# INFRASTRUCTURE STRATEGY – 2024 - 2054

## MASTERTON DISTRICT COUNCIL DRAFT

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MASTERTON DISTRICT COUNCIL
TE KAUNIHERA Ā-ROHE O WHAKAORIORI

# DOCUMENT CONTROL



Masterton District Council

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# INTRODUCTION

## Purpose

Purpose of the Infrastructure Strategy

This Infrastructure Strategy outlines how we intend to manage our infrastructure assets over the next 30 years.

Infrastructure is an important community asset accounting for 88% of operating expenditure and 98% of capital expenditure, with assets grouped within the following activity areas:

- Water supply
- Wastewater
- Stormwater
- Solid waste
- Transport (roads, streets, footpaths and parking areas)
- Parks, Open Spaces and Community Facilities

Good infrastructure enables businesses and communities to flourish. It is essential to health, safety and transport and has a significant impact on the physical environment. Planning and programming infrastructure spending right is a pre-requisite to determining how much we can spend on services that enhance the quality of life of our residents and attract people to live in Masterton.

This strategy sets out the significant issues and risks relating to our infrastructure assets over the next 30 years and:

- Our main options for dealing with those issues;
- Cost and service delivery implications for residents and businesses of those options; and
- The Council's current preferred scenario for infrastructure provision

## Summary of Assets

| Valuation Summary 2023 | Optimised Replacement Cost | Base Life (Ave) |
|---|---|---|
| Roading | $ 578,926,016.00 | 80 |
| Bridges & Culverts | $ 211,119,876.00 | 82 |
| Water Reticulation | $ 123,000,617.00 | 68 |
| Rural Water Schemes | $ 10,575,141.00 | 57 |
| Water Treatment Headworks | $ 21,916,888.00 | 41 |
| | | |
| Sewage Reticulation | $ 157,978,860.00 | 81 |
| Sewage Treatment Works | $ 66,756,121.00 | 55 |
| | | |
| Stormwater Reticulation | $ 59,452,570.00 | 94 |
| Rural Stormwater Schemes | $ 3,608,235.00 | 100 |
| Castlepoint Assets | $ 3,043,742.00 | 80 |
| | | |
| Resource Consents | $ 9,663,261.00 | 24 |
| | | |
| Miscellaneous; airport sealed runway and transfer station | $ 8,765,179.00 | 43 |
| | | |
| Total | $ 1,254,806,507.00 | 75 |

Table based on WSP financial valuation of 3 waters and roading, 30 October 2023

## Context

The place - Masterton (Whakaoriori) - Wairarapa

Wairarapa is said to have been named by the Māori explorer Haunui as he stood on a peak in the Remutaka Range, looking down over the extensive valley. As he looked, the sun sparkled on the waters of the rivers and lakes, and he called the area Wairarapa-Glistening Waters.

The land was settled by successive waves of Māori. By the time Captain Cook became the first European to see Wairarapa in 1770, members of the Rangitāne and Kahungunu iwi were the tangata whenua of Wairarapa.

During the disruption caused by the Musket Wars many Wairarapa Māori left the district for sanctuary of Hawkes Bay and the East Coast, returning in 1841, following 10 years exile. They set about rebuilding their villages and re-establishing cultivations on their traditional sites. Sites near Masterton included Kaikokirikiri near today's Mahunga golf course, Mangaakuta at Homebush, and Kaitekateka at Te Ore-Ore.

In 1841 the first European explorers were also making their way through the interior of the valley, searching for grazing areas for the recently arrived Wellington settlers. By the late 1840s the first large run holders were established, leasing their substantial holdings from local Māori, grazing their stock on largely unaltered pasture.

In 1853, a group of Wellington and Hutt Valley workingmen, led by cooper Joseph Masters, formed the Small Farms Association, and petitioned Governor Grey for land upon which to establish their settlement. Following negotiations with local chief Te Retimana Te Korou, a piece of land on the banks of the Waipoua River was purchased, and on May 21, 1854, the first settlers from the Association arrived on the site of the new township of Masterton. The town grew slowly but as the rural areas surrounding it were more intensively farmed, Masterton grew to be the major town in the valley. It was declared a borough in 1877.

The rural areas were first administered as part of Wairarapa East and Wairarapa West Counties, then as part of Wairarapa North County. In 1899 the Mauriceville County was formed, then in 1900 Masterton and Castlepoint Counties were established. Masterton and Castlepoint Counties amalgamated in 1958 and were joined by Mauriceville County in 1966. Masterton County and Masterton Borough united, and following minor boundary adjustments, the current Masterton District was constituted on 1 November 1989, as part of a nation-wide reorganisation of local government.

Masterton is the largest township in the Masterton district and the Wairarapa region. Ninety minutes north of Wellington city, Masterton offers an escape from the hustle and bustle. The Wairarapa region is becoming famous for its wine, historical aircraft, and as one of the earliest inland European settlements the area has many historical sites to discover.

The Wairarapa railway line allows many residents easy commuting access to work in the cities of Wellington, Lower Hutt and Upper Hutt.

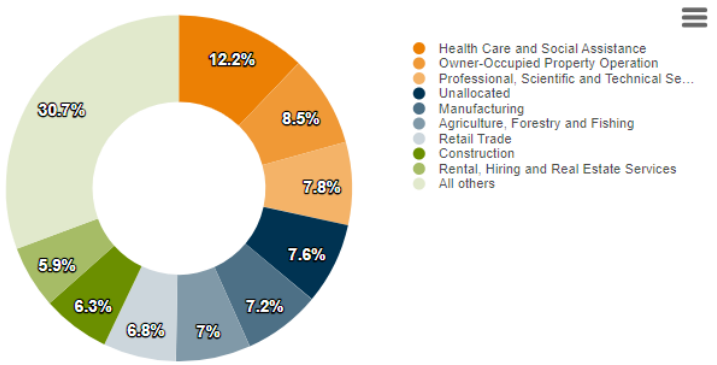
Local industries are predominantly service industries for the surrounding farming community, with industrial development growing in new industrial parks being developed at Waingawa (a services agreement with Carterton District), Solway and Upper Plain.

The five largest industry sectors in the district are Health Care and Social Assistance (12.2%), Owner Occupied Property Operation (8.5%) Professional, Scientific and Technical Services (7.8%) Manufacturing and Agriculture (7.2%), Forestry and Fishing (7%) *

***Infometrics eco profile***

https://ecoprofile.infometrics.co.nz/Masterton%20District/Gdp

## Proportion of GDP by ANZSIC 1-digit industries, 2023




## Biggest contributors to economic growth, 2013-2023

| | |
|---|---|
| Health Care and Social Assistance | $70m |
| Professional, Scientific and Technical Services | $58m |
| Construction | $36m |
| Retail Trade | $31m |
| Electricity, Gas, Water and Waste Services | $27m |
| All other industries | $167m |
| **Total increase in GDP** | **$388m** |

The town is the headquarters of the annual Golden Shears sheep-shearing competition, and the "Wings over Wairarapa" Air Show.

Masterton has Sister City relationships with Hatsukaichi in Hiroshima, Japan; Changchun, China; and Armidale in New South Wales, Australia. Masterton District Council governs the Masterton district as a territorial authority. It is made up of an elected mayor, and eight Councillors. These positions are elected within the Masterton Whakaoriori General Ward, Masterton Whakaoriori Māori Ward, and at-large, every three years. Responsibility for Council activities sits with the Mayor and Councillors.

They are elected under the 'First Past the Post' system in triennial elections, with the last election being held in October 2022.

The 2022 Local Government election included, for the first time, a Māori ward, which enhances representation at the Council table for Māori in our community.

Iwi representatives from our two Iwi (Kahungunu ki Wairarapa Iwi and Rangitāne o Wairarapa Iwi) are appointed to the Council and have speaking rights at all meetings but only voting rights at committee meetings.

## Geography

The Masterton district compromises of 229,500ha of land located between the Tararua Range to the west and the Pacific Ocean to the east. The main urban area is Masterton located on the Wairarapa valley between the Ruamāhanga, Waipoua and Waingawa Rivers. The Masterton district has 218km of water pipes, 279km of sewer pipes, 55km of stormwater pipes and 811km of roads. It has two water treatment plants and four sewerage treatment plants.

## Population

The population of the district increased slightly during the 1980s, rising from about 22,000 in 1981 to about 22,600 in 1991. The population was then relatively stable until approximately 2014/15. The most recent 2018 census data showed an increase in population to 25,557. The Statistics NZ 2023 estimated population was 29,100. At the time of the 2018 Census, there were 22,600 urban and 6500 rural and semi-rural residents (stats NZ*).

The Masterton district includes the following census area units:
Rural and semi-rural: Homebush-Te Ore Ore; Opaki (part); UpperPlain (part) ; Kopuaranga and Whareama.

- Urban: Masterton Central; Kuripuni; Cameron & Soldiers Park; McJorrow Park; Solway North; Solway South; Ngaumutawa (part); Douglas Park and Lansdowne West and East.

Key characteristics of this population base include:

- 78% of the population lives in the urban area of Masterton.
- Those who identify as Māori make up approximately 21.3% of the population (compared with the national average of 16.2%).
- Overall, 25.7% of the population was aged under 19, and 27% were aged 60 years and over, compared with 24.6% and 19.8% respectively for New Zealand.
- As illustrated by the table below, the total population in Masterton was almost unchanged for approximately 15 years, but the proportion of people aged over 60 years has been increasing by approximately 1-2% at each census count since 1991. The number/proportion of single occupant houses is steadily increasing and was 28.5% at the last census.
-

## Future growth

We expect to see population average annual growth of 1.5% per annum over the life of the plan. Masterton district's population is projected to grow from 28,900 in 2022 to 33,900 by 2032 (+17.3% over that ten years or +1.73% average growth per annum). Projections through to 2052 see the population increase to 42,100 by 2052 (+45.6% over the 30 year forecast or +1.52% average growth per annum) compared to the 2022 base.

Our population will continue to age faster than the NZ average. Infometrics data shows Masterton currently (at 30 June 2023) has more people aged 65+ (22.7% compared to 16.5%); similar numbers of people aged under 15 (18.2% compared to 18.5%) and a smaller proportion of 'working age' (15-64 years - 59.1% compared to 64.9%). Statistics NZ 2022 forecasts growth in the Masterton population aged 65+, from an estimated 6,600 people in 2023 to 8,900 in 2048 - an increase of approximately 35%. Youth (under 15 years of age) and 'working age' groups are expected to remain at similar levels throughout this period (a small decrease in under 15s and a small increase in 'working age' people). The combined effect is that the proportion of people aged 65+ will increase and Masterton's population will age, projected to move from an average age of 42.2 in 2023 to 47.7 in 2048.

We are currently working to ensure we balance demand at both ends of the demographic pyramid, providing services and opportunities that engage and contribute to the wellbeing of both our younger and our more mature populations.

