installation of roadside barrier	\$100,000	\$100,000		
Geometric improvements to Manaia Rd - SPR	\$450,000	\$30,000	\$30,000	\$30,000
Geometric improvements to Pembroke Rd - SPR	\$600,000	\$40,000	\$40,000	\$40,000
Dust coat seals	\$900,000	\$150,000	\$150,000	\$150,000
Opunake Rd Shoulder Widening - RP7700 - RP8000	\$500,000	\$500,000		
Beaconsfield Rd RP2150 - RP2380 - Safety improvements	\$400,000		\$400,000	
Total	\$28,265,000	\$3,720,000	\$2,820,000	\$2,770,000



Asset Management Practices and Improvement Plan

10.0: Asset Management Practices and Improvement Plan

10.1	Overvie	9W	178
10.2	Asset N	Management Practices	178
	10.2.1	Asset Management Policy	178
	10.2.2	Asset Management Goals and Objectives	178
	10.2.3	Activity Management Plan Development	179
	10.2.4	Asset Management Maturity	179
10.3	Optimis	sed Decision-making	181
	10.3.1	Tools and Techniques	181
	10.3.2	Treatment Selection Algorithm	181
	10.3.3	Crash Analysis System (CAS)	181
	10.3.4	Traffic Counts	181
	10.3.5	Net Present Value (NPV)	181
10.4	Current	t and Future Improvements	182

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.



Figure 60 - 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.

Asset Management Practices and Improvement Plan

• 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 61 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.

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.

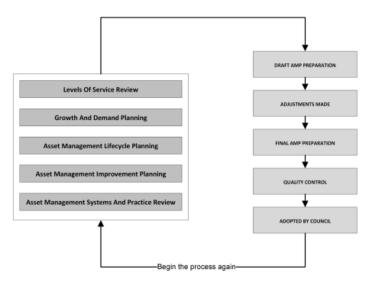


Figure 61 - Activity Management Plan Development Process



Figure 62 - 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 51 - Current and Future Improvements

	Asset Management Practice Area	Improvements	Section Identified	Date	Responsibility
1	AM Policy Development	Asset Management Strategy or Strategic Activity Management Plan development		Ongoing	Director of Assets Asset Managers
2	Levels of Service and Performance Management	Unplanned Road Closures - Development of internal database to record unplanned road closures. Traffic Counts - Annual programme for 100 traffic counts per year in place. To be reviewed annually to identify if 100 traffic counts is sufficient.		Ongoing	Asset Manager Asset Manager
3	Demand Forecasting	Analysis of growth and demand impacts – Analyse CRMs, consumption of assets, growth in Roading network		Ongoing	Asset Management Team
4	Asset Register Data	Verify existing data held in RAMM against hard copy inspection forms and data captured in RAMM Contractor. Analysis of condition of bridges within the Stratford District Analysis of condition of retaining walls within the Stratford District Collection of data for record keeping		Ongoing	Asset Manager Roading Engineer
5	Asset Condition	Collect more data to identify the condition of asset components. Seismic assessment of our bridges. Develop joint inspection programme with contractor		Ongoing	Roading Engineer Asset Manager

Asset Management Practices and Improvement Plan

	Asset Management Practice Area	Improvements	Section Identified	Date	Responsibility
6	Decision Making	Target is to reconstruct 90km per annum. Subject to funding levels.		Ongoing	Asset Manager Roading Engineer
7	Operational Planning	Collect data to calculate overall network cost of sealed pavement and unsealed pavement maintenance and the average life of unsealed road metalling.			Asset Manager Roading Engineer
8	Capital Works Planning	FWD testing of HPMV routes			Asset Manager Roading Engineer
9	Financial and Funding Strategies	Develop strategy to fund replacement of structures that have previously not been depreciated. Development of a Maintenance Intervention Strategy. Development of a delineation devices strategy to be consistent with the ONF road hierarchy, e.g.: Primary collection fully conforms, through to Low volume access to highlight hazards only. Finalise and adopt the Walking and Cycling Strategy to ensure active mode work programmes align with both Council and Waka Kotahi investment objectives.		Ongoing	Asset Manager Finance Department
10	AM Plans	Continue the formal process for developing the Activity Management Plan with timeframes. Continue to improve the document format and information presentation. ONF is embedded into the AMP, Council's business systems, planning documents, management practices and reports as well as maintenance contracts.		Ongoing	Director of Assets Asset Manager Asset Management Coordinator
11	Information Systems	Review data held in RAMM to identify accuracy and completeness. Pocket RAMM for direct input of data into AMIS		Ongoing	Director of Assets Asset Manager

Asset Management Practices and Improvement Plan

	Asset Management Practice Area	Improvements	Section Identified	Date	Responsibility
		Collect additional data associated with forest harvest timing to strengthen our strategic programme and investment response to these challenges.			Asset Management Coordinator
1	Improvement Planning	Develop a monitoring regime for the AMP Improvement Plan Identify AM performance gaps		Ongoing	Director of Assets Asset Manager Roading Engineer Asset Management Coordinator

Appendices

Appendix 1 - Connecting our Communities Strategy 2023-2053 - refer D21/31674

Appendix 2 - Roading Potential Risk Register -refer D21/30134

Appendix 3 - Road Safe Taranaki Strategic Plan 1 July 2024 - 30 June 2027 - refer D24/7218

Appendix 4 - Road Network Procurement Strategy 2022-2025 - refer D22/34311