

# ATTACHMENTS UNDER SEPARATE COVER

**Ordinary Council Meeting** 

**17 December 2024** 

16.8	Adoption of Up	dated Asset Management Plan - Roading
	Attachment 1	Roading Activity Management Plan 2024-27 - December 2024

## Roading Activity Management Plan

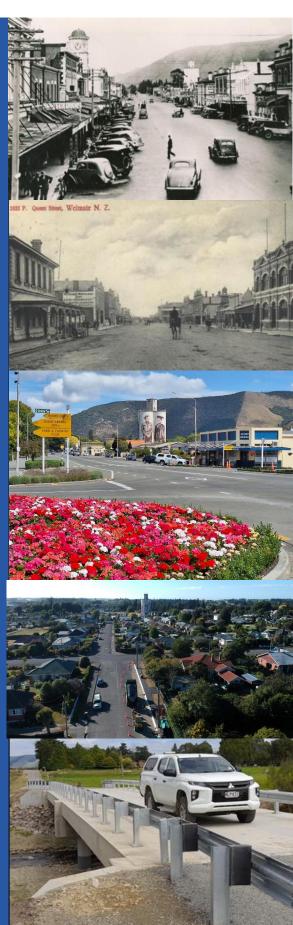
**For the Waimate District Council** 

2024-34

150 Years of Public Funded Roads

1874 - 2024





Item 16.8 - Attachment 1 Page 3



This page was intentionally left blank.

Waimate District Council Roading Activity Management Plan – 2024-27



## **Roading Activity Management Plan**

#### for the Waimate District Council

Prepared By:	R g moffat
	Robert Moffat
	Roading Manager
	Waimate District Council
Reviewed By:	
	Dan Mitchell
	Asset Group Manager
	Waimate District Council
Document Approved By:	
bocument Approved by.	
	Stuart Duncan
	Chief Executive
	Waimate District Council

Waimate District Council Roading Activity Management Plan – 2024-27

Adopted by Council 15 October 2024



**Update Register** 

## **UPDATE REGISTER**

Version Number	Date	Description of Update	Updated By
Version 1	July 2000	Opus International Consultants	M Keast
Version 2	October 2003	Opus International Consultants	J Park/F Northover
Version 3	September 2007	Major Revision of first versions of AMP Opus International Consultants	B Fauth / R Moffat
Version 4	November 2011	Update following AMP Compliance Status Report completed by Waugh Infrastructure Management Ltd, April 2011	Grant Holland Robert Moffat
Version 5	December 2014	Updates throughout document Waimate DC and Waugh Infrastructure Management Ltd	Grant Holland Robert Moffat
Version 6	12 December 2017	Updates throughout document Waimate DC and Waugh Infrastructure Management Ltd	Robert Moffat Grant Holland
Version 7	September 2020 August 2021	Updates throughout document Waimate DC and Waugh Infrastructure Management Ltd	Robert Moffat Grant Holland
Version 8	August 2023	Update of Executive Summary and Glossary of Terms and moved Glossary of Terms to the appendices.	Jo Yeo Rob Moffat
	September- December 2023	Updating of Main AMP document	Rob Moffat Jo Yeo
	September – October 2024	Update Approved NLTP Update Final Strategies information	Rob Moffat Jo Yeo
		Adopted by Council 15 October 2024	
	November 2024	Update to include Years 4 to 10 numbers ,Methodology for selecting individual roads for Reseal and Overlay and 3 year Programme	Rob Moffat Jo Yeo



**Preface** 

#### **PREFACE**

Welcome to the Waimate District Council's Roading Activity Management Plan. For over 150 years, we have been pioneers in infrastructure development, consistently delivering fit for purpose roading services to our community.

This document is your guide to our strategies, activities, and procedures for managing and maintaining our road network. Our primary goal is to provide a safe, efficient, and sustainable transportation system that caters to our community's needs, and fuels economic growth and productivity. We are dedicated to upholding the highest service standards while minimising the environmental impact of our operations.

Considering current financial challenges, we have stuck to our conservative budgeting approach. This has allowed us to develop a practical, no-nonsense budget focused on essential expenditures. Our main objective is to ensure operational continuity, recognising the financial constraints of all our stakeholders.

We would like to express our gratitude to the devoted Councillors and staff who have contributed to the development of our road network over the past century and a half. Their innovative thinking, commitment, and hard work have been pivotal in shaping the infrastructure we depend on daily. We take pride in our progress over the years, and we acknowledge that it would not have been possible without the dedication of our staff and contractors.

We invite everyone to engage with this plan especially NZ Transport Agency Waka Kotahi (NZTA), provide feedback, and join us on our journey towards a safer, more efficient, and sustainable road network. Your support and cooperation are greatly appreciated.

Thank you,

**Robert Moffat** 

**Roading Manager** 

Waimate District Council Roading Activity Management Plan – 2024-34



## **TABLE OF CONTENTS**

1	EX	XECUTIVE SUMMARY	19
	1.1	Purpose of Roading Asset Management Planning	19
	1.2	Plan Level	
	1.3	Assets Included in This Plan	
	1.4	KEY PROBLEM STATEMENTS	21
	1.5	Key Stakeholders and Customers	
	1	5.1 Key Stakeholders	25
	1.	5.2 Funding Partners	
		5.3 Mana Whenua	
	1.6	LEVEL OF SERVICE	
	1.7	GROWTH AND FUTURE DEMANDS	
	1.8	Sustainability	
	1.9	RISK MANAGEMENT	
	1.10		
	1.11		
	1.12		
		12.1 Asset Management Practices	
		12.2 Roading Procurement Processes	
		12.3 New Zealand Transport Agency Audits	
	1.13		
	1.14		
2	IN	ITRODUCTION	37
	2.1	PURPOSE OF THE PLAN	37
	2.2	ASSET MANAGEMENT POLICY STATEMENT FOR ROADING ACTIVITY	
		2.1 Policy Linkages to Other Plans	
		2.2 Structured Assessment of Asset Management Practice	
	2.3	LOCATION	
	2.4		
	2.5	RELATIONSHIP WITH OTHER COUNCIL DOCUMENTS	
		5.1 Long Term Plan	
		5.2 District Plan	
		5.3 Other Related Asset/Activity Management Plans	
		5.4 Annual Plan, Report, and Budget	
		5.5 Infrastructure Strategy	
		5.6 Procurement Strategy	
		5.7 Contracts	
		5.8 Bylaws, Standards, and Policies	
		5.9 Other Road Related Strategic Documents	
	2.6	How This Plan Will Be Used	
	2.7	ROADING ASSET OUTCOMES	
	2.8	KEY STAKEHOLDERS AND CUSTOMERS	
		8.1 Key Stakeholders	
		8.2 Funding Partners	
		8.3 Mana Whenua	
		8.4 Other Parties	
	2.9	PROGRESS SINCE THE LAST AMP	
	2.10		
3	KE	EY PROBLEM AND BENEFIT STATEMENTS	48
	3.1	KEY PROBLEM STATEMENTS	48
	3.2	IMPACTS	
	3.3	KEY STRATEGIC RESPONSE AND BENEFITS.	
	3.4		



4	DE	ESCRIF	PTION OF ROADING ASSETS AND ACTIVITIES	57
	4.1	NETW	ork Classification Framework	57
	4	1.1	One Network Roading Classification (ONRC)	57
	4	1.2	One Network Framework (ONF)	61
	4	1.3	Waimate ONRC ONF Combination	64
	4.2	PAVE	MENT	65
	4.3	BRIDG	ES	66
	4.4	DRAIN	IAGE	69
	4.5	TRAFF	IC SERVICES	70
	4.6		PATHS	
	4.7		PATHS AND SHARED PATHS	
	4.8		T LIGHTING	
	4.9	TRAFF	IC FACILITIES	71
5	LE	VELS	OF SERVICE (LOS)	72
	5.1	INTRO	DUCTION	72
	5.2	NATIO	)NAL	72
	5	2.1	Key Legislations and Regulations	72
	5	2.2	National Strategies and Plans	76
	5	2.3	Standards, Guidelines, and Code of Practice	82
	5.3	REGIC	NAL	82
	5	3.1	Canterbury Regional Land Transport Plan (CRLTP)	82
	5	3.2	Canterbury Land and Water Regional Plan (CLWRP)	83
	5.4	Local	. (WAIMATE DISTRICT COUNCIL)	83
	5.4	4.1	Community Outcomes and Wellbeing	
	5.4	4.2	Strategies, Plans, Bylaws, and Policies	85
	5.4	4.3	Level of Service Customer Consultation	85
	5.5	Curri	ENT AND TARGET LEVELS OF SERVICE	
		5.1	Mandatory Performance Measures	
	5.	5.2	Road Efficiency Group Te Ringa Maimoa (REG) – Transport Insights	
	5.6		S OF SERVICE GAPS	
	5.7		TORING ACHIEVEMENT	
	5.8		CE LIFE OF THE NETWORK	
	5.9		RE IMPROVEMENTS	
		9.1	Levels of Service Development with Community and Stakeholders	
	5.	9.2	Affordability and Willingness to Pay	105
6	GI		H AND FUTURE DEMANDS	
	6.1	DRIVE	RS FOR DEMAND	
	6	1.1	Growth Trend	
	6	1.2	Economic Changes	
	6	1.3	Vehicle Mix and Use Changes	
		1.4	Improvements To Levels of Service (LoS)	
		1.5	Funding Constraints for Growth and Future Demands	
	6.2		IND IMPACTS ON ASSETS	
	6.3		ND MANAGEMENT	
		3.1	Asset Based Demand Management	
		3.2	Non-Asset Based Demand Management	
			RE DEMAND MANAGEMENT IMPROVEMENTS	
		4.1	Traffic Counting Policy	
		4.2	Development Contributions Policy	
		4.3	Land Use and Customer Demand Study	
		4.4	Post-Pandemic Economic and Behavioural Demand Changes	
	6.4	4.5	Climate Change Risk and Adaptation	135
7	SL	JSTAIN	VABILITY	137



	7.1	TRAN	SPORT SUSTAINABILITY	137
	7.2	Sust	INABILITY AND ASSET LIFECYCLE	139
	7.3	SUSTA	INABLE DEVELOPMENT	139
	7	3.1	Energy Strategies for New Zealand	140
	7	3.2	Canterbury Land and Water Regional Plan	140
	7	3.3	Waimate District Climate Resilience Strategy Pathway	141
	7.4	Signi	CICANT NEGATIVE EFFECTS	141
	7.5	Sust	INABILITY WITHIN COUNCIL	143
	7	5.1	Staffing Levels	143
	7	5.2	Skills, Knowledge, and Training	143
	7	5.3	Succession Planning	144
	7.6	CLIMA	ITE CHANGE	144
	7.	6.1	New Climate Change Projections for Canterbury	145
	7.	6.2	It's Time, Canterbury	146
	7.	6.3	Aotearoa New Zealand's First National Adaptation Plan and Local Government	147
	7.	6.4	Meteoblue Information	147
	7.	6.5	Extreme Climate Changes	148
	7.	6.6	Climate Change Effects	149
	7.7	Futu	RE IMPROVEMENTS	150
	ъ.	CIV NA	NAGEMENT	151
8	KI	SK IVI	WAGENIEN I	131
	8.1	Unde	RSTANDING THE CONTEXT	151
	8	1.1	Strategic Context	152
	8	1.2	Organisational Context	152
	8	1.3	Risk Management Context	152
	8	1.4	Considered Risks	152
	8.2	RISK A	ASSESSMENT	155
	8	2.1	Risk Consequences and Likelihood Definition	155
	8	2.2	Scoring Risks Definition	
	8	2.3	Risk Management Process	157
	8.3	CRITIC	AL ASSETS	159
	8.4	INSUF	ANCE	163
	8.5	EMER	GENCY MANAGEMENT	163
	8	5.1	Operational Emergency Management	163
	8	5.2	Civil Defence and Emergency Management	163
	8	5.3	Earthquake Hazard Assessment	166
	8	5.4	Potential Flood Zone Assessment	169
	8.6	Assu	MPTIONS AND UNCERTAINTIES	171
	8.7	Futu	RE IMPROVEMENTS	171
9		EECVC	LE MANAGEMENT PLAN	172
•				
	9.1		ansport Agency Waka Kotahi (NZTA) Work Categories	
	9.2	MAN	AGEMENT PROGRAMME AND BACKGROUND DATA	
	9	2.1	Council's Procurement Strategy	
	9	2.2	Method of Service Delivery	
	9	2.3	Forward Works Programmes (FWPs)	
	9	2.4	Asset Valuation	
	9	2.5	Historical Data	
	9.3		SAFETY	
	9.4		ATIONS AND MAINTENANCE PLAN	
		4.1	In Perpetuity Maintenance	
		4.2	Storms and Other Events	
	9.5	RENE	NAL / REPLACEMENT PLAN	186
		5.1	Base Asset Lives	
	9.6	SEALE	d Roads	
	9.	6.1	Current Trends and Issues	
	9.	6.2	Maintenance Decision Makina Process	196