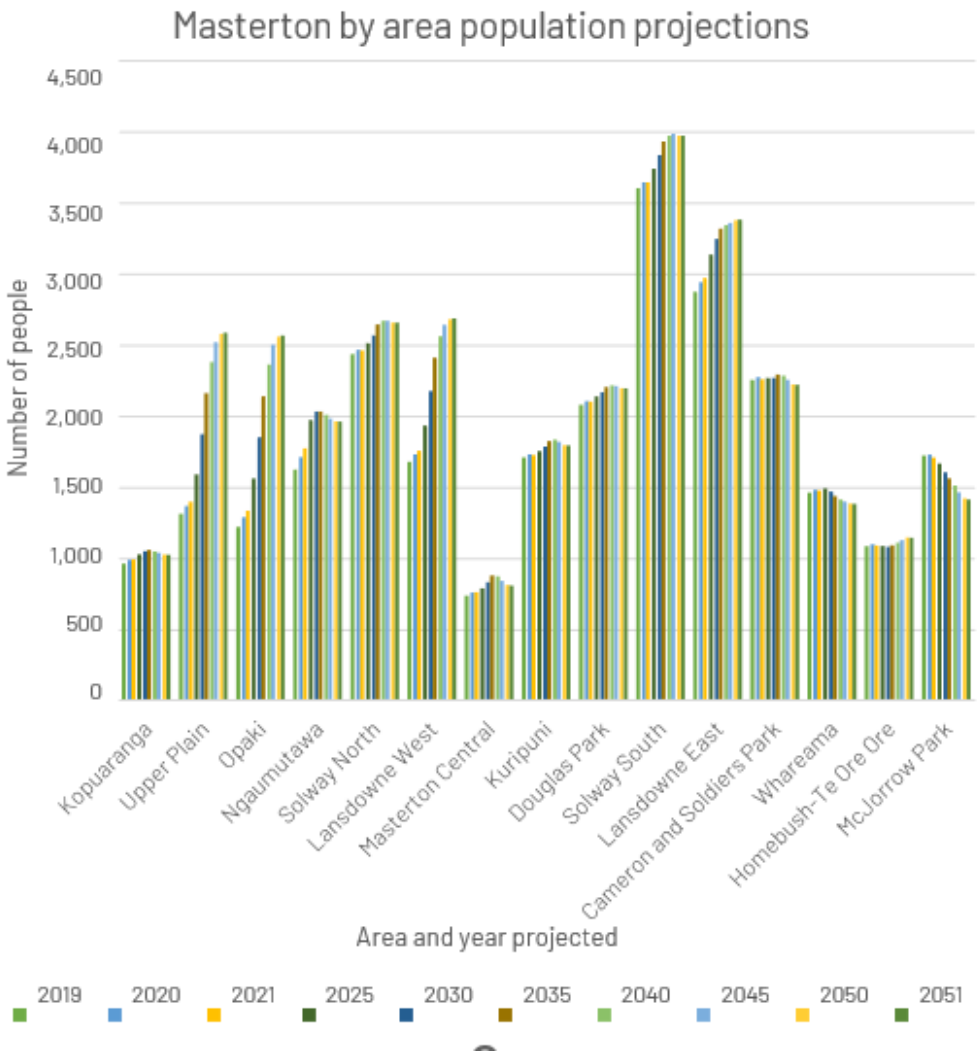
We are also becoming more diverse and we are reflecting this diversity in all that we do.

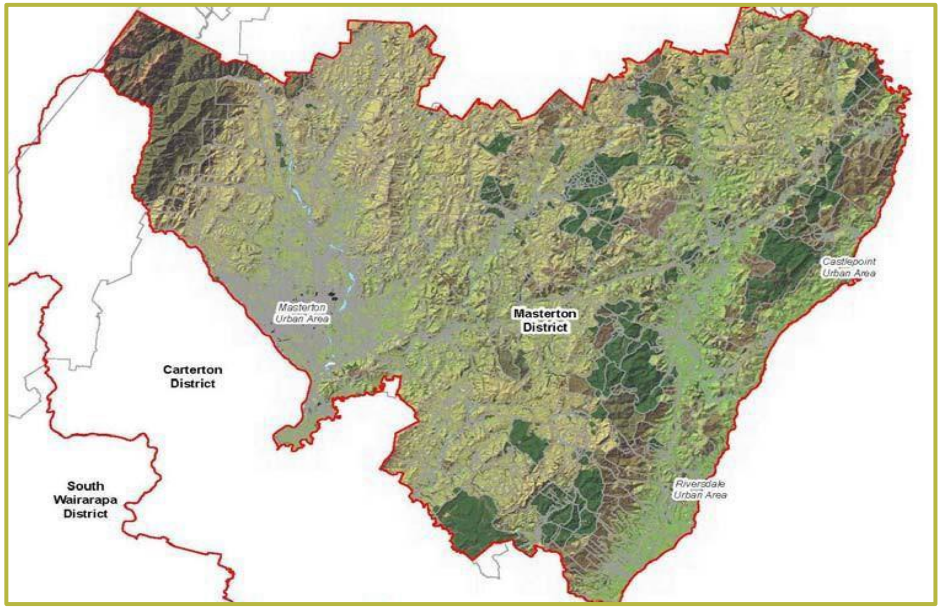
Household numbers are forecast to grow from 12,352 in 2022 to 18,902 in 2054. This equates to average annual growth of 1.66% to 2054, with higher growth of

approximately 1.95% expected in the first ten years and lower growth in the latter years.

Masterton has capacity for growth within its key infrastructure and services. Our 2021 Asset Management Plans indicated we could accommodate housing growth up to 1.8% per annum over the ten years from 2021-31 without significant impacts. We will test and reassess this as we develop the spatial plan scheduled for Year 1 of the 2024-34 LTP, noting also, that there are high levels of uncertainty regarding forecasts in the current environment.

| Masterton population aged over 65 | | | | | | |
|---|---|---|---|---|---|---|
| | | 1996 | 2006 | 2013 | 2018 | 2023 Estimated Population |
| Total population | | 23,200 | 23,000 | 24,100 | 26,400 | 29,700 |
| Population aged 65+ | | 3,200 | 3,800 | 4,600 | 5,500 | 6,600 |
| % of population aged 65+ | | (13.8%) | (16.5%) | (19.1%) | (20.8%) | (22.2%) |


Masterton by area population projections
Number of people
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Kopuaranga
Upper Plain
Opaki
Ngaumutawa
Solway North
Lansdowne West
Masterton Central
Kuripuni
Douglas Park
Solway South
Lansdowne East
Cameron and Soldiers Park
Whareama
Homebush-Te Ore Ore
McJorrow Park
Area and year projected
2019
2020
2021
2025
2030
2035
2040
2045
2050
2051


Masterton Urban Area
Masterton District
Carterton District
South Wairarapa District
Castlepoint Urban Area
Riversdale Urban Area

# STRATEGIC ALIGNMENT

## Alignment with other documents

This Infrastructure Strategy has been developed in alignment with other key documents, including Asset Management Plans for each group of assets and the 2024-34 Financial Strategy.

## Vision

This strategy recognises the Council's vision: Providing the best of rural provincial living.

It also acknowledges the community outcomes that flow from our My Masterton: Our People Our Land strategy (He Hiringa T angata, He Hiringa Whenua) and aims to deliver efficient and effective infrastructure that:

- supports a socially engaged and empowered community.
- recognises cultural pride in our identity and heritage.
- is environmentally sustainable and healthy; and
- is economically thriving and resilient.

## Evolving community expectations

Community expectations change and evolve over time and future generations want to see current thinking challenged and debated. More and more people are environmentally aware and readily embrace technological advancement. The Council acknowledges the following community expectations/aspirations within this strategy. These are themes that have been heard over time through various engagement and consultation processes, and generally align with Council's Community Outcomes:

- Increasing desire for 'green' thinking and approaches within the community, noting environmental, climate change and resilience drivers.
- Increased Iwi representation and participation in decision making.
- A desire for resilient networks and communities.
- Recognition of future generations and intergenerational equity.
- Managing urban growth well; and
- Responding to and utilising technology where appropriate.

## Regional Spatial Planning

Over the past 18 months Masterton District Council has participated in the Wellington Regional Leadership Committee (WRLC) led project to develop Te Rautaki Whanaketanga ki tua a Wairarapa-Wellington-Horowhenua Future Development Strategy (the FDS). The FDS prioritises housing and business development, as well as investment in infrastructure to support this development. The FDS guides regional policy development, including Regional and District Plan changes in the future, as well as Land Transport Plans, infrastructure strategies, councils' budgets (Long Term Plans) and other policies.

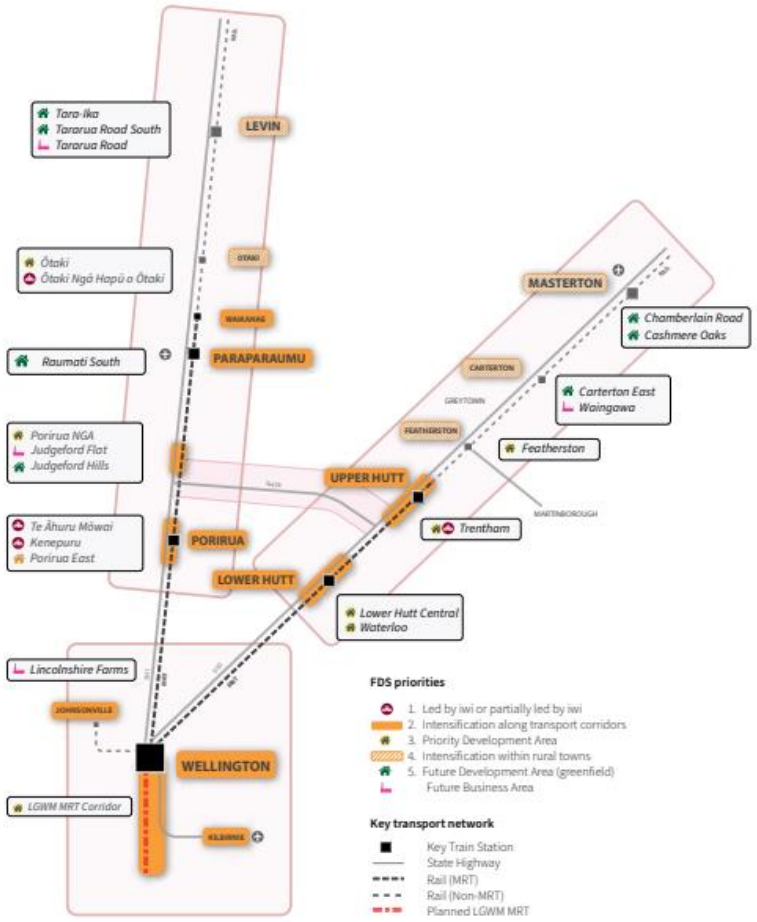
The FDS builds on and replaces the previous Wellington Regional Growth Framework. Consultation on the FDS took place over October/November 2023. The hearings and deliberations were held in December 2023, and the FDS is scheduled for adoption in March 2024. More information on the FDS is available here: https://wrlc.org.nz/project/future-development-strategy

The FDS strategic direction is:

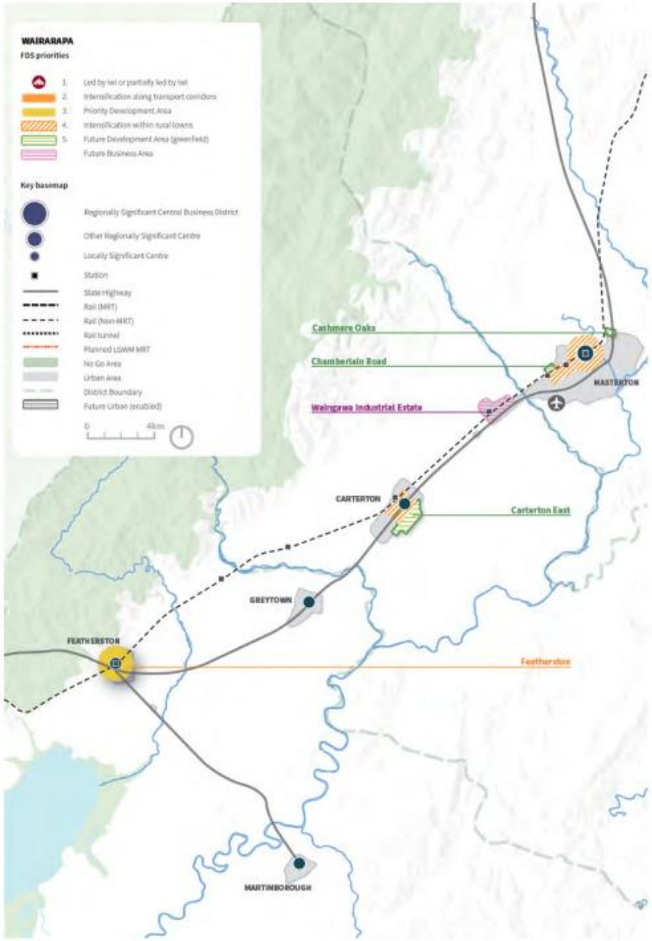
- Providing for affordable housing that meets our needs, and for compact, well-designed towns and cities.
- Realising iwi and hapu values and aspirations
- A flourishing zero-emissions region
- Protecting what we love
- We have the infrastructure we need to thrive
- Productive, resilient, inclusive and sustainable employment.

A draft Implementation Plan is being developed and will be finalised in June 2024 once participating Council's Long-Term Plans are finalised.

A corridor view of where the Wellington region will develop:




Prioritised development within the Wairarapa:


WAIRARAPA
FDS priorities
1. Led by Iwi or partially led by Iwi
2. Intensification along transport corridors
3. Priority Development Area
4. Intensification within rural towns
5. Future Development Area (greenfield)
Future Business Area
Key basemap
Regionally Significant Central Business District
Other Regionally Significant Centre
Locally Significant Centre
Station
State Highway
Rail (MRT)
Rail (Non-MRT)
Rail tunnel
Planned LGWM MRT
No Go Area
Urban Area
District Boundary
Future Urban (enabled)
0
4km
Cashmere Oaks
Chamberlain Road
Waingawa Industrial Estate
MASTERTON
CARTERTON
Carterton East
GREYTOWN
FEATHERSTON
Featherston
MARTINBOROUGH

.

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## Three Waters Reform

The Three Waters legislation introduced by the previous Government was repealed on 14 February 2024.

Two further bills will be introduced this year to progress the Coalition Government's policy "Local Water Done Well", with the first to be introduced and enacted by mid-2024, and the second introduced in December 2024 and enacted by mid-2025.

Local Water Done Well recognises the importance of local decision-making and flexibility for communities and councils to determine how their water services will be delivered in future, while ensuring emphasis on meeting rules for water quality and long-term investment in infrastructure.

Masterton District Council will assess what these changes mean for our community and come back to the community before decisions are made.

The Three Waters activities are included in our financial strategy and the infrastructure strategy. These strategies, along with other supporting information like our forecasting assumptions and disclosures, give a complete and accurate set of information on the medium-term and long-term financial situation for these services.

## National Policy Statement for Freshwater Management

The National Policy Statement (NPS) for Freshwater Management (FM) provides direction to local authorities on managing the activities that affect the health of freshwater.

The Coalition Government has commenced work on the NPS-FM replacement, this process is expected to take between 18 to 24 months and will include consultation with all stakeholders including iwi and the public.

Council has reviewed the Freshwater NPS along with the Natural Resource Plan (NRP) and Whaitua chapters relevant to Masterton District Council and we have captured the NPS requirements for planning our work and upgrading works.

Information about the Natural Resource Plan and Whaitua Chapters can be found in Masterton District Councils 3 Water asset management plans.

More information on the Government's Freshwater National Policy Statement is available at https://www.mfe.govt.nz/fresh-water/freshwater-acts-and-regulations/national-policy- statement-freshwater-management

# AIMS OF THE INFRASTRUCTURE STRATEGY

## Understanding Level of Services

This strategy intends to match the level of service the asset provides with the expectations of customers given financial, technical and legislative constraints. We use formal asset management systems and practices, which provide the Council with key benefits, such as:

- improved understanding of service level options and requirements;
- minimum life cycle (long term) costs for an agreed level of service;
- better understanding and forecasting of asset related management options and costs;
- managed risk of asset failure;
- improved decision making based on costs and benefits of alternatives;
- clear justification for forward works programmes and funding requirements;
- improved accountability over the use of public resources; and
- improved customer satisfaction.

There has been an economic impact resulting from two years of wet weather that included four storm, or heavy rainfall events. The Council's ability to respond to those events and reinstate service levels (particularly for roading and wastewater) has been a key focus of 2022 and 2023. The on-going investment in recovery and resilience and the costs of servicing the associated debt, incurred as a result of the weather events, is a factor in the Council's current financial position and strategy over the next ten years.

This strategy enables the Council, as owners of a comprehensive range of assets, to demonstrate to our customers and other stakeholders that services are being delivered in the most effective manner over at least a 30-year time period.

## Catering for growth and demand

This strategy aims to create, operate, maintain, rehabilitate and replace assets at the required level of service for present and future customers and residents in a cost-effective and sustainable manner. Therefore, we must forecast the needs and demands of the community now and in the future, and outline strategies to develop the assets to meet those needs.

The following factors have been considered in order to predict future demand, noting Council's 2023 Environmental Scan and 202-34 Assumptions provide additional context:

- demographics and population;
- economic development and commercial influences;
- climate and environmental changes; and
- demand for improvements in levels of service from other various sources including:
  - advances in available technology;
  - improving standards of living;
  - a greater understanding of customers' perceptions and expectations;
  - changing legislative requirements;
  - changes in the Council's strategic asset management; and
  - changing customer expectations.
  - Population growth, including changes in our demographics, is considered the key factor for predicting the future demand for

services and assets. Population growth is strongly aligned with economic development.

## Minimising the risk, increasing the resilience

Risk management is as much about identifying opportunities as avoiding or mitigating losses. Risk management in asset management planning is a requirement of the Local Government Act 2002 (LGA). Risk management will be used when there are:

- large potential damages/losses;
- changing economic conditions;
- varying levels of demand for services;
- investments that lie outside the ability to fund;
- important political, economic or financial aspects;
- environmental or safety issues; or
- threats or changes to service levels.

The range and complexity of issues addressed in this section are a clear indication of the increasing challenges facing our communities. We are not alone in facing these challenges. Many of these issues are national or global in their scope and impact. However, many of the most difficult challenges to resolve are new to us all, resource and energy constraints, and good models of how to deal with them are lacking.

Local government has a role and responsibility in addressing these issues as many of their impacts will be felt locally. Vital infrastructure, which underpins the daily functioning of our communities, is often wholly or partly provided by councils e.g., pipes and roads.

The community's ability to deal with increased flooding risk, wastewater challenges or possible transport fuel shortages is critically dependent on how the council manages its assets and these networks.

These issues could mean that there will be a periods of uncertainty and change for the district.

The Masterton district is particularly vulnerable to the impacts of global economic pressures given its high proportion of people on low, fixed incomes and high number of young people on low wages. Possibly correlated is the higher incidence of single occupant households, many of whom are over 65. As a result, many people's range of choice is restricted which in turn limits their ability to respond to change and build resilience

The large land mass of our district, especially relative to our metro counterparts, also means we have more dispersed communities who may be – depending on the scenario - more isolated, more at risk, less able to respond and more or less resilient.

There is a need for communities to cope with these multiple pressures and be able to adapt to new technologies and ways of life – in other words, to become more resilient. We acknowledge that the Council has a role in helping to build local resilience to potential shocks. How we plan to manage and maintain our assets is one of the ways we fulfil this role.

We do this through:

- trying to anticipate risks;
- engaging with the community as early as possible to develop options; and
- making decisions about infrastructure systems and design in such a way that possible improvements are included and choices are kept open as much as possible – adaptability is built in.
- engaging with Regional and Central Government to ensure that information and support – both financial and operational – are provide where appropriate.

A number of risks common to all key activities have been identified.

Some of these common risks have different responses and mitigations measures in the different activities. Where this is the case, the risks are included in the activity specific risk registers associated with each activity asset management plan.

Identifying, analysing, evaluating, treating, monitoring, and communicating risks associated with any activity, function, or process in a way that will enable organisations to reduce losses and maximise opportunities is known as risk management. Identification of opportunities is a key component of risk management, along with preventing or minimising losses.

The Local Government Act of 2002 mandates the inclusion of risk management in asset management planning. It ought to be applied when:

- Significant potential losses/damages.
- Important political, economic, or financial considerations.
- varying levels of service demand.
- investments that are outside of funding capabilities.
- environmental or safety concerns.
- Threats or modifications to service standards

The systematic application of management policies, procedures, and practices to the tasks of identifying, assessing, treating, and monitoring those risks that could prevent a local authority from achieving its strategic or operational objectives, or plans, or from adhering to its legal obligations is referred to as the risk management process.

MDC approved a Corporate Risk Management Policy in September 2022. According to the policy, the key goals are to:

- enhance MDC's ability to achieve business objectives.
- maintain the integrity of services.
- safeguard assets, people, finances, and property
- create a culture where all employees accept responsibility for managing risk.
- ensure that MDC can adequately and appropriately deal with risk and issues as they occur.
- demonstrate transparent and responsible risk management processes which align with and demonstrate good governance.
- identify opportunities and promote innovation and integration.
- record and maintain a risk management framework aligned with the AS/NZS ISO 31000:2018 standard.
- utilize risk management process outputs as inputs into MDC decision-making processes.

The Masterton District Council Policy provides a framework to effectively manage risks inherent to the Council's operations which can affect the achievement of its goals and objectives by:

- Ensuring risk-based information is available to support good decision-making
- Providing assurance that risks are being appropriately addressed and managed
- Ensuring compliance with legislation and regulations.

Managing the life of our assets to ensure our assets are fit for purpose. All assets will eventually reach the end of their useful life and need to be replaced or retired. We manage each asset to ensure it's working at its optimum level. Our assets are measured on:

- what the asset is and what is its purpose (description);
- asset capacity and performance;
- asset condition (including age);
- asset current valuation; and
- asset maintenance.

The activity of asset management is a continual process that incorporates the concept of continual improvement. Over time it is intended that the asset management plans and processes will be improved with better information, better management systems and a more holistic, lifecycle approach to the long-term management of the infrastructural assets.

Council has installed an asset management system called "Assetic" which is a central strategic register and asset management system for all asset classes. It includes in-built reporting, works tracking and life-cycle costing. It is integrated with 'Assetic Predictor' for a complete Strategic Asset Management planning and operational system capable of holding asset information.

Council funds asset replacement and renewal through depreciation and, where necessary, loan funding. Generally, this is sufficient to ensure that the asset is maintained at a suitable standard and the level of service is maintained. However, the current system does not allow Council to clearly articulate any back log or underinvestment in the relevant assets. Council intends to improve this knowledge as the asset management system matures and this will be reported on in future iterations of the Infrastructure Strategy and Asset Management Plans.

Council has also developed an Engineering Lifelines plan, which identifies vulnerable components of assets and ways of mitigating the degree of disruption likely to be incurred in a civil emergency. Mitigating work identified in the plan will be progressively implemented.

## WATER INFRASTRUCTURE ASSETS

Water assets are grouped by each population centre in the Masterton district into water aggregated communities for analysis. The different water communities identified are:

- Urban fully served. Masterton and Tinui are the only communities in this group to date.
- Semi-served (non-potable water only). Taueru, Castlepoint toilets and Wainuioru are the only communities in this group to date.
- Unserved (roof water) includes Whakataki, Mataikona, rural schools (e.g. Mauriceville and Whareama), rural halls, and private rural facilities (e.g. Ararangi Camp, Camp Anderson, Riversdale Motor Camp).
- Unserved (ground/surface water). See above – Unserved (roof water)
- Unserved limited population. Not applicable to Masterton.
- Industrial communities with Building Act requirements for water and wastewater.
- Private water supplies. This includes Castlepoint, Fernridge, Upper Plain, Mauriceville, Opaki and Taueru (Tauweru), and lastly the Wainuioru scheme which is a non-potable supply owned by the Council but operated by a User Committee.

The total optimised replacement cost of water assets inclusive of supply, reticulation & rural supplies as of 30th October 2023 was $155,492,646. With an optimised depreciated replacement cost of $70,626,968 (Source - WSP/Opus valuations Oct 2023)

### Critical assets

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

The critical assets that are identified in the asset management plan are:

- The Kaituna Water Treatment Plant;
- The trunk main from Kaituna to the Masterton urban area;
- Urban storage reservoirs, Upper Plain, Titoki Street, and Manuka Street; and
- Tinui reservoir and treatment plant.

### Risks

Risks, at a strategic level, relevant to the water supply assets were identified and assessed by both Council staff and Waugh Consultants Ltd.

Risks, at an operational level, relevant to the water supply assets have been identified as a result of this work, the 2023 WSP review, Leak Detection Studies, council workshops and Condition Assessment.

Operational risks identified through these projects have been assessed and incorporated into the 2024 Water Supply Asset Management Plan.