9.6.3	Strategy to Meet Levels of Service	196
9.6.4	How Tasks Are Prioritised	196
9.6.5	Summary of Future Costs	197
9.6.6	Deferred Maintenance and Associated Risks	198
9.6.7	Sealed Road Maintaince approved NLTP funding	198
9.7 SEALE	D ROAD RENEWALS	198
9.7.1	Sealed Road Resurfacing	198
9.7.2	Sealed Road Pavement Rehabilitation	202
9.7.3	Renewal Decision Making Process	204
9.7.4	Renewals Strategies to Meet Levels of Service	204
9.7.5	Identification and Prioritisation of Work	
9.7.6	Replacement Standards	206
9.7.7	Summary of Future Costs	206
9.7.8	Sealed Road Renewal Historic Costs	207
9.7.9	Sealed Road Renewal Approved NLTP allocation	208
9.8 Unse	ALED ROADS	
9.8.1	Current Trends and Issues	208
9.8.2	Maintenance Decision Making Process	211
9.8.3	Strategy to Meet Levels of Service	212
9.8.4	How Tasks Are Prioritised	
9.8.5	Summary of Future Costs	212
9.8.6	Deferred Maintenance and Associated Risks	
9.8.7	Unsealed Road NLTP funding allocation	
	ALED ROAD RENEWALS	
9.9.1	Unsealed Road Metalling	
9.9.2	Historic Renewal Costs	
9.9.3	Renewal Decision Making Process	
9.9.4	Renewals Strategies to Meet Levels of Service	
9.9.5	Identification and Prioritisation of Work	
9.9.6	Replacement Standards	
9.9.7	Summary of Future Costs	
9.9.8	Unsealed Renewal NLTP approved allocation	
	RAINAGE CONTROL ASSETS MAINTENANCE	
9.10.1	Current Trends and Issues	
9.10.2	Maintenance Decision Making Process	
9.10.3	Strategy to Meet Levels of Service	
9.10.4	How Tasks Are Prioritised	
9.10.5	Summary of Future Costs	
9.10.6	Deferred Maintenance and Associated Risks	
9.10.7	Drainage Maintenance NLTP approved allocation.	
	RAINAGE RENEWALS	
9.11.1	End of Life Projections	
9.11.2	Renewal Decision Making Process	
9.11.3	Renewals Strategies to Meet Levels of Service	
9.11.4	Identification and Prioritisation of Work	
9.11.5	Replacement Standards	
9.11.6	Drainage Renewals Historical Expenditure	
9.11.7	Summary of Future Costs	
9.11.8	Drainage Renewals NLTP approved allocation.	
	RIDGES MAINTENANCE	
9.12.1	Current Trends and issues	
9.12.2	Maintenance Decision Making Process	
9.12.3	Strategy to Meet Levels of Service	
9.12.4	How Tasks Are Prioritised	
9.12.5	Summary of Future Costs	
9.12.6	Deferred Maintenance and Associated Risks	
0.12.0	Structures Maintenance NLTD Approved Allocation	721



9.13 Br	IDGE RENEWALS AND REPLACEMENTS	234
9.13.1	End of Life Projections	234
9.13.2	Renewal Decision Making Process	235
9.13.3	Renewals Strategies to Meet Levels of Service	235
9.13.4	Identification and Prioritisation of Work	
9.13.5	Replacement Standards	
9.13.6	Proposed Disposal	
9.13.7	Structure Component Replacement Historical Expenditure	
9.13.8	Summary of Future Costs	
9.13.9	Structure Component Replacement NLTP approved allocation	
	IVIRONMENTAL MAINTENANCE	
9.14.1	Current Trends and Issues	
9.14.2	Scope and Nature of Activity	
9.14.3	Strategy to Meet Levels of Service	
9.14.4	Summary of Future costs	
9.14.5	Environmental Maintenance NLTP Approved Allocation	
	TWORK SERVICES MAINTENANCE	
9.15.1	Current Trends and Issues	
9.15.2	Maintenance Decision Making Process	
9.15.3	Strategy to Meet Levels of Service	
9.15.4	How Tasks Are Prioritised	
9.15.5	Summary of Future Costs	
9.15.6	Deferred Maintenance and Associated Risks	
9.15.7	Network Service Maintenance NLTP approved allocation.	
	AFFIC SERVICES RENEWALS	
9.16.1	End of Life Projections	
9.16.2	Renewal Decision Making Process	
9.16.3	Renewals Strategies to Meet Levels of Service	
9.16.4	Identification and Prioritisation of Work	
9.16.5	Replacement Standards	
9.16.6	Traffic Services Renewal historical expenditure	
9.16.7	Summary of Future Costs	
9.16.8	Traffic Services Renewal NLTP approved allocation.	
9.17 LE <i>9.17.1</i>	vel Crossing Warning Devices	
9.17.1 9.17.2	Summary of Future Costs	
9.17.2	Level Crossing Warning Devices NTLP Approved Allocation	
	INOR EVENTS	
9.18 IVI 9.18.1	Historic Expenditure	
9.18.2	Summary of Future Costs	
9.18.3	Minor Events NTLP Approved Allocation	
	TWORK AND ASSET MANAGEMENT	
9.19.1	Current Trends and Issues	
9.19.2	Consistent Condition Data Collection (CCDC)	
9.19.3	Asset Management Data Standard (AMDS)	
9.19.4	Additional requirement secure funding allocations	
9.19.5	Historic Expenditure Historic Network and Asset Management	
9.19.6	Summary of Future Costs	
9.19.7	Network and Asset Management NLTP Approved Allocation	
	OTPATH MAINTENANCE	
9.20.1	Current Trends and Issues	
9.20.2	Maintenance Decision Making Process	
9.20.3	Strategy to Meet Levels of Service	
9.20.4	How Tasks Are Prioritised	
9.20.5	Summary of Future Costs	
9.20.6	Footpath Maintenance NLTP Approved Allocation	
	OTPATH RENEWALS	



9.2	21.1	End of Life Projections	263
9.2	21.2	Renewal Decision Making Process	264
9.2	21.3	Renewals Strategies to Meet Levels of Service	
9.2	21.4	Identification and Prioritisation of Work	265
9.2	21.5	Replacement Standards	
9.2	21.6	Summary of Future Costs	265
9.2	21.7	Footpath Renewal NLTP Approved Allocation	265
9.22	CYCL	E PATHS AND SHARED PATHS	266
9.23	MAI	NTENANCE & OPERATION OF LOCAL ROADS NON ASSISTED PROGRAMME	267
9.2	23.1	Historic Expenditure	267
9.2	23.2	Summary of Future Costs	
9.24	REN	wal, New & Improved infrastructure for Local Roads Non assisted Programme	268
9.25	Low	-Cost Low-Risk Improvements	269
9.2	25.1	Historic Expenditure	
9.2	25.2	Future Programme	270
9.2	25.3	Summary of Future Costs	
9.2	25.4	Low-Cost Low-Risk Improvement NLTP Approved Allocation	
9.26		T DEVELOPMENT PLAN	
	26.1	Selection Criteria	
	26.2	Capital Investment Strategies	
9.27		OSAL PLAN	
10 FIN	IANCIA	L SUMMARY	280
10.1	FINA	NCIAL STRATEGY	280
10.1		IATION	
	.2.1	Valuation 2022	
	.2.2	Valuation Methodology	
	.2.3	Valuation Improvement Recommendations	
10.3		NATED REQUIRED ASSET EXPENDITURE	
10.3		VALIED REQUIRED ASSET EXPENDITURE	
		DING FORECAST EXPENDITURE	
10.5			
10.6		IFICANT FORECASTING ASSUMPTIONS KEY FINANCIAL FORECAST ASSUMPTIONS	
10.7	CON	FIDENCE LEVELS	299
11 PR	OCESSE	S AND ASSET MANAGEMENT PRACTICES	300
11 1	Onc	ANISATION STRUCTURE	200
11.1			
11.2	.2.1	vity Management Plan Review and Monitoring	
		9 11	
	.2.2	Timetable for Audit and Review	
	.2.3	Utilisation of AMP	
	.2.4	NZ Transport Agency Investment Audits	
11.3		NESS PROCESSES	
	.3.1	Road Assessment and Maintenance Management System (RAMM)	
11.	.3.2	Te Ringa Maimoa Transport Excellence Partnership – Transport Insights Data	Quality Report
	2.2	309	244
	.3.3	RAMM -Treatment Selection Algorithm (TSA)	
	.3.4	GIS	
	.3.5	CAS Database	
	.3.6	Bridge Data	
	.3.7	Complaints and Service Requests Database	
	.3.8	Accounting Processes	
	.3.9	Contracts	
	.3.10	As-Built Data	
11.	.3.11	Value for Money Procurement	
11.	.3.12	Future Improvements	313
11.4		ice Delivery S17A Reviews	
11.	4.1	Roadina Service Delivery	314