### Levels of service

Levels of service were reviewed as part of the development of the 2024-34 Long-Term Plan. The community were asked for feedback on Levels of Service as part of the 2022/23 Annual Plan process to feed into the review. The 2023 Community Satisfaction Survey was also taken into consideration. Water supply levels of service are summarised as:

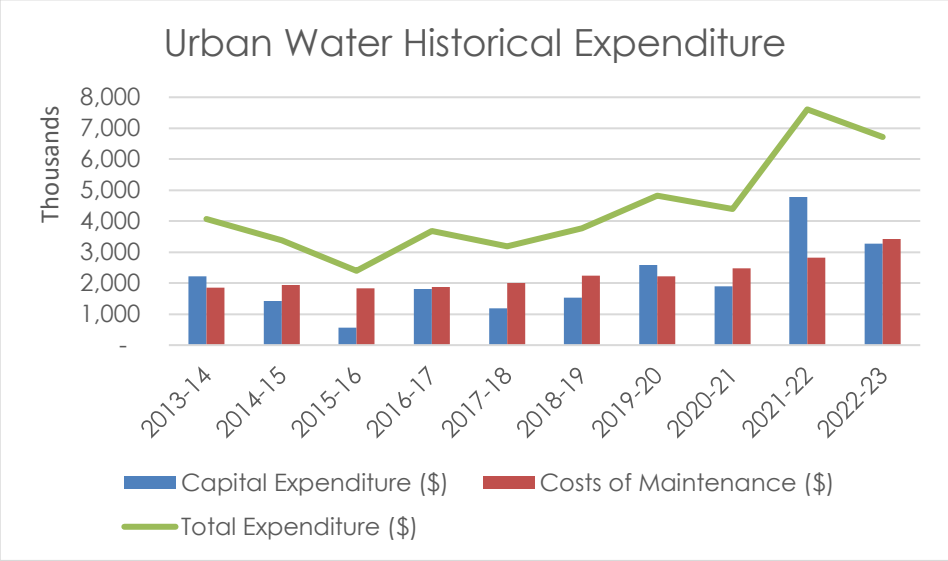
- Providing efficient and effective water supply systems.
  - This level of service aims to ensure the needs of local communities are met regarding the treatment and supply of domestic and industrial water requirements. This contributes to both the public health of the community and the community's capacity for growth and economic development, now and in the future.
- Providing water supply services in a way that is acceptable, safe

and has minimal environmental impact.

- This level of service aims to ensure that services are provided in a way that is equitable and culturally acceptable, whilst maximising public health opportunities and minimising environmental impact.

## Historical expenditure

The graph below shows the historical expenditure on water assets.



## WASTEWATER INFRASTRUCTURE ASSETS

The main wastewater systems in the Masterton district are located in Masterton, Riversdale, Castlepoint and Tinui. They comprise the following:

- Masterton – utilises an urban wastewater reticulation network and a treatment plant with waste stabilisation ponds that dispose primarily to border strips and supporting infrastructure and then to the Ruamāhanga River.
- Riversdale – a wastewater reticulation system and a treatment plant with land disposal via an irrigation scheme.
- Castlepoint – a wastewater reticulation system and a waste stabilisation pond followed by three wetland cells.
- Tinui – a wastewater reticulation system, then discharge to constructed wetland.

The total optimised replacement cost of water assets inclusive of reticulation & treatment as of 30 Oct. 2023 was $234,333,597. With an optimised depreciated replacement cost of $140,773,399. (Source - WSP/Opus valuations Nov 2020)

- Critical assets

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

The critical assets that are identified in the asset management plan are:

- The Colombo Road pump station
- Homebush Wastewater treatment facility (Inclusive of the wetlands and settling pond areas)
- Castlepoint Wastewater treatment plant
- Riversdale Wastewater treatment plant
- The Wastewater trunk mains network
- Pump stations

### Risks

Risks, at a strategic level, relevant to the wastewater assets were identified and assessed by both Council staff and Waugh Consultants Ltd.

Risks, at an operational level, relevant to the Wastewater assets have been identified as a result of this work, the 2014 PHRMP review, 2020 risk workshops, Leak Detection Studies and Condition Assessment. Operational risks identified through these projects have been assessed and incorporated into the 2024 Wastewater Asset Management Plan

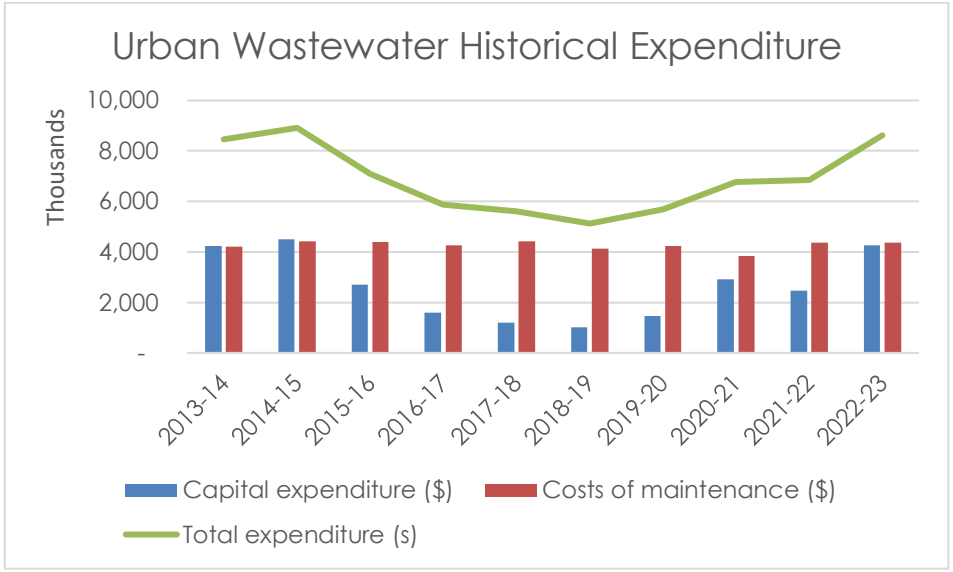
## Levels of service

Wastewater levels of service are summarised as:

- Providing efficient and effective wastewater systems for the collection, transfer and disposal of wastewater.
  - This level of service aims to ensure the needs of local communities are met regarding the treatment and supply of domestic and industrial water requirements. This contributes to both the public health of the community and the community's capacity for growth and economic development, now and in the future.
- Providing wastewater disposal that is acceptable, safe and has minimal impact on the environment; and
  - This level of service aims to ensure that services are provided in a way that is equitable and culturally acceptable, whilst maximising public health opportunities and minimising environmental impact.
- delivering inspection, monitoring and enforcement services of trade waste disposal to protect community health and safety.

## Historical operating expenditure

The graph below shows the historical operating expenditure on wastewater assets.




Note: Includes costs associated with Homebush Wastewater treatment plant.

# STORMWATER INFRASTRUCTURE ASSETS

The stormwater system consists of approximately 55km of pipes and approximately 734 manholes/sumps stop banks, and a retention dam. The Council also contributes to designated stop bank protection works on the Waingawa and Ruamāhanga Rivers.

The total optimised replacement cost of stormwater assets as of 30th October 2023 was $63,060,805. With an optimised depreciated replacement cost of $36,819,933. Possible new stormwater assets are also funded from private developments. Source - WSP/Opus valuations Oct 2023)

## Critical assets

Critical assets can be defined as those that are especially significant to societal wellbeing and that therefore merit priority attention by utilities in emergency response and recovery. They are also defined as those which have a high consequence of failure. For example, a transport route may be critical because it carries high volumes of traffic, or if it is the only access route to a hospital. The critical assets that are identified in the asset management plan are:

- the Chapel Street (Town) drain; and stormwater connections to the Waipoua stop bank.
- Fifth Street retention pond.

## Risks

There are risks associated with the collection of stormwaters and those stormwater assets, and the main risk identified that may pose a threat to the Councils stormwater assets is both possible climate changes and the resulting GWRC predictions for flooding extents.

Risks, at a strategic level, relevant to the wastewater assets were identified and assessed by both Council staff and Waugh Consultants Ltd.

Risks, at an operational level, relevant to the Wastewater assets have been identified as a result of this work, the 2014 PHRMP review, 2020 risk workshops, Leak Detection Studies, and Condition Assessment. Operational risks identified through these projects have been assessed and incorporated into the 2024 Stormwater Asset Management Plan.

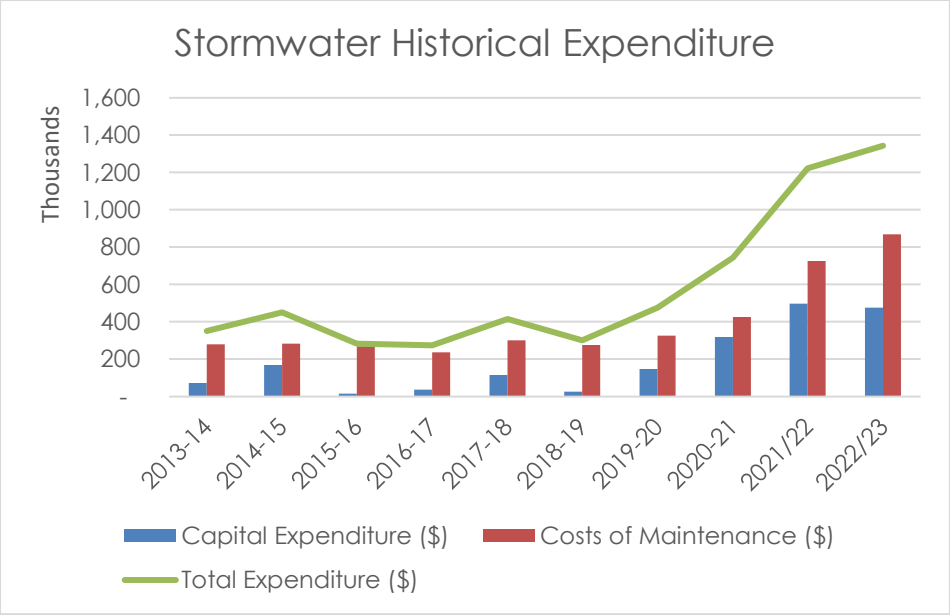
## Levels of service

Stormwater waste levels of service are summarised as:

- Providing an efficient and effective stormwater system to minimise the impact of heavy rainfall and reduce flooding risk.
  - This level of service aims to reduce the impact of heavy rainfall and the risk of flooding and consequent impacts, such as public health risks and damage to private and public property, industry, roads and infrastructure. This contributes to both the public health of the community; and the community's capacity for growth and economic development, now and in the future.
- Delivering stormwater services in a manner that is acceptable, safe and where possible enhances the environment.
  - This level of service aims to ensure that services are provided in a way that is equitable and culturally acceptable, whilst maximising public health opportunities and minimising environmental impact.
- Percentage of stormwater renewal completed.

## Historical operating expenditure

The graph below shows the historical operating expenditure on stormwater assets.



# SOLID WASTE INFRASTRUCTURE ASSETS

Masterton District Council provides, maintains, and manages solid waste management services to offer a dependable, safe, and affordable collection and disposal service that promotes recycling, encourages responsible trash disposal, and fosters a cleaner, greener environment.

Solid waste assets facilitate the collection and transportation of solid waste. Assets are located at the following locations:

- Solid waste assets include the following:
  - Nursery Road Transfer Station
  - Nursery Road Landfill (closed)
  - Clean fill Area (for Landfill cover)
  - Hazardous Wastes Temporary Storage
  - Special Waste Disposal Facility
  - Hastwell Landfill (closed)
  - Tinui Landfill (closed)
  - Castlepoint Transfer Station
  - Riversdale Transfer Station
  - Mauriceville Transfer Station (closed)
  - Recycling wheelie bins

Total solid waste assets optimised replacement valuation as at 2020 was $1,595,590 Source - WSP/Opus valuations Nov 2020)

The Regional Waste Minimisation Plan (WMMP) 2023- 2029 has been adopted. This is a crucial document for figuring out how the Masterton District Council's solid waste asset management plans will impact the level of service in the future.

## Critical assets

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

There are no critical assets identified in the asset management plan.

## Risks

A strategic level risk assessment has been completed via a review of Masterton District Council's Asset Management Procedures and Risk Management (Waugh Consultants, 2006), in collaboration with asset managers, and through the creation of new asset management procedures at Masterton District Council (Waugh Consultants, 2011)

The impact of the Waugh Update (2011, 2014 & 2020) was reviewed at a strategic level in conjunction with the risk assessments carried out by Council staff. The risk management analysis is now consistently incorporated into all respective asset management plans, including the 2024 Solid Waste Asset Management Plan.

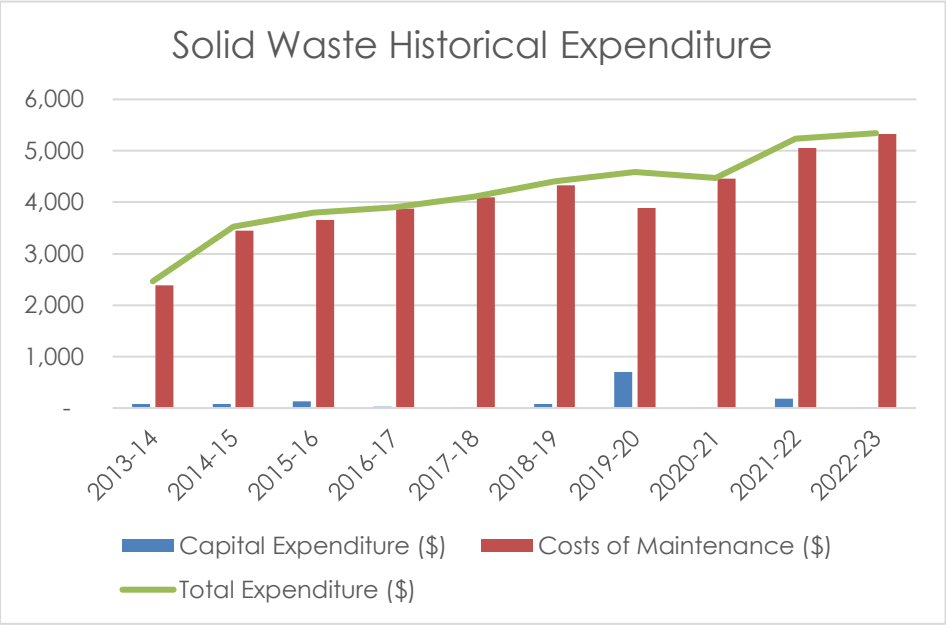
## Levels of service

Solid waste levels of service are summarised as:

- Provide solid waste management facilities and solutions across the district in accordance with the solid waste management plan for the Wairarapa.
  - This level of service aims to ensure the needs of local communities are met about the transfer and disposal of both domestic and industrial waste products. This contributes to both the public health of the community and the capacity for growth and economic development, now and in the future.
- Operating the rural and urban transfer, composting and recycling operations in a safe and environmentally-sensitive manner.
  - This level of service aims to ensure that services are provided in a way that is safe and acceptable, whilst maximising public health and minimising environmental impact.

## Historical operating expenditure

The graph below shows the historical operating expenditure on solid waste assets.



## TRANSPORT (ROADING) INFRASTRUCTURE ASSETS

There are approximately 281km unsealed and 521km of sealed carriageway in the roading network. The network also includes approximately 208km of footpaths, 2800 streetlamps, 4832 signs, 40km of drainage culverts as well as 202 km of kerbing, channels and associated drainage structures. Hood Aerodrome has a 1250m sealed runway, three grass runways, a terminal and multiple privately-owned hangers and buildings. There are 5,87km of cycle lanes and shared paths and 267 bridges.

The total optimised replacement cost of roading assets as at 30 June 2022 was $840,740,319. With an optimised depreciated replacement cost of $651,957,155. Annual depreciation (a measure of asset consumption) for 2023/24 was calculated $7,810,387.

Currently the annual cost for the maintenance and renewals activity is approximately $10.6 per km of network per year. Compared to our peers of other provincial centres we are currently at the lower end of the investment scale in all areas

### Critical assets

An assessment of Critical Assets has been undertaken in line with the process developed by AECOM and used by NZTA and several other local authorities.

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

In determining critical roading assets, a criticality framework has been proposed which incorporates three elements:

1. ONRC/ONF classification.
2. Access to lifeline utilities or a lifeline evacuation route.
3. Access to essential services

The table below summarises the key critical roading assets and is taken from the AECOM and NZTA study listed in the Roading Asset Management Plan.

Critical roads summary:

| Road (and extent) | Criteria | Area in District |
|---|---|---|
| Akura Road | SH Detour | Masterton |
| Blackhill Road to 11 Blackhill Road | Fire station - Tinui | Tīnui |
| Chapel Street | Fire Station – Masterton<br>Resthome - Wairarapa Village | Masterton |
| Church Street to Columbo Road | Police Station - Masterton | Masterton |
| Cole Street | Resthome - Lyndale Manor<br>Resthome -Lyndale Villa | Masterton |
| Colombo Road | Resthome - Kandahar Court | Masterton |
| Cornwall Street to 3 Cornwall Street | Resthome -Cornwall Rest Home | Masterton |
| High St Solway | School - Hadlow Preparatory School | Masterton |
| Homewood Road to Waiorongo Road | District Road | Riversdale |
| Lincoln Road | SH Detour | Masterton |
| Manaia Road | SH Detour<br>Flight - Hood Aerodrome | Masterton |
| Manawa Road to Alfredton Tinui Road | District Road | Masterton |
| Main Road | Hall - Taueru | Masterton |
| Masterton Stronvar Road | School - Wainuioru | Wainuioru |
| Ngaumutawa Road | SH Detour | Masterton |
| Opaki Kaiparoro Road | SH Detour<br>Fire station - Mauriceville | Mauriceville |
| Oxford Street to 15 Oxford Street | Resthome - Ultimate Care Lansdowne Court | Masterton |
| Paierau Road | SH Detour | Masterton |
| Pownall Street | School - Wairarapa College | Masterton |
| Roberts Road to Lansdowne Crescent | Resthome - Kandahar Home | Masterton |

| | | |
|---|---|---|
| South Belt | SH Detour | Masterton |
| South Road to Manaia Road | School - Masterton Primary School | Masterton |
| Te Ore Ore Road | Hospital - Wairarapa Hospital | Masterton |
| Te Whiti Road | SH Detour | Masterton |
| Titoki Street | Resthome - Lansdowne Park Village | Masterton |
| Totara Street to Titoki Street | Resthome - Kandahar Home | Masterton |
| Upper Plain Road to 767 Upper Plain Road | WTP – Masterton, Hospital - Glenwood Masonic Hospital | Masterton |
| Villa Street | SH2 Detour | Masterton |
| Whangaehu Valley Road | District Road – (Route 52) | Whangaehu |

## Risks

Key risks addressed in the 2024 Roading Asset Management Plan include:

- A lack of business continuity planning
- Lack of Succession Planning
- Poor quality of vested assets
- Inadequate insurance

Section 8.5 of the Roading AMP 2024 – 2034 details the Roading risks and Council response to those risks.

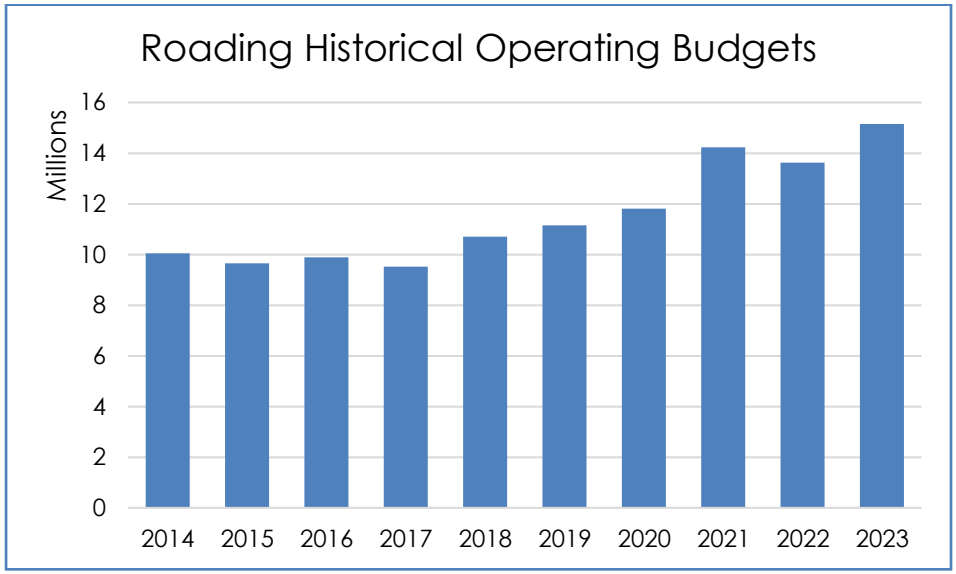
## Levels of service

Roading levels of Service are summarised as:

- Road safety
- Road condition
- Road maintenance
- Footpaths

### Historical operating expenditure

The graph below shows the historical operating expenditure on roading assets.



# PARKS, OPEN SPACES AND COMMUNITY FACILITIES INFRASTRUCTURE ASSETS

In February 2021 Council adopted its first Parks and Open Strategy (POSS). Council is committed to using the POSS and the recommendations as a framework and guide for planning, maintenance and investment decisions for planning including the Annual Plan and Long-Term Plan processes, as well as Asset Management.

Council owns, maintains and manages diverse property and community facilities. These include assets such as Waiata House, Masterton Airport (Hood Aerodrome), the Library and Archive, Mawley Park camping ground, senior/community housing, other housing, rural halls, public toilets, sports clubs/facilities.

## Critical assets

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

There are no critical assets identified in the asset management plan for Parks and Open Spaces or for Property and Facilities. We acknowledge that some assets that may not meet our definition of critical are considered to be of significant value to the community.

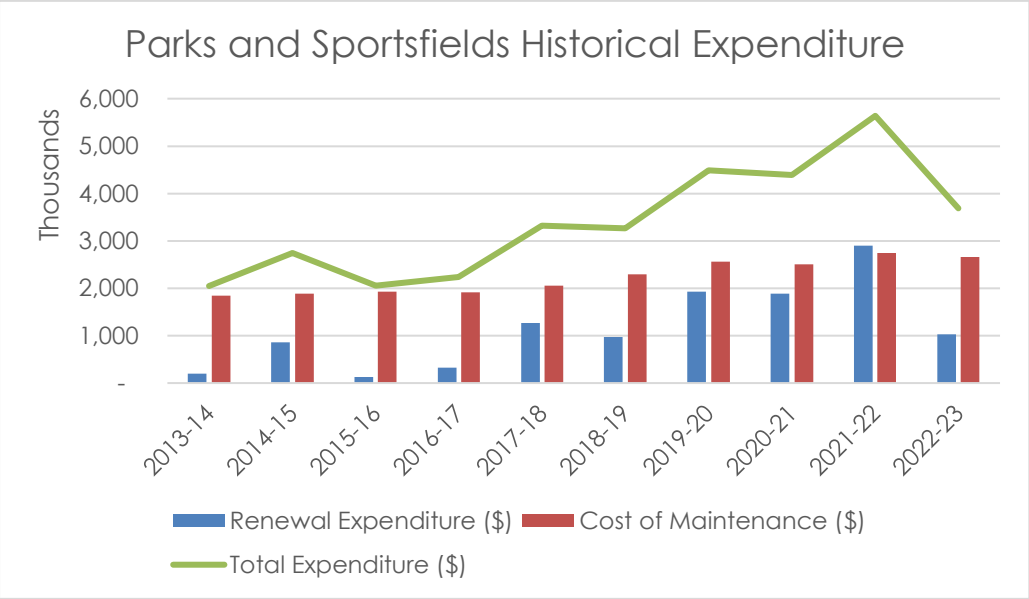
## Asset management

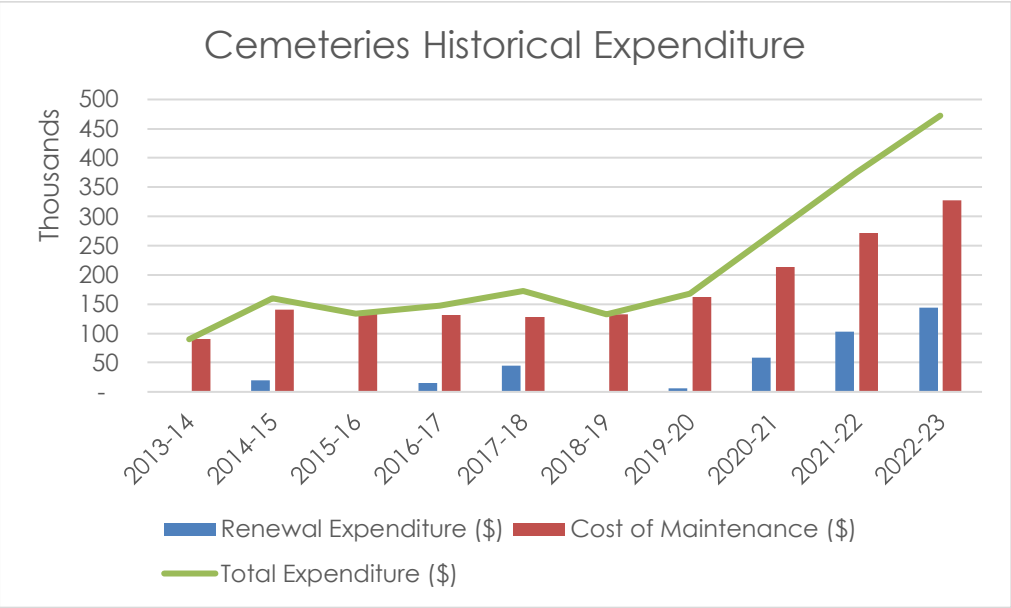
Council has installed an asset management system called “Assetic’ which is a central strategic register and asset management system for all asset classes. It includes in-built reporting, works tracking and life-cycle costing. It is integrated with 'Assetic Predictor’ for a complete strategic asset management planning and operational system capable of holding all asset information. As of February 2024, property and community facility

assets have not transferred onto Council Asset management System (Assetic) but will be one of the next Council asset groups to do so.