12 IMPROVEMENT PLAN  12.1 ASSET MANAGEMENT IMPROVEMENT PROCESS  31.12.2 MONTORING AND REVIEW PROCEDURES.  31.12.2.1 Three Year Review		11.4.	Service Delivery Review Recommendation	314
12.2 MONITORING AND REVIEW PROCEDURES.  12.2.1 Three Year Review	12	IMPF	OVEMENT PLAN	315
12.2.1 Three Year Review	1	2.1	ASSET MANAGEMENT IMPROVEMENT PROCESS	315
12.2 Annual Review	1	2.2	MONITORING AND REVIEW PROCEDURES	315
13.1 APPENDICES		12.2.	Three Year Review	315
13.1 WAIMATE DISTRICT ROAD MAP  13.2 RISK REGISTERS  13.2.3 Planning Risks  13.2.2 Delivery Risks  13.2.3 Physical Risks  13.2.3 Physical Risks  13.2.3 Physical Risks  13.2.3 Physical Risks  13.2.4 Management Risks  13.2.5 Physical Risks  13.2.6 CRITICAL ASSETS.  13.3 2024-27 MATIONAL LAND TRANSPORT PLAN FINAL DECISIONS  13.4 CRITICAL ASSETS.  13.5 SCHEDULE OF POOR PERFORMING ROAD PAVEMENTS  13.6 3 YEAR RESEAL PROGRAMME  TABLE OF FIGURES  Figure 1.1 - Waimate District Council Roading Services Key Problem Statements 2024  2 Figure 1.2 - Service Performance 2021/22 (August 2023 Transport Insights Te Ringa Maimoa)  2 Figure 1.3 - Network Percentage Length and Journeys Travelled (2023/24, Transport Insight)  2 Figure 1.4 - Network Length by ONF Category (2023/24, Transport Insight)  2 Figure 1.5 - Historical Visual Condition Rating Data for Sealed Roads (as at 2023)  3 Figure 1.6 - Historical Visual Condition Rating Data for Sealed Roads (as at 2023)  3 Figure 1.7 - Average Annual Roading Expenditure 2024-24 (October 2024)  3 Figure 1.9 - NLTP "Continuous Programe" Historical Investment (October 2024)  3 Figure 2.1 - Map of Waimate District Council Boundary  4 Figure 2.2 - Map of Waimate District Council Boundary  4 Figure 2.3 - Waimate District Road Network and the State Highway  4 Figure 2.5 - Customer Groups  4 Figure 2.5 - Customer Groups  4 Figure 2.5 - Customer Groups  5 Figure 4.1 - ONRC Categories in the Waimate District Network  5 Figure 4.1 - ONRC Percentages Split of Network Roading Classification (ONRC) Map (As at November 2022)  5 Figure 4.3 - Waimate District One Network Roading Classification (ONRC) Map (As at November 2022)  5 Figure 4.5 - One Network Road Classification - Functional Classification and their Thresholds  5 Figure 4.5 - One Network Road Classification - Functional Classification and their Thresholds  5 Figure 4.5 - One Network Road Classification - Functional Classification and Their Thresholds  5 Figure 4.5 - ONE Percentage Split of Network (Estracted November 2023)  6 Figure 4.7 - O		12.2.	Annual Review	315
13.1 WAIMATE DISTRICT ROAD MAP	1	2.3	AMP IMPROVEMENT PROGRAMME	316
13.2 Planning Risks 32 13.2.1 Planning Risks 32 13.2.2 Delivery Risks 32 13.2.3 Physical Risks 32 13.2.4 Management Risks 32 13.3.2 A Mynsical Risks 32 13.3 2024-27 NATIONAL LAND TRANSPORT PLAN FINAL DECISIONS 32 13.3 2024-27 NATIONAL LAND TRANSPORT PLAN FINAL DECISIONS 32 13.4 CRITICAL ASSETS 33 13.5 SCHEDULE OF POOR PERFORMING ROAD PAVEMENTS 34 13.6 3 YEAR RESEAL PROGRAMME 34 13.6 3 YEAR RESEAL PROGRAMME 34 13.6 3 YEAR RESEAL PROGRAMME 34 13.6 1 STEAD STANDING STAN	13	APPE	IDICES	319
13.2.1 Planning Risks	1	3.1	WAIMATE DISTRICT ROAD MAP	319
13.2.2 Delivery Risks. 32 13.2.3 Physical Risks. 32 13.2.3 Physical Risks. 32 13.2.4 Management Risks. 32 13.3 2024-27 NATIONAL LAND TRANSPORT PLAN FINAL DECISIONS. 32 13.4 CRITICAL ASSETS. 33 13.5 SCHEDULE OF POOR PERFORMING ROAD PAVEMENTS. 34 13.6 3 YEAR RESEAL PROGRAMME. 34 14.1 - NETWORK RESEAL PROGRAMME. 34 15 JEJURE 1.3 - NETWORK PERFORMENTS. 34 15 JEJURE 2.3 - NETWORK PERFORMENTS. 34 15 JEJURE 2.4 - MAY RESEAL PROGRAMME. 34 16 JEJURE 2.4 - MAY RESEAL PROGRAMME. 34 16 JEJURE 2.4 - GENERAL PROGRAMME. 35 16 JEJURE 3.4 - GENERAL PROGRAMME. 35 16 JEJURE 3.5 - GENERAL PROGRAMME. 35 16 JE	1	.3.2	Risk Registers	320
13.2.4 Monagement Risks		13.2.	Planning Risks	320
13.2.4 Management Risks			·	
13.3 2024-27 NATIONAL LAND TRANSPORT PLAN FINAL DECISIONS			<b>7</b>	
13.4 CRITICAL ASSETS				
TABLE OF FIGURES  Figure 1.1 - Waimate District Council Roading Services Key Problem Statements 2024				
TABLE OF FIGURES  Figure 1.1 - Waimate District Council Roading Services Key Problem Statements 2024				
Figure 1.1 - Waimate District Council Roading Services Key Problem Statements 2024				
Figure 1.2 - Service Performance 2021/22 (August 2023 Transport Insights Te Ringa Maimoa)	TΑ	\BL	OF FIGURES	
Figure 1.3 - Network Percentage Length and Journeys Travelled (2023/24, Transport Insight)	Figu	re 1.1	Waimate District Council Roading Services Key Problem Statements 2024	22
Figure 1.4 - Network Length by ONF Category (2023/24, Transport Insight)	_		č ,	
Figure 1.5 - Network Length Verses Vehicle Journey by ONF Category (2023/24, Transport Insight)	_			
Figure 1.6 - Historical Visual Condition Rating Data for Sealed Roads (as at 2023) 3. 3 Figure 1.7 - Average Annual Roading Expenditure 2024-27 (October 2024) 3. 3 Figure 1.8 - Average Annual Roading Expenditure 2024-34 (October 2024) 3. 3 Figure 1.9 - NLTP "Continuous Programe" Histroical Investment (October 2024) 3. 3 Figure 2.1 - Map of Waimate District Council Boundary 4. 4 Figure 2.2 - Map of Waimate District in the Canterbury Region 4. 4 Figure 2.3 - Waimate District Road Network and the State Highway 4. 4 Figure 2.4 - General Relationship Between the Roading AMP and Other Strategic Document 4. 4 Figure 2.5 - Customer Groups 4. 4 Figure 2.6 - Roading AMP Framework 4. 4 Figure 3.1 - Waimate District Council Roading Services Key Problem Statements 2024 4. 4 Figure 4.1 - ONRC Categories in the Waimate District Network 5. 5 Figure 4.2 - One Network Road Classification - Functional Classification and their Thresholds 5. 5 Figure 4.3 - Waimate District One Network Roading Classification (ONRC) Map (As at November 2022) 5 Figure 4.4 - Road Length Split by ONRC (as at October 2023) 6 Figure 4.5 - ONRC Percentage Split of Network (as at October 2023) 6 Figure 4.6 - ONF Street Families 6 Figure 4.7 - ONF Focus to People, Place and Movement 6 Figure 4.9 - Waimate District Network Characteristics by ONF Categories (as at October 2023) 6 Figure 4.9 - Waimate District One Network Framework (ONF) Map (as at November 2022) 6 Figure 5.1 - Transport Outcome Framework (ONF) Map (as at November 2022) 6 Figure 5.2 - Road to Zero Strategy 6 Figure 5.3 - Transport Evidence Bace Strategy Identified Key Enablers and Agreed Actions 7 Figure 5.5 - Six Key External Factors / Driver of Land Transport 8 Figure 5.5 - Climate Change Strategy Five Pillars 8	Figu	re 1.4	Network Length by ONF Category (2023/24, Transport Insight)	27
Figure 1.7 - Average Annual Roading Expenditure 2024-27 (October 2024)	Figu	re 1.5	Network Length Verses Vehicle Journey by ONF Category (2023/24, Transport Insight)	28
Figure 1.8 - Average Annual Roading Expenditure 2024-34 (October 2024)	Figu	re 1.6	Historical Visual Condition Rating Data for Sealed Roads (as at 2023)	30
Figure 1.9 - NLTP "Continuous Programe" Histroical Investment (October 2024)				
Figure 2.1 - Map of Waimate District Council Boundary				
Figure 2.2 - Map of Waimate District in the Canterbury Region				
Figure 2.3 - Waimate District Road Network and the State Highway	_		· ·	
Figure 2.4 - General Relationship Between the Roading AMP and Other Strategic Document	_		· · · · · · · · · · · · · · · · · · ·	
Figure 2.5 - Customer Groups				
Figure 2.6 - Roading AMP Framework				
Figure 3.1 - Waimate District Council Roading Services Key Problem Statements 2024	_		•	
Figure 4.1 - ONRC Categories in the Waimate District Network	_		<u> </u>	
Figure 4.2 - One Network Road Classification - Functional Classification and their Thresholds				
Figure 4.3 - Waimate District One Network Roading Classification (ONRC) Map (As at November 2022)	_		•	
Figure 4.4 - Road Length Split by ONRC (as at October 2023) 6 Figure 4.5 - ONRC Percentage Split of Network (as at October 2023) 6 Figure 4.6 - ONF Street Families 6 Figure 4.7 - ONF Focus to People, Place and Movement 6 Figure 4.8 - Waimate District Network Characteristics by ONF Categories (as at October 2023) 6 Figure 4.9 - Waimate District One Network Framework (ONF) Map (as at November 2022) 6 Figure 4.10 - Sealed vs Unsealed Road Network (Extracted November 2023, Transport Insights) 6 Figure 5.1 - Transport Outcome Framework 7 Figure 5.2 - Road to Zero Strategy 7 Figure 5.3 - Transport Evidence Bace Strategy Identified Key Enablers and Agreed Actions 7 Figure 5.4 - Arataki Conceptual Framework 7 Figure 5.5 - Six Key External Factors / Driver of Land Transport 8 Figure 5.6 - Climate Change Strategy Five Pillars 8	_			
Figure 4.5 - ONRC Percentage Split of Network (as at October 2023)	_			
Figure 4.6 - ONF Street Families	_		9 . , , ,	
Figure 4.7 - ONF Focus to People, Place and Movement				
Figure 4.8 - Waimate District Network Characteristics by ONF Categories (as at October 2023)	_			
Figure 4.9 - Waimate District One Network Framework (ONF) Map (as at November 2022) 6 Figure 4.10 - Sealed vs Unsealed Road Network (Extracted November 2023, Transport Insights) 6 Figure 5.1 - Transport Outcome Framework 7 Figure 5.2 - Road to Zero Strategy 7 Figure 5.3 - Transport Evidence Bace Strategy Identified Key Enablers and Agreed Actions 7 Figure 5.4 - Arataki Conceptual Framework 7 Figure 5.5 - Six Key External Factors / Driver of Land Transport 8 Figure 5.6 - Climate Change Strategy Five Pillars 8	_		·	
Figure 4.10 - Sealed vs Unsealed Road Network (Extracted November 2023, Transport Insights)				
Figure 5.1 - Transport Outcome Framework				
Figure 5.2 - Road to Zero Strategy	_			
Figure 5.3 - Transport Evidence Bace Strategy Identified Key Enablers and Agreed Actions	_		·	
Figure 5.4 - Arataki Conceptual Framework				
Figure 5.5 - Six Key External Factors / Driver of Land Transport	_		· · · · · · · · · · · · · · · · · · ·	
Figure 5.6 - Climate Change Strategy Five Pillars8				
5 5.				
1 16 at C 3.7 Emission Neutron Frankey Folices	Figu	re 5.7	Emission Reduction Plan Key Policies	81



Figure 5.8 - Canterbury Regional Land Transport Plan Strategic Objectives	83
Figure 5.9 - CRLTP Ten-year Transport Investment Priorities	
Figure 5.10 - Council Community Outcomes 2024-27	84
Figure 5.11 - Council's Wellbeing 2024-27	84
Figure 5.12 - Results for Roading and Footpaths 2023	86
Figure 5.13 - % of Residents That are Not Satisfied with Roads and Footpaths (1995-2023)	87
Figure 5.14 - % of Residents That are Satisfied and Very Satisfied with Roads and Footpaths (2023)	88
Figure 5.15 - Roading Customer Service Requests by Year (2010/11 to 2022/23)	90
Figure 5.16 - Roading Customer Service Requests by Type of Service Requests (2010/11 to 2022/23)	90
Figure 5.17 - Level of Service Framework (IIMM2020)	91
Figure 5.18 - Transport Insights ONRC Performance Measure Report	98
Figure 5.19 - Transport Insights ONF Transport Outcomes Report	99
Figure 5.20 - Total Costs - MO&R Costs, Excluding Emergency Works - 3 Year Average (2020/21-2022/23)	.103
Figure 5.21 - Grade 3-5 Seal Life Expectation (Years and %)	
Figure 5.22 - Levels of Service Balance	. 105
Figure 6.1 - Comparison Between the 2020 Projections and the 2023 Predictions	. 107
Figure 6.2 - Population Projections (Usually Resident Population)	.108
Figure 6.3 - Age Distribution of Waimate District's Population in 2053 (Rational Report)	
Figure 6.4 - Waimate District Population Projections 2013-2053 (Based on Area Units)	
Figure 6.5 - Waimate District's population by Age – 2013, 2018, 2022 (Source: NZ Stats)	
Figure 6.6 - Projected Average Household Size by Territorial Authority and at 30 June 2043 (Med	
Projection)(Stats NZ)	
Figure 6.7 - Waimate District Household Numbers and Type (Stats NZ)	
Figure 6.8 - WDC's Employment Predictions in the Next Thirty Years (Rational Report)	
Figure 6.9 - Roads Used by Current District's Forestry Traffic	
Figure 6.10 - Forestry Area	
Figure 6.11 - Dairy Farmland in the Waimate District	
Figure 6.12 - Studholme Dairy Factory	
Figure 6.13 - Oceania Dairy Factory (Cooneys Road, Glenavy)	
Figure 6.14 - Glenavy Waste-to-Energy Plant design	
Figure 6.15 - Average Visitor Nights in Waimate District	
Figure 6.16 - Lower Hook Road Traffic Counts	
Figure 6.17 - Grays Crossing Road Traffic Counts	
Figure 6.18 - Hakataramea Valley Road Traffic Counts	
Figure 6.19 - Horsnells Road Traffic Counts	
Figure 6.20 - Ikawai Middle Road Traffic Counts	
Figure 6.21 - Old Ferry Road Traffic Counts	
Figure 6.22 - Pareora River Road Traffic Counts	
Figure 6.23 - 50MAX Book of Maps - Waimate District (November 2023)	
Figure 6.24 - Large Agricultural Vehicles Using the Roading Network	
Figure 6.25 - Vehicles Currently Registered in the Waimate District, thousands (By type, as at 30 Septem	
2023)	
Figure 6.26 - Vehicle Currently Registered in Waimate District, Thousands (As at 30 September 2023)	
Figure 7.1 - Second Emissions Reduction Plan Transport Sector at a Glance (July 2024)	
Figure 7.1 - Second Emissions Reduction Flair Hansport Sector at a Glance (July 2024)	
Figure 7.2 - Yearly Precipitation (Rainfall) Change	
Figure 8.1 - Waimate District Council's Risk Management Process	
Figure 8.2 - Specific Risks for Each Risk Area (Extracted from NZTA Research Report 415)	
Figure 8.3 - Risk Score (Extrracted from Risk Management Policy)	
Figure 8.4 - Key Critical Routes Identified for Mid-South Canterbury – Developed by ARC	
Figure 8.5 - Critical Roading Assets in the Waimate District – Developed by ARC	
Figure 8.6 - Identified Critical Roads in the Waimate District (December 2023) Figure 8.7 - National Disaster Resilience Strategy Vision, Goal, and Main Priorities	
9,	
Figure 8.8 - Waimate CDEM Group Area (Extracted from Canterbury CDEM Group Plan	
Figure 8.9 - Waimate District Risk Profile identified by Canterbury CDEM (Extracted from Canterbury CDEM)	JEIVI