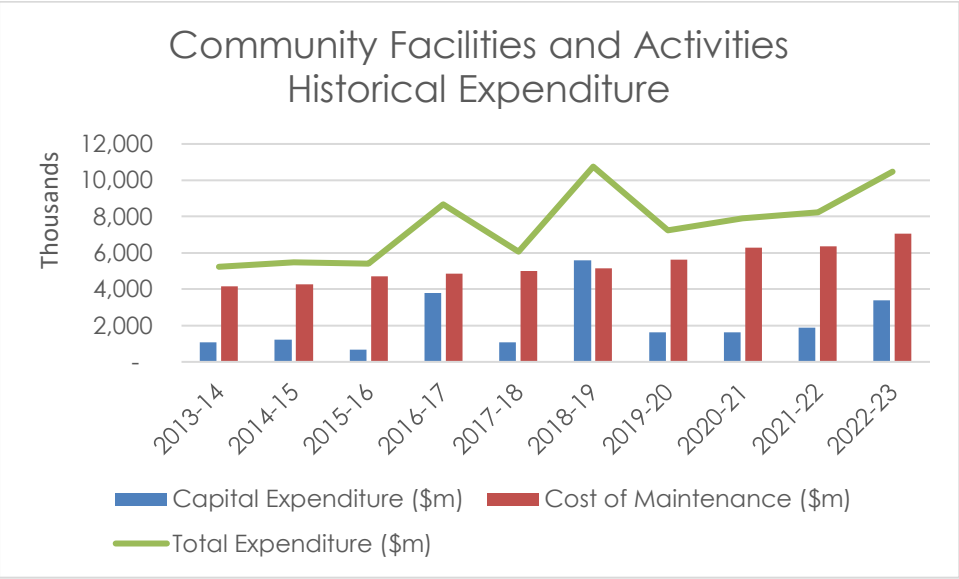
## Historical operating expenditure

The graph below shows the historical operating expenditure on parks and community facilities assets.






Assets also include the Trust House Recreation Centre which comprises the War Memorial Stadium, fitness gym and indoor/outdoor swimming pools and the all-weather athletics track and associated facilities the town hall, cemeteries and reserves.




Hood Aerodrome runway assets optimised replacement valuation as of 2023 was $6,314,327. Source - WSP/Opus valuations Oct 2023)

## Risks

There are risks associated with Parks and Open Spaces assets, and the main risk identified is possible changes to climate. Climate change affects how council manages its parks and reserves assets both now and in the future and how these assets are affected by associated activities due to climate change, in particular the availability of water for our sports fields and gardens

Current operational risks associated with Property and Facilities include:

- Health and Safety
- Constant compliance with Standard Operating Procedures
- Legislative requirement

# MAINTENANCE STRATEGIES

Maintenance strategies have been developed to achieve cost effective maintenance to maintain assets to meet the intended levels of service. We have determined that the most effective way to achieve this objective is to contract out the network maintenance works to commercial contractors.

We will review the cost-effectiveness of the current arrangements for meeting the needs of the community within the district for good-quality local infrastructure, local public services, and the performance of regulatory functions according to Council's review schedule in accordance with Section 17a of the LGA.

## Data confidence

Data confidence is rated for all asset streams in the Asset Management Plans and is summarised the table below.

Confidence is based on the quality of information available, the extent of the network that has been inspected or the availability of as-built plans. Historic expenditure is known and therefore has a high degree of confidence. Asset condition is based on the available data, which is known to be incomplete. It is anticipated that the level of confidence will improve over time as data is captured.

# OUR APPROACH TO ASSET MANAGEMENT

The following principles and issues set out the long-term approach used to manage the Council's infrastructure.

The data confidence levels for this asset are shown in the below table where, a = highly reliable, b = reliable, c = uncertain, and d = very uncertain.

| Data Confidence | | | | |
|---|---|---|---|---|
| Attribute | D | C | B | A |
| Physical parameters | [redacted] | [redacted] | [redacted] | |
| Asset capacity | [redacted] | [redacted] | [redacted] | |
| Asset condition | [redacted] | [redacted] | | |
| Valuations | [redacted] | [redacted] | [redacted] | |
| Historical expenditures | [redacted] | [redacted] | [redacted] | [redacted] |
| Design standards | [redacted] | [redacted] | [redacted] | |

## Renew or replace assets

The objective of asset management is to create, operate, maintain, rehabilitate and replace assets at the required level of service for present and future customers in a cost effective and sustainable manner. Capital investment decisions are determined by the following considerations:

- When should existing infrastructure be replaced?
- When should the Council invest in improving the existing service?
- How much needs to be invested to provide infrastructure for a growing community?

The Asset Management Plans for each infrastructure activity provide the details of the renewal programme.

## Response to community growth or decline

Projections suggest that, without intervention, Masterton's population will increase by 1.5% per annum.

Existing Council systems and services (such as Kaituna water supply and the Homebush wastewater treatment plant) have the capacity and capability to accommodate increasing development or demand resulting from economic or population growth demands that are beyond the current projected growth forecasts.

## Lifecycle renewals

The Optimised Renewal Decision Making process is the primary basis for making lifecycle renewal decisions. This process is a risk-based methodology which assesses the probability of each failure mode (including structural, capacity, performance, age, operational and performance) and the consequence (or damages) of the failures.

A scoring system of 1 to 5 is employed to quantitatively assess the risk components e.g., structurally failed sections will attract a failure mode probability of 5. The risks of failure (for each failure mode) of each section are assessed and calculated by quantifying the product of their probability and consequence of failure.

Assets with a high risk of failure are then ranked and the top group is included in the priority 1 list. The ongoing programme of collecting further asset information and variation of market prices for asset renewal/replacement, as well new technology advances in the associated industries, mean that the priority list is provisional and will be subject to change with new information. Lifecycles of renewed assets vary depending on type but are typically 18 years for road reseals, 25 years for footpaths and 60 to 80 years for pipework.

## Planned increase or decrease in the levels of service

Levels of service were reviewed through the 2024-34 LTP process. A programme of work relevant to this Strategy has been scheduled as a result of that review. This includes:

- Review Mawley Park
- Rural Halls and other asset divestment
- Redevelopment of public library
- Henley and Remembrance Lakes

If other level of service changes are made, these will be incorporated in future Long- term Plans (LTP). Key factors in determining any changes to the current levels of service are affordability, user expectations and the willingness of the community to pay.

## Maintain or improve public health

Our focus is to maintain Masterton's high drinking water quality. Due to nature of our water supply operations, substantial changes are not necessary.

The Ministry of Health has an ongoing programme of improving standards for small and rural drinking water suppliers. Ongoing infrastructure investment is required to achieve compliance with these standards. This will raise affordability challenges for users of small supplies into the future. The Council has acknowledged, within the water supply asset management plan, assistance for rural water schemes to meet future drinking water standard compliance. How this provision will be spent is dependent on any changes to the Drinking Water Standards.

## Natural Resources Plan

Greater Wellington Regional Councils (GWRC) Natural Resources Plan (NRP) became fully operative on 28 July 2023

The NRP for the Wellington region is an integration and replacement of five regional plans for soil; fresh water; air; discharges to land; and the coastal marine area.

The NRP sets targets and rules for all activities in the Wellington region that have the potential to affect the natural environment, biodiversity and landscape values.

## Demand drivers

It is possible that factors in the future could change the demand on the Council's infrastructure assets. The asset management plans provide an analysis of these drivers and possible impacts and are summarised in the table below,

| Demand drivers | | |
|---|---|---|
| Demand drivers | Future Impact | Future possible operational demands |
| Population | Low/Med | Minor impact on demand |
| Commercial Influences | Low/Med | Demand is expected to increase at the Waingawa Industrial area |
| Climate | Med/High | Demand likely to increase in hotter/ drier periods and more severe storm events |
| Tourism | No/Low | Unlikely to impact significantly on demand |
| Land Use | Low/Med | Demand may increase from large wood processing sites supplied by Kaituna and/or Tinui |
| Improvement in the level of service | Med | Although demand for quantity is not expected to change, demand for improvement in water quality is anticipated |
| Changes in customer expectations | Low/moderate | Outcomes from public consultation |
| Water standards | Moderate/High | More stringent standards applied to water production and to rural water schemes. |
| Wastewater Volume/ Mix | Low | Negligible |
| Solid waste Volume/Mix | Low/moderate | Minor impact on demand |
| Transport traffic volumes | Moderate | Increased maintenance and renewal program |
| Heavy Class Vehicles | Moderate | Lifting weight restriction from rural bridges |

| Demand drivers | | |
|---|---|---|
| Demand drivers | Future Impact | Future possible operational demands |
| Pastoral Farming practices | Low | Minor impact on demand |
| Land use (Forestry) | Moderate/High | Construction of an eastern bypass for Masterton was investigated in 2011 and found not economically viable. The report is to be reviewed in 2019. |
| Footpath's (ageing population) | Moderate | Footpath surfaces and widths will increasingly need to be upgraded to accommodate growing numbers of mobility scooters |
| The usage of walkways and other passive parks facilities | Medium | Review of the trails network |
| Parks playing surfaces | Low/Medium | Review the requirements of each park facility |

## Risk and resilience for infrastructure

The Council carries material damage insurance cover on all its buildings and significant above-ground assets. We are also a member of the Local Authority Protection Programme fund (LAPP) which is a mutual fund scheme designed to cover our 40% contribution to meet the costs of restoring underground infrastructure in the event of a disaster. The balance of 60% is expected to be met by central government's Disaster Recovery Fund. Damage to roads and bridge assets in the event of natural disaster events (including flooding) will be funded by way of our annual roading budget, reserve funds and the NZ Transport Agency (NZTA) share of the damage incurred.

The financial resilience of the Council in the face of unexpected costs is also supplemented by having cash reserves of based on having cash reserves of $16 million. These funds are available to meet immediate recovery costs and would be expected to be reimbursed once appropriate funding sources are confirmed.

Our asset management practices also need to include a stronger understanding of the resilience of our infrastructure networks, especially key pinch-points and the degree to which different parts of networks are critical to overall performance.

There is a need to increase the sophistication of how we think about resilience, shifting beyond a narrow focus on shock events or infrastructure failure and thinking more about interdependencies, levels of service and community preparedness.

A longer-term view needs to be taken with increased focus on adapting to slower changes over time, including climate change.

Importantly, increased resilience is not necessarily about making things stronger or investing more and is quite often achieved by operational changes. Some key elements of resilience attributes are:

- organisational performance;
- community preparedness;
- service delivery;
- adaptation;
- financial sustainability;
- interdependencies; and
- responsibility.

## OPERATIONAL RISKS

The key identified operational risks that would affect the performance of our infrastructure assets are detailed below.

### Water Supply Assets

- Contamination to Masterton district drinking supplies. Given recent drinking water contamination in supplies around the country, our focus is to ensure Masterton's drinking water quality remains at the highest possible level. The nature of Masterton water supply operations mean substantial changes are not envisioned and the Council has developed a Water Safety Plan to manage this risk.
- Future "water take" consents from the Waingawa River being reduced. Options for additional water storage and demand management with meters are included in this strategy.

### Wastewater Assets

- Wastewater treatment plant capacity. Options to increase treatment capacity at Homebush are included in this strategy.
- Pipe capacity and wastewater overflows. Blockages and stormwater inflows can cause overflow. We have an Inflow and Infiltration strategy to minimise these events. The direction of further work will be guided by independent engineering advice. Council has received some one-off funding from central government to assist this work as a way of improving the resilience of the wastewater network.

### Stormwater Assets

- Blockages to the stormwater network. Blockages can cause localised flooding. Maintaining the network and associated waterways and enforcing bylaws will help us keep the stormwater network performing.
- Severe Tropical Cyclone Gabrielle was a severe tropical cyclone that devastated parts of the North Island of New Zealand and affected parts of Vanuatu and Australia in February 2023.
- Cyclone Gabrielle followed closely timed severe weather events, including floods. Cyclone Gabrielle had a significant impact on Masterton, NZ, in February 2023. Tinui homes were flooded, leading to discussions between affected owners and Masterton Council. Coastal communities in Wairarapa faced isolation due to slips and flooding, prompting support from the Horowhenua District Council. The aftermath prompted the Wairarapa mayors to establish a Relief Fund for those impacted by Gabrielle.