Waimate District Council Roading Activity Management Plan – 2024-34



Figure 8.10 - Earthquake Assessment Chart for Structures (Extracted from Earthquake Hazard Ass	
Report)	
Figure 8.11 - Earthquake Assessment Chart for Transport (Extracted from Earthquake Hazard Ass	
Report)	167
Figure 8.12 - Map of Ground Shaking Zones (Extracted from Earthquake Hazard Assessment Report)	168
Figure 8.13 - Map of Potential Flood Zones (operative District Plan)	
Figure 8.14 - Map of Waimate Roads Located Within Potential Flood Zones	170
Figure 9.1 - Balancing Proactive and Reactive Maintenance	172
Figure 9.2 - Procurement Policy Procedures	177
Figure 9.3 - Procurement Flow Chart	178
Figure 9.4 - Total Maintenance, Operations and Renewal Costs 3 year average Rural Districts	
Figure 9.5 - Crash Types Local Road of Waimate District for the Last Five Years (Death and Serious Injury	
Only, As at July 2023)	
Figure 9.6 - Crash Types in the Rural Local Road of Waimate District for the Last Five Years (Death and	
Injury Crashes Only, As at July 2023)	
Figure 9.7 - Crash Types in the Urban Local Road of Waimate District for the Last Five Years (Death and	
Injury Crashes Only, As at July 2023).	
Figure 9.8 - Crash Types in the Whole State Highway of Waimate District for the Last Five Years (D	
Serious Injury Crashes Only, As at July 2023)	
Figure 9.9 - Flood Damage Events Repair Cost from 1982 (Adjusted to June 2023)	
Figure 9.10 - Visual Condition Rating Data for Sealed Roads	
Figure 9.11 - Visual Condition Rating - Cracking Data	
Figure 9.12 - Visual Condition Rating – Shoving, Rutting Alligator, and Flushing Data	
Figure 9.13 - Road Roughness Distribution by Length	
Figure 9.14 - Sealed Road Condition Against Peer Group	
Figure 9.15 - Pavement Strength – Sealed Roads SNP Distribution (2022)	
Figure 9.16 - Pavement Strength – Composite of all Sealed Roads Surveyed and Recommended Mair	
Approach from MSD Tests (2022)	102
Figure 9.17 - Profile of Structural Pavement Number for roads with Reseal Prioritised from MSD Tes	
<u> </u>	, ,
Figure 9.18 - Profile of Structural Pavement Number for roads with Rehabilitation Need from MSD Tes	
Signary 0.40 Cooled Developed Historic Developed Coopering	
Figure 9.19 - Sealed Pavement Historic Repair Quantities	
Figure 9.20 - Sealed Pavement Historic Repair Expenditure	
Figure 9.21 - Sealed Pavement Road Resurfacing Historic Length, since 1972	
Figure 9.22 - Renewal Life Activity Achieved Since 1972	
Figure 9.23 - Sealed Roads Over Expected Life (as at November 2023)	
Figure 9.24 - Resealing Requirement to Remove Backlog. (As at November 2023)	
Figure 9.25 - Construction Year of Sealed Road	
Figure 9.26 - Rural Sealed Roads Pavement Age Groups (Nov 2023)	
Figure 9.27 - Urban Sealed Roads Pavement Age Groups (Nov 2023)	
Figure 9.28 - Length of Reconstruction Sealed Roads Over the Years(Nov 2023)	
Figure 9.29 - Sealed Pavement Resurfacing Historic Expenditure	
Figure 9.30 - Sealed Pavement Rehabilitation Historic Expenditure	
Figure 9.31 - Pavement Strength – Unsealed Roads SNP Distribution (2022)	
Figure~9.32-Pavement~Strength-Composite~of~all~Unsealed~Roads~Surveyed~from~MSD~Tests~(2022)	
Figure 9.33 - Historic Unsealed Road Grading Lengths (as at June 2024)	
Figure 9.34 - Historical Expenditure Unsealed Pavement Maintenance (As of June 2024)	211
Figure 9.35 - Historic Metalling Quantities	
Figure 9.36 - Historical Expenditure Unsealed Pavement Maintenance (as of June 2024)	
Figure 9.37 - Very Poor Condition Rated Kerb and Channel	216
Figure 9.38 - New Dish Kerb and Channel	217
Figure 9.39 - Culvert Condition (Novemebr 2023)	
Figure 9.40 - Historic Drainage Maintenance Quantities	
Figure 9.41 - Drainage Control Assets Maintenance Historical Expenditure (As at June2024)	
Figure 9.42 - Deep Type Kerb and Channel	
=	225

Waimate District Council Roading Activity Management Plan – 2024-34



Figure 9.45 - Proposed Large Culvert Replacement – McNamaras Road Culvert	226
Figure 9.46 - Drainage Assets Renewal Historical Expenditure (As at June2024)	226
Figure 9.47 - Condition Rating Summary for Bridges	230
Figure 9.48 - Historical Structures Maintenance Expenditure	232
Figure 9.49 - Age of Existing Bridges (as at December 2023)	236
Figure 9.50 - Structures Component Maintenance Expenditure	240
Figure 9.51 - Historical Environmental Maintenance Expenditure	242
Figure 9.52 - Historical Network Services Maintenance Expenditure	
Figure 9.53 - Traffic Services Renewal Expenditure	251
Figure 9.54 - Historic Level Crossing Device Expenditure	252
Figure 9.55 - Minor Event Expenditure 1972 to 2024	
Figure 9.56 - Historic Network and Asset Management Expenditure	256
Figure 9.57 - Footpath Material and Condition	
Figure 9.58 - Footpath Condition Material Length	260
Figure 9.59 – Footpath Maintenance Historic Expenditure	261
Figure 9.60 - Footpath Surface Date	263
Figure 9.61 - Footpath Renewal Historic Expenditure	264
Figure 9.62 - Footpath Prioritisation Flowchart	266
Figure 9.63 - Maintenance & Operation Non Assisted Programme Expenditure	267
Figure 9.64 - New & Improved infrastructure for Local Roads Non assisted Programme Expenditure	268
Figure 9.65 - Historical Low-Cost Low-Risk Improvement Expenditure	270
Figure 9.66 - Seal Widening Completed on Talbots Road, Blind Brow	271
Figure 9.67 - Proposed Safety Footpath on Point Bush Road Bridge	271
Figure 9.68 - Proposed Holme Station Intersection Realignment	
Figure 10.1 - Proposed Average Annual Proportion for Roading Expenditure for 2024-34 (November 2	024)280
Figure 10.2 - Historic Roading Expenditure from 2000/01 Compared to Proposed 10 years (as at Novem	ber 2024)
	288
Figure 10.3 - Historic Subsidised Roading Expenditure Adjusted to June 2023 Costs	
Figure 11.1 - Waimate District Council Asset Group Orgainsation Structure	300
Figure 11.2 - Waimate District Council Data Systems	
Figure 11.3 - Data Quality 2023/24 (Extracted from Transport Insights August 2024)	310
Figure 13.1 - Criticality Analysis Criteria	340
TABLE OF TABLES	
Table 1.1 - Roading Assets (as of August 2023)	20
Table 1.2 - Road Asset Valuation Summary (June 2022)	20
Table 1.3 - Key Problem Statements, Impacts, and Benefits	
	25
Table 1.4 - Roading Customer Groups	32
Table 1.5 - Roading Customer Groups	
	33
Table 1.5 - Roading Forecast Expenditure 2024-27 (as at October 2024)	
Table 1.5 - Roading Forecast Expenditure 2024-27 (as at October 2024)	34 d adopted
Table 1.5 - Roading Forecast Expenditure 2024-27 (as at October 2024)	34 d adopted 38
Table 1.5 - Roading Forecast Expenditure 2024-27 (as at October 2024)	34 d adopted 38 41
Table 1.5 - Roading Forecast Expenditure 2024-27 (as at October 2024)	34 d adopted 38 41
Table 1.5 - Roading Forecast Expenditure 2024-27 (as at October 2024)	34 d adopted 38 41 44
Table 1.5 - Roading Forecast Expenditure 2024-27 (as at October 2024)	34 d adopted 38 41 45
Table 1.5 - Roading Forecast Expenditure 2024-27 (as at October 2024)	34 d adopted38414445
Table 1.5 - Roading Forecast Expenditure 2024-27 (as at October 2024)	34 d adopted3841444550
Table 1.5 - Roading Forecast Expenditure 2024-27 (as at October 2024)	34 d adopted 41 45 49 50 50
Table 1.5 - Roading Forecast Expenditure 2024-27 (as at October 2024)	
Table 1.5 - Roading Forecast Expenditure 2024-27 (as at October 2024)	
Table 1.5 - Roading Forecast Expenditure 2024-27 (as at October 2024)	



Table 4.6 - Number of Bridge Asset (as at 1 July 2023)	67
Table 4.7 - Length of Bridge Asset (as at 1 July 2023)	
Table 4.8 - Weight and/or Speed Limit Restricted Bridges (as at 1 July 2023)	68
Table 4.9 - Drainage Asset	69
Table 4.10 - Signs Assets	70
Table 4.11 - Footpath Assets	
Table 4.12 - Traffic Facilities Assets	71
Table 5.1 - Legislations and Regulations Affecting the Roading Activity	72
Table 5.2 - Community Outcomes and Roading Rationale	
Table 5.3 - Residents Survey Detail Differences	86
Table 5.4 - % of Residents Satisfied and Very Satisfied Between 2021 and 2023	88
Table 5.5 - Roading Customer Service Requests 2010/11 to 2022/23	89
Table 5.6 - Customer Levels of Service and Performance Measures (as reported in Annual Reports)	93
Table 5.7 - Service Attribute Linked to Technical Levels of Service	96
Table 5.8 - ONRC Performance Measures	100
Table 6.1 - Roading Demand Drivers	106
Table 6.2 - Summary of the Four Growth Scenarios (as from Rationale Report, June 2023)	108
Table 6.3 - Average Age of District Population	110
Table 6.4 - Forecasts of Vehicle Movements Carrying the Selected Commodities by District (Heavy v	
movements pa) (Richard Paling Consulting and GHD. 2012)	
Table 6.5 - Waimate District 50MAX HPMV Non Accepted Bridges	124
Table 6.6 - Satisfaction (Satisified and Very Satisified) by Reporting Period (2023)	129
Table 6.7 - Design Width Standards and Some Traffic Services Requirements	
Table 7.1 - Sustainability Elements	
Table 7.2 - Negative Effects – Roading Activity	
Table 8.1 - Consequences Rating	
Table 8.2 - Likelihood Rating	156
Table 8.3 - Key Critical Routes in the Waimate District – Developed by ARC	159
Table 8.4 - List of Bridges with no Alternative Routes available	
Table 9.1 - NZTA Work Category Structure (Revised March 2024)	
Table 9.2 - Roading Physical Works Contracts	179
Table 9.3 - Assets Historical Data	
Table 9.4 - Asset Base Life (Extracted from Roading Imfrastucture Valuation (30 June 2022)	187
Table 9.5 - Prioritisation of Maintenance Tasks	
Table 9.6 - Proposed Sealed Pavement Maintenance Budget for 2024-27 (As at November 2024)	
Table 9.7 - Proposed Sealed Pavement Maintenance Budget for 2027-34 (as at November 2024)	198
Table 9.8 - Expected Useful Life of Road Seals (Extracted from Valuation Report 2022)	
Table 9.9 - Proposed Sealed Road Resurfacing Budget for 2024-27 (as at November 2024)	
Table 9.10 - Proposed Sealed Road Resurfacing Budget for 2027-34 (as at November 2024)	
Table 9.11 - Proposed Sealed Road Pavement Rehabilitation Budget for 2024-27 (as at November 2024)	
Table 9.12 - Proposed Sealed Road Pavement Rehabilitation Budget for 2027-34 (as at November 2024)	
Table 9.13 - Proposed Unsealed Road Maintenance Budget for 2024-27 (as at November 2024)	
Table 9.14 - Proposed Unsealed Road Maintenance Budget for 2027-34 ( as at November 2024)	
Table 9.15 - Proposed Unsealed Road Metalling Budget for 2024-27 (as at November 2024)	
Table 9.16 - Proposed Unsealed Road Metalling Budget for 2027-34 (as at November 2024)	
Table 9.17 - Drainage Assets (November 2023)	
Table 9.18 - Proposed Routine Drainage Maintenance Budget for 2024-27 (as at November 2024)	
Table 9.19 - Proposed Routine Drainage Maintenance Budget for 2027-34 (as at November 2024)	
Table 9.20 - Culvert Condition (November 2023)	
Table 9.21 - Proposed Drainage Renewal Budget for 2024-27 (as at November 2024)	
Table 9.22 - Proposed Drainage Renewal Budget for 2027-34 (as at November 2024)	
Table 9.23 - Council's Bridge Assets (November 2023)	
Table 9.24 - Timber Bridges, Excluding Deck	
Table 9.25 - Bridge Load Capacity	
Table 9.26 - Proposed Structure Maintenance Budget for 2024-27 (as at November 2024)	
Table 0.37 Proposed Structure Maintenance Budget for 2027 24 (as at Nevember 2024)	224

Waimate District Council Roading Activity Management Plan – 2024-34



Table 9.28 - List of Bridge Structures Component Replacement / Renewals. (Updated as of September 2	
Table 9.29 - Proposed Structure Component Replacement Budget for 2024-27 (as at November 2024)	
Table 9.30 - Proposed Structure Component Replacement Budget for 2024-27 (as at November 2024)	
Table 9.31 - Proposed Structure Component Replacement Budget for 2027-34 (as at November 2024)	
Table 9.32 - Proposed Environmental Maintenance Budget for 2024-27 (as at November 2024)	
Table 9.33 - Signs and Markings Asset Information (as at December 2023)	
Table 9.34 - Proposed Network Services Maintenance Budget for 2024-27 (as at November 2024)	
Table 9.35 - Proposed Network Services Maintenance Budget for 2027-34 (as at November 2024)	
Table 9.36 - Proposed Traffic Services Renewal Budget for 2024-27 (as at November 2024	
Table 9.37 - Proposed Traffic Services Renewal Budget for 2027-34. (as at November 2024)	
Table 9.38 - Proposed Level Crossing Warning Devices Budget for 2024-27 (as at November 2024)	
Table 9.39 - Proposed Level Crossing Warning Devices Budget for 2024-27 (as at November 2024)	
Table 9.40 - Proposed Minor Event Budget for 2024-27 (as at November 2024)	
Table 9.41 - Proposed Minor Event Budget for 2024-27 (as at November 2024)	
Table 9.42 - Proposed Network and Asset Management Budget for 2024-27 (as at November 2024)	
Table 9.43 - Proposed Network and Asset Management Budget for 2027-34 (as at November 2024)	
Table 9.44 - Footpath Assets	
Table 9.44 - Proofpath Assets	
Table 9.46 - Proposed Footpath Maintenance Budget for 20273427 (as at November 2024)	
Table 9.47 - Proposed Footpath Renewal Budget for 2024-27 (as at November 2024)	
Table 9.48 - Proposed Footpath Renewal Budget for 2024-27 (as at November 2024)	
Table 9.49 - Proposed Maintenance & Operation Non Assisted Budget for 2024-27 (as at November 2024)	
Table 9.50 - Proposed Maintenance & Operation Non Assisted Budget for 2024-27 (as at November 2024) Table 9.50 - Proposed Maintenance & Operation Non Assisted Budget for 2027-34 (as at November 2024)	•
Table 9.51 - New & Improved infrastructure for Local Roads Non assisted budget for 2024-27 (as at Nove	
2024)	
Table 9.52 - New & Improved infrastructure for Local Roads Non assisted budget for 2027-34 (as at Nove	
2024)	
Table 9.53 - NLTP Funding Request for Low-Cost Low Risk Improvements (as at September 2023)	
Table 9.54 - Capital Investment Strategies	
Table 9.55 - Disposal of Assets Summary	
Table 10.1 - Roading Infrastructure Valuation 2022 (as at 30 June 2022)	
Table 10.2 - Roading Infrastructure Valuation Comparison 2017-2020	
Table 10.3 - Comparison between Forecast Expenditure and Annual Depreciation (October 2024)	
Table 10.4 - Roading Subsidised Activity Forecast Expenditure for 2024-34 (based on NZTA Split, as at Nove	
2024)	
Table 10.5 - Roading Subsidised Maintenance Operations and Renewal Activity Forecast Expenditure for 1	
34 (as at November 2024	
Table 10.6 - Roading Unsubsidised Activity Forecast Expenditure for 2024-34 (as at November 2024)	
Table 10.7 - 2024-2034 LTP Significant Forecasting Assumptions (September 2024)	
Table 11.1 - Timetable for Audit and Review	
Table 11.2 - Methodologies for the On-going Implementation and Updating of AMP's	
Table 11.3 - NZTA Technical Audit Rating Assessment (As at November 2021)	303
Table 11.4 - NZTA Technical Audit Recommendations (As at November 2021)	304
Table 11.5 - NZTA Procedural Audit Rating Assessment (As at June 2023)	
Table 11.6 - NZTA Procedural Audit Recommendations (As at June 2023)	
Table 11.7 - NZTA Procedural Audit Suggestions (As at June 2023)	
Table 11.8 - Data Confidence Grade Definition (Valuation 2022)	
Table 11.9 - Data Confidence Grading for Roading Assets (Valuation 2022)	
Table 12.1 - Improvement Programme (As at November 2024)	
Table 13.1 - Waimate District Council Roading Activity Planning Risks	
Table 13.2 - Waimate District Council Roading Activity Delivery Risks	
Table 13.3 - Waimate District Council Roading Activity Physical Risks	
Table 13.4 - Waimate District Council Roading Activity Management Risks	326
Table 13.5 - List of Critical Roads in the Waimate District (December 2023)	

Waimate District Council Roading Activity Management Plan – 2024-34



Waimate District Council Roading Activity Management Plan – 2024-34

#### 1 EXECUTIVE SUMMARY

#### 1.1 Purpose of Roading Asset Management Planning



This Activity Management Plan for Roading 2024-34 (AMP) has been developed to provide the Waimate District Council (WDC) with a long-term management tool for roading activities. It documents management, planning, financial, engineering, and technical best-practices to ensure that the levels of service required is provided cost-effectively for the current and future community.

"An AM Plan documents the organisation's intended AM programmes for management of its assets and services based on the organisation's understanding of service level requirements and the network's capability to meet those requirements. The AM Plan can be considered

as a business case for the long-term financial forecasts and should drive strategic thinking and planning and ensure the organisation is operating in a financially sustainable manner. AM Plans can also act as a vehicle for communication with customers and other parties on different funding scenarios and impacts on service levels and risk." (IIMM Version 6.0, 2020).

#### 1.2 Plan Level

Council has undertaken a structured assessment of the appropriate level of asset management practice for the Roading assets, see Section 2.2. This has been adopted by Council through the Asset Management Policy Statement.

This analysis of factors suggested that asset management practice should at least be at 'Core' level for Roading. The previous AMP has been reviewed and the approach to update the AMP to a level of Core or higher of Asset Management has been taken. The following principles are used by Council to guide asset management planning and decision making in Roading assets:

- Appropriate Levels of Service (LoS) are determined through effective consultation.
- Service delivery needs form the basis of asset management (AM)
- Asset management decision making is transparent and accountable.
- Asset management is integrated with corporate, financial, business, and budgetary planning using Asset/Activity Management Plans (AMP) and Council's Long Term Plan (LTP)
- Council collaborates with neighbouring authorities and other agencies including NZ Transport Agency Waka Kotahi (NZTA) and Environment Canterbury (ECan)
- Informed asset planning decision making, takes a lifecycle management and inter-generational approach.
- Sustainable management provides for present needs whilst sustaining resources for future generations.

#### 1.3 Assets Included in This Plan

The Roading assets include all Council-owned and maintained roads, streets, bridges, footpaths, and related infrastructure within the District, as summarised in Table 1.1. The roading network incorporates 1,325 kilometres of maintained roading, of which 51% is unsealed, and 55km classified as urban.

Waimate District Council Roading Activity Management Plan - 2024-34

19

Page 21



Table 1.1 - Roading Assets (as of August 2023)1

Asset	Quantity					
Total Length of Road	1,325 km					
Sealed Road	651 km	Urban 4	19.1 km	Rural 601.9 km		
Unsealed Road	674 km Urban 6.3 km Rural 668.			Rural 668.0 km		
Bridges	182		3,369 m			
Culverts	3,544		37,226 m			
Concrete Fords	90		1,750 m			
Kerb and Channel		49,1	31 m			
Signs	4,752					
Street Lights	493					
Footpaths		63	km			

Table 1.2 summarises Council's 2022 valuation of the Roading assets, assessed as having a total replacement value of \$576 million, excluding unformed ('paper') roads.

An annual depreciation or decline in service potential figure is used to determine an affordable programme of work necessary to maintain the network within pre-determined financial constraints. This has been valued at \$3.8 million per annum, a 29.3% increase compared to the 2020 RAMM valuation.

Table 1.2 - Road Asset Valuation Summary (June 2022)<sup>2</sup>

Asset	Optimised Optimised Depreciated Replacement Cost Replacement Cost		Annual Depreciation
Land	\$80,672,118	\$80,672,118	\$0
Formation	\$190,302,784	\$190,302,784	\$0
Unsealed Pavement Structure	\$39,908,447	\$39,908,447	\$0
Seal Pavement Structure	\$132,544,528	\$73,255,555	\$1,039,236
Sealed Pavement Surface	\$23,740,366	\$12,991,324	\$1,367,712
Bridges	\$54,571,726	\$25,913,519	\$568,476
Drainage	\$24,947,687	\$11,565,610	\$251,706
Drain Fords	\$2,942,405	\$730,119	\$65,028
Footpaths	\$9,329,617	\$3,368,775	\$305,570
Signs	\$765,300	\$535,710	\$33,755
Street Lighting	\$591,401	\$355,057	\$19,422
Surface Water Channels	\$15,111,622	\$6,719,503	\$151,461
Traffic Facilities	\$114,373	\$55,825	\$3,900
Total Road Assets	\$575,542,374	\$446,374,346	\$3,806,266

 $<sup>^{\</sup>rm 1}\,{\rm All}$  data is taken from Waimate District Council's RAMM database for roading assets.

<sup>&</sup>lt;sup>2</sup> WSP Auckland, NZ, Road Asset Valuation as at 30 June 2022 – Waimate District Council, November 2022

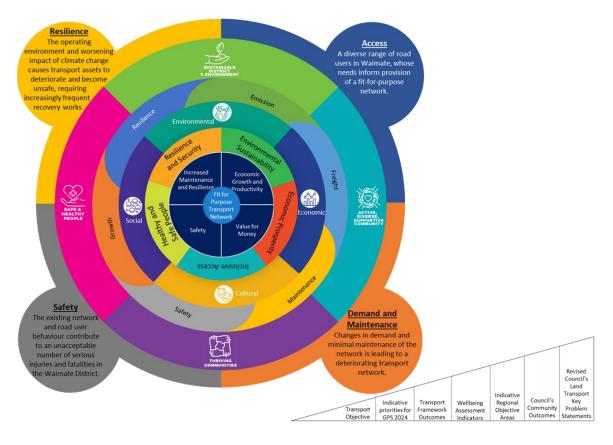


#### 1.4 Key Problem Statements

Council has identified key challenges faced by the Organisation in continuing to deliver roading services that meet the levels of service required by customers in the most cost-effective way, at an asset/activity management level.

- Figure 1.1 displays the District's Key Problem Statements against the National, Regional, and Local strategic directions.
- Table 1.3 details the impacts and benefits of addressing these key problem statements and sets the strategic context for Council's Activity Management Plan.