### Solid Waste Assets

- Recycling processing and solid waste transportation. Being able to recycle more and having to transport less waste will benefit our community.

### Roading Assets

- Slips and flood damage. Work on rural roads and pavement

drainage will aid in the prevention of slips and flood damage. This work will also assist out stormwater network.

### Parks, Property and Community Facilities Assets

- Earthquakes and water supply to parks. Earthquake strengthening or alternative options for public and council owned buildings has started. The Council is aware that water supply to our parks will be a challenge in future years. Future work may include sewer mining, water harvesting and increased planting of drought-tolerant species.

# OTHER RISKS

## Climate change and stormwater protection

Climate change will increase the risks from natural hazard events that already occur within the district, particularly as a result of:

- sea level rise, exacerbating the effects of coastal erosion and inundation and of river flooding in low lying areas, especially during storm surge;
- increased frequency and intensity of storm events, adding to the risk from floods, landslides, severe wind, storm surge, coastal erosion and inundation; and
- increased frequency of drought, placing pressure on water resources and increasing the wildfire risk.

More frequent droughts may also affect the security of water supply. Currently we rely on adequate water flows from the Waingawa River and have no stored water for a prolonged drought.

We therefore reduce the causes and adapt to the effects of climate change. Our policies and responses will need to be robust to a range of possible futures, rather than relying on a single 'forecast'.

Climate change is projected to have the impacts shown in the table below on the Masterton district coast. These are expressed as a range, as there are several scenarios considered when making projections.

We have based our planning on the NIWA modelled regional climate change projections (known as the Whaitua tables). The scenarios are expressed as a range, from higher emissions to lower emissions for a number of climate related parameters.

Council is taking a two-plan approach to addressing the impacts of climate change:

1. The Corporate Carbon Emission Reduction Plan (CCERP 2021) guides the Council's journey to become a net zero carbon organisation. It is about reducing our organisational greenhouse gas emissions (GHG). These are the emissions that are a result of the day-to-day operations of our organisation.
2. The development of the Masterton District's Climate Action Plan (CAP 2022) created a set of 76 actions that the wider district could implement collectively to reduce emissions and adapt to climate change impacts.

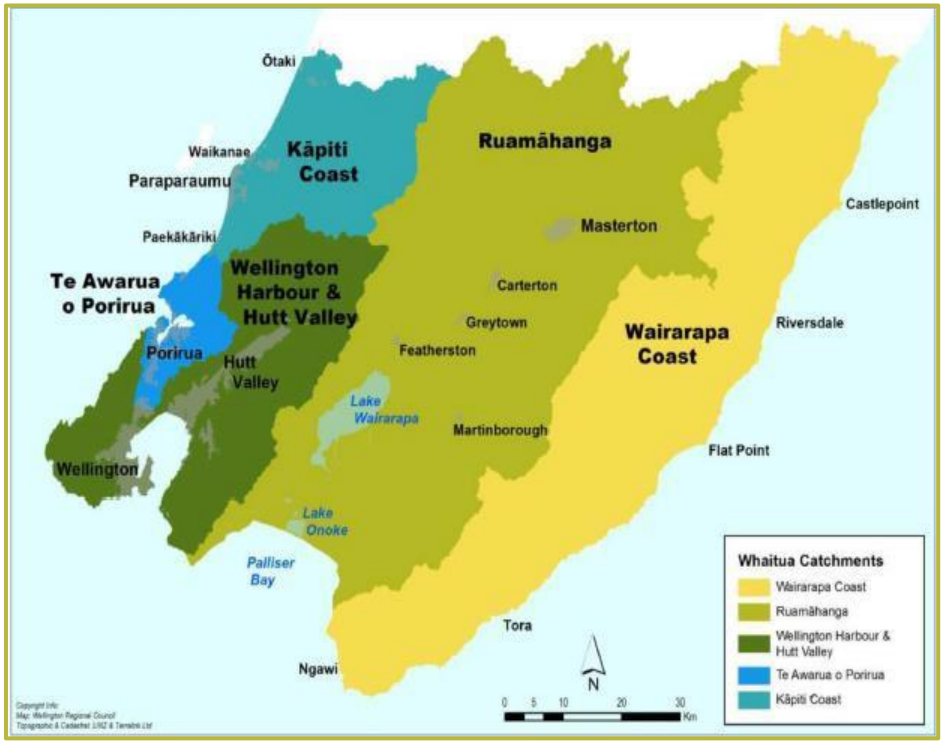
Our Asset Management Plans and Infrastructure Strategy have considered the impacts on our infrastructure over the next 30 years. They consider:

- the scenarios and projections expressed in the Whaitua tables.
- Regional Climate Change Rosl Assessment
- Regional Emissions Reduction Plan
- Regional Food System Strategy
- Participating in the National Climate Change Network
- Developing an organisational carbon footprint
- Focusing on energy efficiency
- Increasing our EV fleet
- Promoting waste minimisation
- Council's corporate carbon emissions reduction plan
- Masterton's climate action plan

*Notes:*
*https://www.gw.govt.nz/assets/Uploads/WhaituaClimateChangeprojectionsMarch202 0.pdf*

*Rcp4.5 mid-range scenarios where greenhouse gas concentrations stabilise by 2100*

*Rcp8.5 is a high concentration scenario where the ghg emissions continuing very high. In the light of new technologies and improvements it remains a valid way to test the sensitivity of the climate variables.*



| Climate Change Wairarapa | | | |
|---|---|---|---|
| By 2040, seasonally the region could expect*: | | | Impacts |
| Ruamahanga | • 0.7°C to 1°C temperature rise<br>• Up to 30 Increased hot days over 25°C | • Between 5 % less rain, to 5 % more rainfall<br>• 0.12 to 0.24 metres above present | • Increased human heat stress and mental health issues, rurally and in urban centres<br>• Increased temperatures in urban centres due to human activities, large areas of concrete, buildings and vehicles<br>• Increased risks of pests (such as wasps, rodents and fruit flies) and diseases (including risks to human health) and biodiversity losses<br>• Increased air pollution and seasonal allergies<br>• Higher demand for drinking water at times when water is likely to be scarcer<br>• Stress on ecosystems and associated impacts on health and economy<br>• Range and habitat of native plants and animals will change-extinction of some species<br>• Higher temperatures may allow for different crops to be grown.<br>• Timing of seasonal activities such as flowering, breeding and migration will change.<br>• •Several fold increase in urban and rural wildfire risk – a particular concern for water supply | • Increased prevalence of drought delivering urban and rural water shortages, and increased pressure on water infrastructure, including water storage<br>• Saltwater intrusion on groundwater<br>• Decreased water quality and increased levels of toxic algae which impacts biodiversity, recreation and drinking water sources<br>• Increased flooding, slips and landslides affecting land, houses, roads and other assets, public transport and rural productivity<br>• Flood protection infrastructure Levels of Service reduced overtime<br>• Impacted rural community due to reduced agricultural production<br>• Reduced soil fertility<br>• Regional parks negatively affected by both drought and flooding<br>• Higher stress on indigenous ecosystems, plants and animals, especially with drought<br>• Reduced workplace productivity |
| Wairarapa Coast | • 0.5°C to 1°C temperature rise<br>• Up to 30 Increased hot days over 25°C | • Between 0 % less rain, to 5 % more rainfall<br>• 0.12 to 0.24 metres above present | | |
| By 2090, seasonally the region could expect*: | | | | |
| Ruamahanga | • 1.2°C to 3°C temperature rise<br>• Up to 80 Increased hot days over 25°C | • Between 0 % less rain, to 10 % more rainfall<br>• 0.68 to 1.75 metres above present | | |
| Wairarapa Coast | • 1°C to 3°C temperature rise<br>• Up to 60 Increased hot days over 25°C | • Between 10 % less rain, to 5 % more rainfall<br>• 0.68 to 1.75 metres above present | | |

– Source: MFE , GWRC and NIWA climate change summaries. Updated 2020*Projected changes are relative to 1995 levels. The numbers provided are mid-range estimates of what the change is projected to be and should not be taken as definitive values.

## Increased flood risk

As well as the main township of Masterton, our district has other smaller communities such as Castlepoint, Taueru, Tinui, Mauriceville and Riversdale. Two of these communities are situated along the district's coastal edge. These urban developments are subject to flooding from the many streams and rivers which drop fast out of the ranges and then slow down and spread out on the plain on their way to the sea. In high rainfall events, the volume and rate of flow of the water coming down the waterways rises quickly and residual ponding, once the waterway levels have dropped, can be significant.

Severe Tropical Cyclone Gabrielle was a severe tropical cyclone that devastated parts of the North Island of New Zealand and affected parts of Vanuatu and Australia in February 2023.

Cyclone Gabrielle followed closely timed severe weather events, including floods. Cyclone Gabrielle had a significant impact on Masterton, NZ, in February 2023. Tinui homes were flooded, leading to discussions between affected owners and Masterton Council. Coastal communities in Wairarapa faced isolation due to slips and flooding, prompting support from the Horowhenua District Council. The aftermath prompted the Wairarapa mayors to establish a Relief Fund for those impacted by Gabrielle.

The climate change projections suggest that very heavy rainfall events are likely to become more frequent, especially in the Tararua ranges during north-westerly storms and the Wairarapa during southerly storms. This will present very significant challenges in how we manage our assets.

Stormwater eventually finds its way to the sea. The level of the sea at the time the stormwater is flowing down the rivers influences how fast and how much of the stormwater can drain away. If the sea level is high enough, it can prevent the water flowing away out to sea causing it to back up and overflow inland. The rise in base sea level is caused in part by rising ocean temperatures – heated water expands.

In addition to this effect, rising ocean temperatures mean that storms generated at sea will contain more energy, for example be more intense. This in turn means that storm surges and wave heights will be higher. All these factors combine to significantly increase the risk of inland flooding on the district's coastal plains.

GWRC has collated data gathered from 20 years' research and data using aerial photos, electronic flood mapping tools and a range of analytical techniques to identify hundreds of Masterton properties as being at potential increased risk of flooding.

We are working with GWRC to confirm predictions for flood events. The overriding issue is to ensure timely protection measures are in place against a 1 in 100-year flood to preserve our community and our economy. Until levels are confirmed, and any mitigation required is in place, there may be implications for any proposed developments in the town centre, the library project and the town's overall economic development.

## Earthquake resilience risks

Parts of Masterton are built on old flood plains that could be subject to liquefaction in a major earthquake. Part of the Council's bridge and reticulation renewals programme involves using different construction methods and materials to provide greater earthquake resilience in pipelines.

We do not consider that this risk is so great that the renewals programme should be brought forward. Instead, we will address resilience at the time pipes and bridges are replaced.

# WHAT WORK IS PLANNED?

## Significant Infrastructure

Significant Council infrastructure is identified in each Asset Management Plan. The expected asset lives are set out in detail in our statement of accounting policies. The asset management programme is focused on the most critical parts of the network servicing large numbers of properties, essential services and businesses.

## Work programmes assumptions

The Asset Management Plans also detail the projected work programme associated with the management and renewal of assets. This work programme is based on the following assumptions:

There are no significant proposed changes to current levels of service.

Inflation is based on projections by BERL for the local government cost index.

The lifecycle of assets, demand forecast, resilience and regulatory compliance are based on the principles detailed in this strategy.

All necessary resource consents will be obtained for proposed major projects. Consent risks have been included in the option assessment and project selection.

The NZTA funding assistance rate remains at 56% and that NZTA will continue to provide funding to maintain the network at its existing condition.

The current state of engineering technology remains unchanged. The Council has already adopted developments that both lower the cost of replacing pipes, for example by using trenchless construction technologies, and allow pipes to be treated in ways that extend their lives for several decades such as by inserting new linings in existing pipes. Future technological developments have not been factored into this strategy but opportunities for innovation will be explored as they become available.

No natural hazard events that impact on planned business as usual in a major way have been factored into the work programme. However, the Council continues to improve asset resilience and to plan and prepare for hazard events.

Treaty of Waitangi settlements will not significantly affect current governance arrangements of infrastructure assets.