Figure 1.1 - Waimate District Council Roading Services Key Problem Statements 2024



Waimate District Council Roading Activity Management Plan – 2024-34



Table 13.	<b>Kev Problem</b>	Statements	Impacts	and Renefits
I apic T.3 -	KEN LIODIEIII	Juane Ille Illus,	IIIIDacts.	and benefits

	Table 1.3 - Key Problem Statements, Impacts, and Benefits										
Key Problem Statement	Impacts on the Network	Community Benefits	Management Benefits								
Resilience The operating environment and worsening impact of climate change causes transport assets to deteriorate and become unsafe, requiring increasingly frequent recovery works.	<ul> <li>Limited pavement strength</li> <li>Decreased road user safety.</li> <li>Drainage studies to identify future planning and strategies.</li> <li>Pavement strength analyses identify significant issues within flood-prone areas</li> <li>Insufficient drainage</li> <li>Flood damage of assets</li> <li>Limited access</li> </ul>	<ul> <li>Reliability of network</li> <li>Safer roads</li> <li>Access maintained.</li> <li>Comfort and customer experience maintained / improved.</li> <li>Social and economic benefits through maintenance of network and access</li> </ul>	<ul> <li>Levels of service met.</li> <li>Safer network provided.</li> <li>Proactive maintenance and renewals can be prioritised on road assets most at risk.</li> <li>Minimised wet weather event disruptions</li> <li>Progressive climate change adaptation</li> <li>Reduced emergency works and recovery</li> </ul>								
Safety The existing network and road user behaviour contribute to an unacceptable number of serious injuries and fatalities in the Waimate District.	<ul> <li>Compromised safety on the network</li> <li>Potential inconsistency between other Districts</li> <li>Social and economic impact of fatalities and serious injuries</li> </ul>	Improved road safety for the network  Safer, better informed road users  Regionally aligned approaches to informing road user choices and system management  Improvements on infrastructure and speed management	<ul> <li>Road-to-Zero         objectives         progressively         achieved.</li> <li>Contribution to         Regional and         National initiatives,         strategic goals, and         objectives.</li> <li>Reduction in deaths         and serious injuries</li> </ul>								



Key Problem Statement	Impacts on the Network	Community Benefits	Management Benefits
Access A diverse range of road users in Waimate, whose needs inform provision of a fit-for-purpose network.	<ul> <li>Increase in allowable larger, oversized, and overweight vehicles on network.</li> <li>Width and strength of pavements and structures (bridges) not suitable for load and size</li> <li>Suitability of assets for different users (including pedestrians and cyclists)</li> </ul>	<ul> <li>Improved community well-being and resilience</li> <li>All road users considered.</li> <li>Active transport users (pedestrians and cyclists) are given greater priority.</li> <li>Safety improvements for active transport users</li> <li>Suitability of assets for different users (including pedestrians and cyclists)</li> <li>Network enables local economy</li> </ul>	<ul> <li>Levels of service met.</li> <li>More resilient roading network</li> <li>Safer network</li> <li>Greater accessibility to all road users</li> <li>Accessibility for Mobility Scooters</li> <li>Reduction in VKT and carbon emissions</li> </ul>
Demand and Maintenance Changes in demand and minimal maintenance of the network is leading to a deteriorating transport network.	<ul> <li>Bow-wave of pavement seals (1963-73 rapid construction – 30km/yr. seal extension)</li> <li>Levels of service not met (performance)</li> <li>Network no longer fit for purpose across the network.</li> <li>Increase in allowable larger, oversized, and overweight vehicles.</li> <li>Pavement strength and width challenged (including pavement structure)</li> <li>Natural water courses lost (due to intensive land use – reshaping of watercourses), causing surface flooding</li> </ul>	<ul> <li>Low costs to date</li> <li>Levels of service and expectations met.</li> <li>Safer network</li> <li>Accessible network</li> <li>Efficient use of resources</li> <li>Network resilience</li> </ul>	<ul> <li>Council rates and NZTA investment has been minimised to date.</li> <li>Levels of service and expectations met.</li> <li>Bridge capacity prioritised</li> <li>Aging assets are addressed in a timely manner.</li> <li>Appropriate quantities of proactive maintenance and renewals can be prioritised on road assets most at risk</li> </ul>

Waimate District Council Roading Activity Management Plan – 2024-34



#### 1.5 Key Stakeholders and Customers

#### 1.5.1 Key Stakeholders

The Council is the ultimate owner of the roading assets, as the designated Road Controlling Authority. The Crown entity established to manage Roading activities is NZ Transport Agency Waka Kotahi (NZTA). Other key stakeholders of the roading network include:

- Environment Canterbury Regional Council (ECan)
- Owners and operators of inter-connecting or co-located networks, including NZTA State
  Highways and NZTA-appointed representatives, such as network contractors, neighbouring
  territorial authorities, and Department of Conservation Te Papa Atawhai (DOC)
- Road users (customers), as detailed in Table 1.4
- Representative road-user groups such as Transporting New Zealand: la Ara Aotearoa,
   Federated Farmers, and others. These are distinct from users (Council's customers)
- Council employees, and Council-appointed consultants and contractors who manage and work on the District's roading assets.

#### 1.5.1.1 Customer Groups

Waimate District Council's customers fall into three different groups, detailed in Table 1.4.

**Table 1.4 - Roading Customer Groups** 

Customer Group	Description	Customers
Users	Those who directly use the service	Private drivers
		Commercial and freight road users
		Drivers of public and other transport services (e.g., tourist buses)
		Active road users including pedestrians and cyclists
Associated	These are other service providers	Contractors
Service Providers	who rely on the Roading network	Utilities service providers – use the road corridor to co-locate and access their assets.
		Transport operators.
		Emergency Services
The Wider	Non-users that are affected if the	Residents
Community	service is not provided	Ratepayers
		Tourists
		Event organisers
		Residents who live beside the roads
		Local businesses – requiring access

## 1.5.1.2 Aoraki Roading Collaboration (ARC) – Mid-South Canterbury (Waimate, Mackenzie, Timaru, and Ashburton District Councils)

Since 2014, a strong collaboration has developed across Mid-South Canterbury Councils, which has ensured cost-effective service delivery in-line with industry best practice. The development of a common Maintenance Contract document between Waimate, Mackenzie, Timaru, and Ashburton

Waimate District Council Roading Activity Management Plan - 2024-34



District Councils has formed an excellent platform for greater alignment of transportation services delivery. It has also supported cost-effective procurement of physical works and professional services.

The latest work is in the draft Delineation Strategy.

#### 1.5.2 Funding Partners

Funding is provided by two significant parties:

#### • NZ Transport Agency Waka Kotahi (NZTA)

NZTA co-invests, in accordance with operational requirements at a current Financial Assistance Rate (FAR) of 68%<sup>3</sup>. This is to fund the District's Maintenance, Operations, Renewals, Low-Cost Low Risk (Capital work), and Road Safety Programmes.

#### Ratepayers

Local Council rates provide funding for all roading non-subsidised activities and the remaining "local share" of roading costs qualifying for Financial Assistance from NZTA.

#### 1.5.3 Mana Whenua

Council recognises Te Rūnanga o Waihao as mana whenua with ancestral and cultural relationships within the Waimate District and recognises Te Rūnanga o Ngāi Tahu as the iwi authority whose rohe (boundary) covers the Waimate District.

Council values the contribution Māori make to Council decision-making and have identified some Council-led initiatives to address the requirements<sup>4</sup>.

#### 1.6 Level of Service

The Roading asset comprises of a diversity of components including road pavements, surfaces, bridges, footpaths, drainage, signs, and streetlighting assets. Levels of Service (LoS) in this AMP cover key service attributes, such as accessibility, affordability, efficiency, quality, reliability, responsiveness, and safety.

LoS measures are expressed in terms of both "Customer Performance Measures", which measure the service received by the user, and "Technical Performance Measures", which measure how the organisation provides the service. Section 5 sets-out a framework for defining Levels of Service.



Figure 1.2 - Service Performance 2021/22 (August 2023 Transport Insights Te Ringa Maimoa)

(LGA Non-Financial Performance Measures)

Waimate District Council Roading Activity Management Plan - 2024-34

26

Item 16.8 - Attachment 1 Page 28

<sup>&</sup>lt;sup>3</sup> NZTA FARs 2024-27 NLTP

<sup>&</sup>lt;sup>4</sup> Participation of Māori in the Decision-making Process - Waimate District Council (waimatedc.govt.nz)

#### 1.7 Growth and Future Demands

The Waimate District roading network caters predominantly for low volume rural traffic on sealed and unsealed roads with only 55 kilometres (4.2%) of the network classified as urban road. The network includes just five kilometres of rural roads that caters for a traffic loading greater than 1,000vpd, classified as Primary Collector in the One Network Road Classification (ONRC) hierarchy, Figure 1.3. According to One Network Framework (ONF) hierarchy, most of the roads are classified as Rural Roads (83.1%), Figure 1.4, and as shown in Figure 1.5, most of the vehicle journeys are on Rural Roads and Rural Connectors.

Network % Length (km) & Journeys Travelled (veh km)

Primary Collector—
Secondary Collector—
Access—
Low Volume—

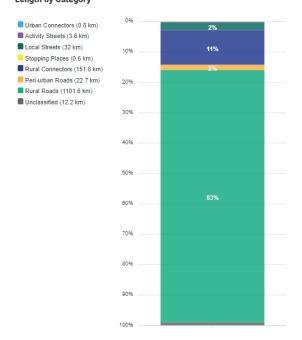
% Urban Km

% Rural km

% Urban Vkt

% Rural Vkt



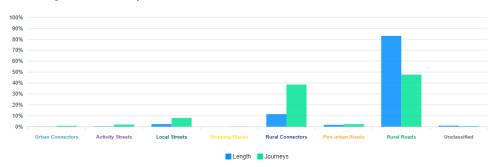


Waimate District Council Roading Activity Management Plan - 2024-34

27

Page 29

Figure 1.5 - Network Length Verses Vehicle Journey by ONF Category (2023/24, Transport Insight)
Network Length vs Vehicle Journeys



The 2018 Census population of Waimate District was 7,815<sup>5</sup> and the "Estimate Resident Population" as at 30 June 2023 for the Waimate District was 8,400<sup>6</sup>. The recommended medium growth scenario projects the District's population to increase to 9,500 in 2053, at an average rate of 0.4% growth per year between 2023 and 2053), Section 6.1.1.1. Over the last three years, COIVD-19 has changed the world and the way people think, move, and live. Anecdotally, the demand for properties in the Waimate District has increased with affordable housing, the changes in the working world (working remotely), and nearing future retirees are seeing the District as an attractive lifestyle option.

Population growth is likely to have minimal impact on future demand on the roading network. Trends in the mix of heavy traffic associated with land use changes within the District are likely to have a greater effect on Council's roading assets. To get a better prediction of likely demand, Council is currently reviewing their Traffic Count Strategy and data quality. This allows the Council to assess asset performance as utilisation of the asset changes, and review whether key assets provide sufficient capacity for current and future use. Further detail on growth and demand planning is provided in Section 6.

#### 1.8 Sustainability

Transport legislation and policy in New Zealand calls for the need to rebuild after recent weather events and strengthen the resilience of the entire transport system for all New Zealanders<sup>7</sup>. The key strategic priorities identified in the GPS 2024 are Economic Growth and Productivity, Increased Maintenance and Resilience, Safety, and Value for Money. This means that Council must look at more sustainable revenue and ensure that roading services works and network management is delivered in a Value for Money manner, while supporting community resilience, safety, and economic growth and productivity.

As part of Canterbury Regional Council's Land Transport Plan, the key priorities are Maintenance, Resilience, Emissions, Growth, Safety, and Freight. This means that Council must ensure that the roading service works and network management is must also delivered in a manner that can mitigate the likely impacts of climate change, minimises and environmental harm.

Whilst there are no significant negative effects assessed as resulting from the Council's roading activities, opportunities exist to deliver road asset development and management services to reduce

Waimate District Council Roading Activity Management Plan - 2024-34

<sup>&</sup>lt;sup>5</sup> Statistics New Zealand, 2018 Population Usually resident population counts)

 $<sup>^{\</sup>rm 6}$  Statistics New Zealand, 2023 population estimates

<sup>&</sup>lt;sup>7</sup> Government Policy Statement on land transport 2024/34 - June 2024 (GPS 2024).



the negative impact for Waimate District's residents on the social, economic, environmental, or cultural well-being of the community.

Sustainability also considers the management of Council's staff and resourcing to ensure continued cost-effective delivery of roading activities and where possible, the reduction in travel demand and carbon emissions. There is a need to build-in a means of succession planning for roading's engineering (technical) and physical works (contracting) practices and procedures.

Planning for climate change adaptation, network resilience, emergency management response and recovery (Section 6.4), insurances of assets, and reduction of emission is required.

#### 1.9 Risk Management

Council has a Risk Management Policy in place. A Risk Management Strategy has been described in Section 7 of this AMP.

Due to the collaborative effort of the Aoraki Roading Collaboration (ARC), a joint risk management assessment was undertaken. The types of risks considered are:

- Planning Risks
- Management Risks
- Delivery Risks
- Physical Asset Risks.

#### 1.10 Lifecycle Management Plan

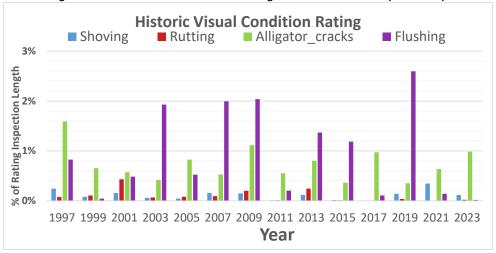
Council's Lifecycle Management planning identifies the maintenance, operations, and renewals activities required to keep the road assets operating at the currently established levels of service (LoS) in the most cost-effective manner. The Lifecycle Management Plan, Section 9, ensures that current strategies do not consume the asset, leading to an unexpected increase in maintenance/renewal expenditure in the future.

Waimate District Council undertakes condition and performance analysis of the network relying on the practical experience and knowledge of engineering staff to provide a gauge of network performance. This knowledge is used extensively for current and future planning purposes. Regular condition surveys of the asset components need to be undertaken, and the results and data recorded to ensure that an improved understanding of asset capacity at current service levels is developed.

Figure 1.6 shows the historical results from visual condition rating for sealed roads. This shows that the overall network condition was improved significantly in the 1990's and since then, it has remained relatively stable. This is indicating that maintenance and renewal levels for sealed roads are appropriate to maintain the condition of the pavements at an acceptable level, against the increase in heavy traffic mix and ages of parts of the network.

Waimate District Council Roading Activity Management Plan – 2024-34

Figure 1.6 - Historical Visual Condition Rating Data for Sealed Roads (as at 2023)



Current asset management practice applies a combination of "reactive" condition driven and network lifecycle depreciation techniques to determine the work necessary to maintain the network within predetermined financial constraints. Budgets quantities have been based on inspections and accurate historical quantities and costs, and future demands and growth. Increased investment is required above the NLTP 2021-24 due to cost increases a result of re-tendering the Road Network Operations and Maintenance Contract and inflation.

The increases include additional proactive drainage maintenance and renewals to provide network resilience.

This AMP recommends renewal works to the following transport infrastructure asset groups:

#### · Sealed road resurfacing

The amount of delayed reseal has reduced, although there are roads over the expected life there is no backlog. The annual resurfacing area required is 5% of the total seal area or 181,000 m<sup>2</sup>. This will reseal a small backlog of road which are over their expected life in a three-year period.

#### • Pavement renewal/Rehabilitation

The quantities of pavement renewal required is based on road condition inspection and maintenance cost assessment. Use of additional modelling using surface and pavement strength (MSD) survey data is being developed. Initial results have informed some recommendations for prioritised sealed road renewals in the 2024 AMP period and the ability to fund renewals.

Given the large proportion of pavements that were constructed in the same periods (1965 to 1973), Council is aware of the potential 'bow-wave' of rehabilitation and resealing works.

The Council plans to complete modelling to determine a sustainable level for future pavement renewals, with any changes implemented in the 2027-30 Activity Management Plan.



#### Drainage

Roadside drainage is a key activity for:

#### • Pavement Performance

Maximising the life of pavements by protecting them from ingress of water. This includes prioritising appropriate drainage works for roads in potential flood zones.

#### • Traffic Risk

Poor drainage results water on the carriageway which is significant traffic safety risk.

#### • Storm Damage Resilience

Uncontrolled water flows on the road pavement and shoulders causes erosion and gravel loss.

The amount of road drainage work completed in past years has been **insufficient**, especially given the change in groundwater conditions arising from irrigation and weather events the District has faced. The increased drainage maintenance and constructed in the last two years has already reduced and prevented storm damage to the network.

The urban kerb and channel network has 7,500m of assets, which are beyond end of their useful lives, these sections need to be replaced for pavement protection, safety, and amenity purposes. Council proposes to renew these sections over a 10-year period.

Some Culvert assets are at or nearing the end of their useful life and provide insufficient capacity in extreme weather events. These assets will need to be progressively replaced.

#### Bridges

Council has a lists the bridges (Table 9.28 - List of Bridge Structures Component Replacement / Renewals. (Updated as of September 2024)) that are prioritised for structural component replacements over the next 10 years.

Council is considering the future need of the following weight restricted side bridges, Scarletts Bridge on Fletchers Road, and Lundys Bridge on Crowes Road.

#### Footpaths

Footpaths provide a safe facility for pedestrians to encourage active transport modes They also provide safe routes for vulnerable users, such as the elderly, disabled, and young, to move to and from places within their community. Levels of service gaps are noticeable for the footpath asset Council proposes to renew 3,500 m<sup>2</sup> per year, which is modest amount. It will take 25 years to bring the footpaths to the desired standard.

Council has no specific plans for the disposal of any Roading assets within the term of this AMP apart the above identified weight restricted side bridges. This is subject to receiving adequate funding.

#### 1.11 Financial Forecasts

The following tables shows Council's forecast for the Roading assets. A full forward budget and forecasts are shown Section 10. Funding for the management, operational and maintenance, and renewal work for the roading network is provided from the District's roading rates and NZTA's Financial Assistance, as identified in Section 1.5.2.

Waimate District Council Roading Activity Management Plan - 2024-34

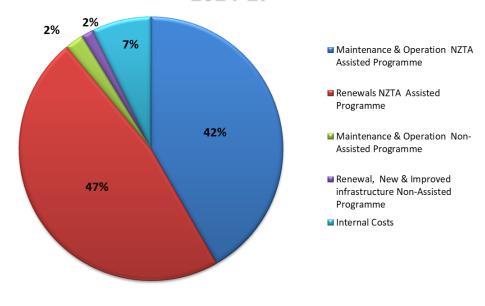


Table 1.5 - Roading Forecast Expenditure 2024-27 (as at October 2024)

Roading Budget Summary	2024-25	2025-26	2026-27	3 year Programme Totals
Maintenance & Operation (NZTA Assisted Programme)	\$3,164,347	\$3,202,634	\$3,275,413	\$9,642,394
Renewals (NZTA Assisted Programme)	\$3,743,946	\$3,553,286	\$3,633,896	\$10,931,129
New & Improved (NZTA Assisted Programme)	\$0	\$0	\$0	\$0
Resilience Programme (Crown Assisted Programme – FAR 84%)	\$0	\$0	\$50,000	\$50,000
Road Safety Promotion (NZTA Assisted Programme)	RSP (	Cluster arrangen	nents with Tima	ru DC
Maintenance & Operation (Non-Assisted Programme)	\$147,200	\$182,644	\$186,030	\$515,874
Renewal, New & Improved Infrastructure (Non-Assisted Programme)	\$276,800	\$32,000	\$32,000	\$340,800
Internal Costs	\$502,827	\$572,759	\$613,699	\$1,689,285
Total	\$7,885,120	\$7,543,323	\$7,741,038	\$23,169,482

Figure 1.7 - Average Annual Roading Expenditure 2024-27 (October 2024)

## Average Annual Roading Expenditure 2024-27



Waimate District Council Roading Activity Management Plan – 2024-34

32

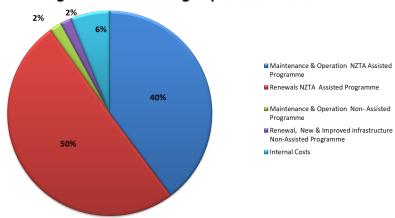
Item 16.8 - Attachment 1 Page 34

Table 1.6 - Roading Forecast Expenditure 2024-34 (as at October 2024)

Roading Budget Summary	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	10 year Programme Totals
Maintenance & Operation Waka Kotahi											
Assisted Programme	\$3,164,347	\$3,202,634	\$3,275,413	\$3,509,402	\$3,581,828	\$3,650,963	\$3,716,805	\$3,782,648	\$3,848,490	\$3,911,041	\$35,643,571
Renewals Waka Kotahi Assisted											
Programme	\$3,743,946	\$3,553,286	\$3,633,896	\$4,613,381	\$4,708,592	\$4,799,474	\$4,886,029	\$4,972,584	\$5,059,139	\$5,141,367	\$45,111,695
New & Improved Waka Kotahi Assisted Programme Road Safety Promotion Waka Kotahi Assisted Programme	\$0	\$0	\$50,000	\$533,000	\$544,000 RSP Clust	\$554,500 er arrangements v	\$564,500 vith Timaru DC	\$574,500	\$584,500	\$594,000	\$3,999,000
Maintenance & Operation Non- Assisted Programme	\$147,200	\$182,644	\$186,030	\$156,915	\$160,154	\$163,245	\$166,189	\$169,133	\$172,077	\$174,874	\$1,678,459
Renewal, New & Improved infrastructure Non-Assisted Programme	\$276,800	\$32,000	\$32,000	\$170,560	\$174,080	\$177,440	\$180,640	\$183,840	\$187,040	\$190,080	\$1,604,480
Internal Costs	\$502,827	\$512,883	\$524,448	\$536,013	\$547,076	\$557,635	\$567,692	\$577,748	\$587,805	\$597,358	\$5,511,485
Total	\$7,835,121	\$7,483,447	\$7,701,787	\$9,519,271	\$9,715,729	\$9,903,257	\$10,081,855	\$10,260,453	\$10,439,051	\$10,608,719	\$93,548,690

Figure 1.8 - Average Annual Roading Expenditure 2024-34 (October 2024)

#### Average Annual Roading Expenditure 2024-34



Waimate District Council Roading Activity Management Plan – 2024-34

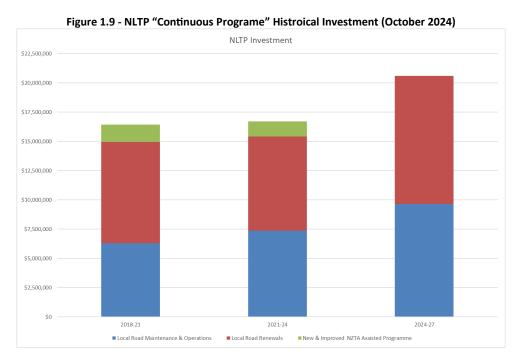
33

Item 16.8 - Attachment 1 Page 35



Table 1.7 - NLTP "Continuous Programmes" Historical Investment (as at October 2024)

Activity area	2018-21	2021-24	2024-27	Change \$	Change %
Local Road Maintenance & Operations	\$6,305,943	\$7,374,368	\$9,642,394	\$2,268,026	31%
Local Road Renewals	\$8,651,004	\$8,044,577	\$10,931,129	\$2,886,552	36%
New & Improved NZTA Assisted Programme	\$1,480,190	\$1,283,760	\$50,000	-\$1,233,760	-96%
Total	\$16,437,137	\$16,702,704	\$20,623,523	\$3,920,818	23%



#### 1.12 Processes and Asset Management Practices

#### 1.12.1 Asset Management Practices

Waimate District Council employs and has the following staff responsible for the management of the roading assets:

- Roading Manager
- Roading Technician (Vacant)
- Senior Roading Officer
- Roading Officer
- Road Asset Information Technician
- Technical Support Officer Roading Part-time

Waimate District Council Roading Activity Management Plan – 2024-34



# **Executive Summary**

Council Roading programme is delivered through a combination of in-house staff, external professional service consultants, and physical works contractors.

## 1.12.2 Roading Procurement Processes

In line with Council's <u>NZTA Approved and Endorsed Procurement Strategy 2023</u>, Council seeks to procure goods and services to support the community in an affordable and efficient manner. Within this approach, Council will consider the most appropriate bundling of work for maintenance and construction (renewal and improvement) in terms of Council's objective and the market's ability, capacity, and competitiveness.

While retaining scope for in-house teams and small local suppliers along with the benefits to the local economy they can provide, Council also has a responsibility to recognise the efficiencies and benefits derived from larger and longer-term maintenance and construction contracts. Competitive tendering, where price and quality are evaluated, will be used to select suppliers for road maintenance and large capital projects in general. In some cases, direct appointment may be the most effective approach, and this will be considered in terms of specialisation, market competitiveness, and the overall cost and efficiency to Council (value-for-money).

Opportunities for collaboration with other organisations will be considered where the procurement situation warrants such investigation. It is essential that collaborating organisations have compatible goals and operational procedures. Council has agreed to work closely with the other South and Mid-Canterbury Councils through Aoraki Roading Collaboration (ARC).

#### 1.12.3 New Zealand Transport Agency Audits

#### 1.12.3.1 Technical Audit

NZTA's Technical Audit of Waimate District Council was completed over 12-15 April 2021. Overall, it was mentioned that the road network is generally in good condition and the smooth travel index has been slowly declining since 2010/11. Council has the lowest cost per kilometre of maintenance expenditure compared with the rural districts peer group and nationally for the previous three years. Overall, "Some Improvement Needed" and 10 recommendation items were defined. For more details, refer to Section 11.2.4.1.

## 1.12.3.2 Procedural Audit

NZTA's Procedural Audit was conducted between 1-4 May 2023 for 1 July 2019 to 30 June 2022 period. Overall, the audit rated Council's procedures as "Effective", with eight recommendations and suggestions. The subject area that requires some improvement is in the "Procurement Procedures". For more details, refer to Section 11.2.4.2.

## 1.13 Plan Improvement and Monitoring

Council has developed this AMP based on its current knowledge of customer requirements, the configuration of the existing and future network to meet customer requirements, current asset information, and the strategies being adopted to achieve customer outcomes. To further develop the AMP to support asset management processes, systems, and data, Council recognises the need for ongoing improvement, which includes:

- Pavement modelling
- Traffic counting and Demand Management
- Footpath programmes

Waimate District Council Roading Activity Management Plan – 2024-34

35

Item 16.8 - Attachment 1 Page 37



# **Executive Summary**

- Emissions baselining
- Review of the plans by internal staff and suitably qualified external consultants
- Developing an AMP that meets the requirements of the community
- Benchmarking key performance indicators against similar external TLAs
- A corporate commitment to implementing and maintaining suitable AM information systems
- Adopting a team approach to the preparation of future AMPs in order to maximise the buy-in
  of internal staff and sharing of specialised knowledge.

## 1.14 Key Assumptions and Confidence Level

There are significant assumptions and confidence level that have been made in the development of this AMP.

- Asset data, from RAMM database as at June 2023, has been taken as the verified network asset.
- Future changes in government requirements may affect the required Levels of Service and Strategic Priorities.
- No specific consultation or research has been conducted to determine future demands on the road network. Council has a moderate level of confidence in future demands based on current available information.
- The knowledge and reliance of Council's practitioners (Council's Roading staff, Council's consultants, and Council's contractors) directly providing current information to the development of this Roading AMP. This includes information collected from Residents Survey, Section 5.4.3.1.

The following are key financial forecast assumptions made:

- NZTA will continue to co-invest and provide financial assistance to Council for the road network.
- Council will continue to fund the current levels of service identified in this AMP.
- The dollar value shown in this AMP are October 2024 dollars, adjusted for inflation applicable to Roading Activity. (Adjusted using BERL Cost adjusters - October 2023)
- Some renewal costs are rough order of cost estimates that will require to be further researched and refined.
- No account has been taken of the impacts related to the development, acceptance, and implementation of the Risk Management Plan.
- Assumptions were made on 'Total Useful Life' and 'Residual Useful Life' of assets in relation to the asset valuation.
- Asset data is fit-for-purpose and reliable for the development of the long-term financial forecast.
- NZTA Funding Assistance Rate (FAR) subsidy will remain the same for the 10-year period of this plan and there will be no other NZTA funding changes.
- Funding Sources will be from NZTA National Land Transport Fund (NLTF) and Council Property Rates.

Waimate District Council Roading Activity Management Plan - 2024-34

36

Page 38



## 2 INTRODUCTION

## 2.1 Purpose of the Plan

Activity/Asset Management Plans (AMPs) are the main method of demonstrating the <u>Local Government Act 2002, Schedule 10</u> – requirements. Council will also use the AMPs as a means to fulfil its statutory obligations for compliance with the following Acts and the Office of the Auditor-General for its assets and activities:

- Local Government Act 2002
- Resource Management Act 1991
- Building Act 2004
- Land Transport Management Act 2003
- Health Act 1956.

The objective of Asset/Activity Management planning is:

"To provide the required level of service, in the most cost-effective manner, through management of assets for existing and future customers."

The purpose of this Activity Management Plan (AMP) is to:

- Deliver on local government's purpose to promote the social, economic, environmental, and cultural well-being of communities in the present and for the future.
- ii. Demonstrate that the roading assets are operated and maintained in a sustainable, prudent and cost-effective manner, so that they provide the required levels of service (LoS) for current and future customers.
- iii. Demonstrate regulatory compliance, which includes ensuring the Long Term Plan (LTP) is supported by:
  - Quality information and assumptions underlying forecast information.
  - Framework for forecast information and performance measures are appropriate to assess meaningful Levels of Service
- iv. Demonstrate that the Asset/Activity Management (AM) level will be achieved.

The AMP has been prepared with the intention of an annual review of the financial statements and a three yearly review of the remainder of the AMP.

# 2.2 Asset Management Policy Statement for Roading Activity

The Waimate District Council Asset Management Policy Statement for the Roading Activity:

- Sets the direction of the roading asset management process
- Sets the appropriate level of asset management practice for the activity
- Ensure that Council's service delivery is optimised to deliver agreed Council's Community Outcomes and Levels of Service (LoS)
- Manage related risks
- Optimise expenditure over the entire lifecycle of the service delivery using appropriate assets as required.

Waimate District Council Roading Activity Management Plan - 2024-34

37



The appropriate level of asset management practice identified for Council's Roading Activity is 'Core' practice, with some 'Intermediate' elements as highlighted by the Asset Management Maturity Assessment<sup>8</sup>.

'Core' asset management practice is basic technical asset management planning undertaken at a level designed to meet minimum legislative and organisational requirements for financial planning and reporting. 'Core' practice provides technical management outputs for current levels of service, demand management, asset lifecycles, asset forward replacement programmes, new capital expenditure, and associated cash flow projections.

# 2.2.1 Policy Linkages to Other Plans

This Asset Management Policy links to, Council's LTP, the <u>Canterbury Regional Land Transport Plan</u> (<u>RLTP</u>), and Council's Roading Activity Management Plan (AMP). NZ Transportation Agency Waka Kotahi (NZTA) requires minimum asset management practice from the Policy. The Aoraki Roading Collaboration Group (ARC) is always looking at developing practice and producing numerous documents together.

#### 2.2.2 Structured Assessment of Asset Management Practice

Council undertook a structured assessment of the appropriate level of asset management practice for the Roading Activity in March 2017. This structured assessment follows the guidance provided in Section 2.1 of the International Infrastructure Management Manual (2015) and Table 2.1.2 International Infrastructure Management Manual (2015). This was reviewed by Council and adopted on 15 August 2023.

Table 2.1 - Roading Activity/Asset Management Practice Assessment (as at March 2017, reviewed and adopted 15 August 2023)

Criteria	Assessment	Commentary		
Population	Core	The initial population risk screen for urban areas, all township populations, and total District population showed that asset management practice should be 'Core'.		
District Wide Risks	Core	Based on the identified District-wide risk factors, the suggested level of appropriate asset management practice should be 'Core'.		
Costs and Benefits	\$8 M (25% of total expenditure)	The roading budget is the largest in Council and represent higher risks if AM practice is not at an appropriate level. These budgets also allow more scope to develop asset management practice as appropriate.		
Legislative Requirements	Compliance approach	Waimate District Council's Policy is to meet minimum legislative requirements and Council follows clear directives within timeframes acceptable to the community. Council will advocate on behalf of the community where legislation is deemed inappropriate.		
Size, Condition, Complexity of Assets	Typical of a small urban and rural authority	There are a range of assets spread across the large District area. In particular, the roading network and rural water supplies are extensive with only a small rating base. While the assets are not highly complex the isolated nature of the communities requires a specific approach.		

<sup>&</sup>lt;sup>8</sup> International Infrastructure Management Manual (IIMM) - 2020

Waimate District Council Roading Activity Management Plan - 2024-34

38



Criteria	Assessment	Commentary		
Risks Associated with Failures	Moderate level of risk	Overall risks associated with asset failure have been assessed to be moderate. There are some critical routes, bridges, and demand issues pending.		
Organisational Skills and Resources	Average, Core	Waimate District Council comprises a small organisation servi one main urban centre, small communities, and a large rural are The success of the organisation relies on key staff. Experience managers cover operations and planning roles. Special technical work is outsourced.		
		Services are delivered through a combination of in-house teams, consultants, and contractors. Council periodically reviews resources required and adjusts the mix of resources to meet work requirements. This includes increasing in-house resourcing when required.		
Customer Expectations	Average	The District has a range of community assets that are of a high standard and the community is justifiably proud of them and has high expectations of the development and maintenance. There is some variation in expectations across the District, particularly between Waimate township and more remote rural areas.		
		Overall customer expectations are judged to be medium and the trend of increasing customer expectation is likely. This suggests a requirement for well-developed asset management practice to consistently meet community expectations in the long-term.		
Sustainability	No Corporate Policy at this stage, part of AMP and planning process at activity level	Waimate District Council is following the sustainability regimes of the Land Transport Management Act 2003 (LTMA), NZTA direction <sup>9</sup> , and Regional Land Transport Plan (RLTP) <sup>10</sup> requirements (including subsequent amendments and revisions) for Roading. Council is in the process of reviewing, updating, and developing its sustainability policies. This will include incorporating legislative changes and any national or regional policies or plans.  Any impact of these on asset management practice will be incorporated into the next review of Asset Management Policies.		
Final AM Level	Core With Intermediate in additional areas as required by Waka Kotahi (co-funder)	Analysis of factors suggests that asset management practice should be Core.  Additional emphasis is required in the following practice areas:  Demand Forecasting, Asset Register Data, Asset Condition, Operational Planning, Capital Works Planning, Financial and Funding Strategies Service Delivery Models in line with national directives and requirements.		

Waimate District Council Roading Activity Management Plan – 2024-34

<sup>&</sup>lt;sup>9</sup> Toitū Te Taiao – Our Sustainability Action Plan | Waka Kotahi NZ Transport Agency (nzta.govt.nz) <sup>10</sup> Regional transport planning | Environment Canterbury (ecan.govt.nz)



# 2.3 Location

The general topography of the Waimate District is described as flat to rolling. The network has been split into 428km in flat topography, 853km in rolling topography, and 55km in mountainous topography. The District is bounded by the Pacific Ocean to the East, the Kirkliston Range to the West, the Pareora River to the North, and the Waitaki River to the South.

Figure 2.1 shows the boundary of the Waimate District alongside neighbouring local authorities.

State Highway 1 and State Highway 82 provide the principal regional connections for the road network within the Waimate District. Figure 2.2 shows both the location of the District within the Canterbury Region, and Figure 2.3 shows the State Highway and District roading network.

Figure 2.1 - Map of Waimate District Council Boundary

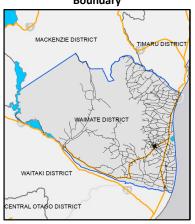


Figure 2.2 - Map of Waimate District in the Canterbury Region



Figure 2.3 - Waimate District Road Network and the State Highway



Waimate District Council Roading Activity Management Plan - 2024-34

40



#### 2.4 The Assets

The roading asset includes all Council owned and maintained roads, streets, bridges, footpaths, cycle paths, and related infrastructure within the District as shown in Table 2.2. Unformed (paper) roads are not included. For more information on the assets covered in this plan, refer to Section 4.

Table 2.2 - Roading Assets (as at August 2023)

Asset		Qua	ntity		
Total Length of Road		1,32	5 km		
Sealed Road	651 km	Urban 4	19.1 km	Rural 601.9 km	
Unsealed Road	674 km	Urban	Urban 6.3 km Rural 668.0 km		
Bridges	182		3,369 m		
Culverts	3,544		37,226 m		
Concrete Fords	90		1,750 m		
Kerb and Channel	49,131 m				
Signs	4,752				
Street Lights	493				
Footpaths		63	km	_	

The condition of the roads is dynamic over periods of time due to the District's topography, and the seasonal variations in climatic conditions and traffic demands.

## **Relationship with Other Council Documents**

The Asset Management Planning process analyses the impact of the Levels of Service on the business and should be structured to be compatible with other key planning mechanisms and documents.

## 2.5.1 Long Term Plan<sup>11</sup>

Waimate District Council Long Term Plan (LTP) 2025 - 2034 sets out the broad strategic direction for the period of this plan, defining the Vision, Community's Desired Outcomes and Wellbeing, Strategic Goals, Identified Projects and Tasks, and the Financial Framework that will be required. The Community Outcomes and Wellbeing are directly related to Governance, Environment Protection, Sustainability, Economic Development, and Organisation Performance.

#### 2.5.2 District Plan<sup>12</sup>

The Waimate District Plan assists the Council in carrying out its functions under the Resource Management Act 1991 so that it may achieve the purpose of the Act that is to "promote the sustainable management of natural and physical resources." The District Plan was developed in consultation with local communities and interest groups and controls such activities as:

- Erection, relocation, or demolition of structures, buildings, network utilities and signs
- Commercial activities
- **Earthworks**

<sup>&</sup>lt;sup>11</sup> Long Term Plans - Waimate District Council (waimatedc.govt.nz)



- Hazardous substances
- Planting, trimming, or removing vegetation
- Subdivision and development.
- Management of potential flood zones.

## 2.5.3 Other Related Asset/Activity Management Plans

Council has other Activity Groups, each managed through the production and use of Asset/Activity Management Plans (AMP). Of particular relevance to the Roading Activity are the Water Supply, Sewerage (Wastewater), and Stormwater AMPs. Cooperation with these Activity Groups is required as their works in the road corridor will have impacts on the Roading Activity.

#### 2.5.4 Annual Plan, Report, and Budget

The works identified in this AMP will form the basis on which future Annual Plans and Reports are prepared and performance measures are reported on.

#### 2.5.5 Infrastructure Strategy

This AMP will provide inputs required for the Roads and Footpaths portion of the 30-year Infrastructure Strategy (IS) as required by the 2014 amendment to the Local Government Act 2002. The Infrastructure Strategy forms part of Council's Long Term Plan.

# 2.5.6 Procurement Strategy

The Procurement Strategy is required by the Land Transport Management Act 1998, and signals Council's intentions for procurement of subsidised land transport activities. This Strategy was last updated and Endorsed by NZTA and Council in April 2023.

## 2.5.7 Contracts

The levels of service, strategies and information requirements contained in AMP's are translated into contract specifications and reporting requirements.

#### 2.5.8 Bylaws, Standards, and Policies

These tools for asset creation and subsequent management are needed to support Asset Management tactics.

# 2.5.9 Other Road Related Strategic Documents

These include but is not limited to:

- Towards a productive, sustainable and inclusive economy: Aotearoa New Zealand's First Emissions Reduction Plan
- New Zealand's second emissions reduction plan
- Government Policy Statement on Land Transport 2024
- Transport Outcomes Framework
- Road to Zero
- New Zealand Walking and Cycling Strategy; Getting there on foot, by cycle
- Arataki Our 30-year plan 2023
- <u>Canterbury Regional Policy Statement</u>
- Canterbury Land and Water Regional Plan
- Regional Land Transport Plan 2024-34

Waimate District Council Roading Activity Management Plan - 2024-34

42

Page 44