We will ensure the network renewal programme is adequate to, at a minimum, maintain the asset condition rating and to improve it over 30 years.

These assumptions have all been assessed with a low level of uncertainty based on information collected. Particular risks associated with individual projects are included in the option assessment.

## SIGNIFICANT PROJECTS REQUIRED

Over the next ten years we have scheduled some high value infrastructure spending (renewals and service level increases) as well as construction projects to address areas of community well-being. The proposed library extension and new town hall are significant projects that increase the level of service to our community. We are committed to cyclone recovery roading works, an airport runway project and new animal shelter, all factored in before considering new projects for the 2024-34 Long Term Plan. The new debt associated with these projects will result in increasing rates to pay for the increased levels of service.

We are looking to respond to the needs identified in our asset management plans, with a step change increase in maintenance and renewal spending on our roading assets to maintain the current level of service. Water resilience is also a major driver for expenditure as we look at water storage, leaks, charging by usages and improvements to urban drainage and flood protection.

Significant decisions about capital expenditure will be required over the life of this plan or LTP plan life. The tables below provide a summary of these decisions.

**NB – Capital expenditure has been adjusted for future inflation.**

| Summary of Key Dates in Asset Management Plans | | |
|---|---|---|
| | **Year(s)** | **Comments / Decision Required** |
| **Potable Water** | | |
| Raw Water Storage | 2024-2027 | LTP Decision Required 2024. Design and construction costs split over 3 years. |
| Potable Water Storage | 2027-2028 | LTP Decision Required 2024. Expand existing treated water storage at Upper Plain Road |
| Urbanisation | 2024 - 2027 | LTP Decision Required 2024. Extend water infrastructure to urban fringe areas. |
| | | |
| **Waste Water** | | |
| Homebush Consent Investigations | 2032 | LTP decision required by 2030. Design and consent investigations ahead of Consent renewal |
| Homebush Upgrades | 2033-2037 | LTP decision required by 2030. Consent application costs and new infrastructure. |
| | | |
| **Stormwater** | | |
| Stopbank / Flood Control | 2024 - 2025 | Awaiting GWRC decisions and Natural Resources Plan change. Following that, Council decision on whether to extend or upgrade stopbanks. |
| | | |
| **Solid Waste** | | |
| Clean Fill Site | 2028 | LTP decision required 2024. Council decision required to confirm new site. |
| | | |
| **Community and Facilities** | | |
| Hood Aerodrome Upgrades | 2024 - 2026 | Masterplan adopted 2023. Progress Masterplan for Hood. |
| Town Hall / Municipal Building | 2024 - 2026 | LTP decision required 2024. Give effect to Councils preferred option post LTP. |
| Masterton Revamp | 2024 - 2027 | LTP decision required 2024. Upgrade of water and resurfacing of roads and footpath. |
| | | |
| **Roading** | | |
| Mataikona Road access | 2024 - 2034 | Business case to be confirmed by Waka Kotahi August 2024. Council decision on funding to be confirmed in LTP 2024, but subject to Waka Kotahi funding. |

## Major projects

| Project | Date and Category | Est Cost $ | Preferred option | Other options | |
|---|---|---|---|---|---|
| 3 Water Renewals | 2024 – 34<br><br>Growth / Renewals/LOS | $3.4M (p/a.)<br>+$800k for Year 1 as a catch up. | Continue with proactive approach to renewal programme. Targeting older and under performing assets | Reduce renewal plan but this will increase the asset failure risk.<br>Assets will continue to age and deteriorate | Increase renewal spend.<br>Affordability issues for community versus potential asset condition gains. |
| Trunk Main Renewal | 2024 – 2026<br>LOS/Risk | $3.9M (Year 1 & 2) | Replacement of trunk main from Kaituna WTP. | Do not replace – not appropriate as main is at end of life. | |
| Roading Programme | 2024 – 34<br><br>Growth/ LOS & Renewals | $9.9M p/a<br>(includes subsidised and non-subsidised expenditure) | Continue with proactive approach to renewal programme.<br>Programme designed to bring Roading asset up to prescribed LOS | Reduce renewal plan.<br>This will increase the asset failure risk. Assets will continue to age and deteriorate | Increase renewal spend.<br>Affordability issues for community versus potential asset condition gains |

## Major projects

| Project | Date and Category | Est Cost $ | Preferred option | Other options |
|---|---|---|---|---|
| Urbanisation | 2024 - 2027<br>Growth / Renewals | $8.1M Millard<br>$2.4M Chamberlain | Included within 3 water and roading programmes to enable growth around Masterton urban fringes and infill. | Do nothing and let developers cover all costs. |
| Masterton Raw Water Storage | 2025 – 28<br>Risk / LOS | $8.4M over 3 years. | Increase Masterton urban raw water storage capacity to 40 days. | Restrict water use to the community to match our current and future water take consent and storage capability |
| Potable Water Storage | 2027 – 2028<br>Risk / LOS | $7.9M | Construction of new reservoir to provide resilience within network. Currently less than 12 hours storage available in network. | Accept less resilience to the supply. |

## Major projects

| Project | Date and Category | Est Cost $ | Preferred option | Other options | |
|---|---|---|---|---|---|
| Town Hall / Municipal Building | 2024 – 26<br><br>LOS | Town Hall / Municipal building;<br>$3.6M to $49.9M<br><br>Library/Archives;<br>$2.2M to $14.7M | Demolish Town Hall and Municipal Buildings, build new Town Hall and expand Waiata House. $42.6M.<br><br>Upgrade and expand library $10.4M | Town Hall/Municipal<br>Option 1; Demolish the Town Hall and Municipal Buildings, retain Waiata House and Queen Street premises. $3.6M.<br><br>Option 2; Demolish the Town Hall, build new Town Hall and refurbish the Municipal Building. $ 49.9M.<br><br>Library/Archive<br>Option 1; Essential repairs and maintenance. $2.2M<br><br>Option 2; Upgrade and expand library and archives. $14.7M | |
| Masterton Revamp | 2024 – 27<br><br>LOS | $6.5M | Reduced programme of work, focusing on replacement of water infrastructure and resurfacing of road and footpath in CBD only. | Enhanced CBD option to improve pedestrian access and reduce on street car parking.<br><br>Cost Est $14.12M. Focus on the CBD from Jackson Street to Park Street. | Do nothing: This is deferring a decision on the infrastructure in the Town Centre that is end of life and overdue for renewal. |

## Major projects

| Project | Date and Category | Est Cost $ | Preferred option | Other options / Notes |
|---|---|---|---|---|
| Homebush Wastewater treatment plant upgrades | From 2032-2037<br><br>Renewals | $36.3M for plant upgrade | Upgrades to meet current and future consent requirements for 2034 | Homebush strategy will require amendments if changes to its implementation are agreed. These amendments may be brought about by changes to policies and or technology. Note that we are still awaiting clear policy guidance from GWRC which will inform any future treatment options. |
| Clean fill site | 2028<br><br>LOS | $460K for developing new cleanfill site | Council provides a clean fill site to support waste management in accordance with the WMMP | Council does not develop clean fill site and allows private sector to provide instead. |

## Major projects

| Project | Date and Category | Est Cost $ | Preferred option | Other options / Note |
|---|---|---|---|---|
| Hood Aerodrome upgrades | 2024 – 2026<br>Risk / LOS & growth | $17M<br>($10M of this budget has been funded by NZ Govt PGF/Kanoa) | Current focus is on delivery of Stage 1 infrastructure, runway widening and resurfacing. | The signed contact with the Provincial Development Unit outlines Council and Central Governments obligations to the project and funding sources, based on the application we put forward in 2020. |
| Mataikona Road access | 2024 – 2034<br>LOS | $26.2M<br>($8.2M in years 2&3) | Mataikona business case has been developed with a hybrid preferred option. Further work required to confirm Councils direction. | TBC. |
| Stopbank / Flood Control | 2024 – 2025<br>LOS/Risk | $2.2M | To provide flood protection to Masterton Urban area. | Note - awaiting GWRC policy and plans to inform this work. |

More information on each of these projects including most likely scenarios, timings and options is provided below.

## Renewals of existing 3 water assets

The proposed scenario for the renewal work programme for the three waters network has an estimated cost of $3.4M per annum, plus an additional $800,000 in year 1. These costs do not include any enhancements, maintenance or operational expenditure.

The principle alternative is to reduce or defer the renewal spends resulting in a reduction in asset condition and performance, risking a reduction in the levels of service provided by the three water networks.

## Renewals and upgrades of existing roading assets

The proposed scenario for the renewal work programme for the roading network has an estimated cost of $9.9M per annum, excluding Cyclone recovery/reinstatement. These costs do not include any enhancements, maintenance or operational expenditure.

The transportation maintenance, operational and renewals programme is the largest of MDC activities. Together it constitutes around 14 million dollars of annual spending.

In 2021, it was anticipated that investment in maintenance and operations would remain relatively constant for the foreseeable future. This investment in renewals proposed was in response to MDC deterioration modelling scenarios, Waka Kotahi (NZTA) audit recommendations and the increased activity in the forestry sector, which is applying additional demand loading on pavements.

Over the past three years the impact of cyclones Gabrielle and Hale along with other storms has refocused efforts. While rebuilding and recovery of storm damaged assets is an immediate focus, it is important that we do not allow other assets to fall into disrepair. Accordingly, the focus will remain on timely asset renewal outside of the recovery works.

The principal alternative is to reduce or defer the renewal spends resulting in a reduction in asset condition and performance, risking a reduction in the levels of service provided by the Roading networks. It would also have implications for rural roads and bridges with the forecast increased in the forest harvest and the increase in truck capacity currently being implemented by the central government's HMPV and 50 max programmes. The financial impact of deferring renewals is difficult to quantify for an entire network but inevitably

the disruption and renewal costs of a failed asset are greater than if the work was undertaken in a timely manner.

### Network expansion and upgrades

To meet growing demand for more housing project are required to expand or upgrade areas on the urban fringes of Masterton. These upgrades mainly include Roading and 3 Water upgrades to meet the required demand.

### Town Hall and Municipal Building:

Since the closure of the Town Hall in 2016 there has been much time spent engaging with the community, investigating, and analysing options to help shape what a new Civic facility for Masterton looks like. Through the 2024-34 Long Term Plan, Council will consider options for a dynamic and adaptable venue that can support a wide range of cultural events and provide a point of difference to other venues in the district, as well as a fit for purpose Civic Defence facility and a modern, safe workspace for staff while providing an "accessible 'front door' to Council services and community meeting facilities.

The LTP includes an allocation of $42.6 million dollars spread over the first 4 years in order to deliver the project.

### Library and Archives

Council will provide a modern Library that is a centre of literacy, knowledge and documentary heritage that connects people to each other, services, and information to create a thriving and sustainable community.

### Masterton Revamp (Town Centre upgrade):

We want people to enjoying spending time in Masterton, and for visitors to want to come back, so we have had discussions with the community to understand the aspirations, desires and requirements to help Masterton thrive. Those discussions led to the development and adoption of a Town Centre Strategy in 2018 which helped shape the objectives for our Town Centre and the areas that we should start to invest in.

The Council has since pulled back on the scope and ambition of the strategy. The current LTP includes provision to renew assets in Queen Street, including the water main, footpath and road surfaces.

All other work associated with the Town Centre Strategy, including entrances to the town, linkages within the town centre and developing our connection to the Waipoua river remain available for a future Council to re-prioritise.

The previous LTP included an allocation of $35.4 million dollars over the 10-year period to deliver the project. This provision has largely been removed from the 2024-34 LTP.

## Water supply resilience

Urban 40-day raw water reservoir

We need to be able to store more water in order to meet increased demand from a growing population, provide safeguards against any future changes to resource consent conditions and provide greater resilience in times of drought. To address this, we will investigate options for reservoirs for urban raw water. The LTP includes a provision of $8.4 million over 2023-25 to complete the work. The consequence of not undertaking projects to increase our water supply resilience is that Masterton will not have a secondary drinking water supply that is separate to our main supply. Causes of using a secondary supply could be a natural event e.g., earthquake, infrastructure failure, or water supply contamination.

## Homebush wastewater treatment plant upgrade/consent review

The Natural Resources Plan requires the Council to further reduce treated wastewater discharged into the river. The most likely scenario and timing of this will be subject to further consultation with Iwi, GWRC and the community.

The Council's Wastewater Strategy is outlined with the following objectives:

Objective 1 – Project Plan: Establish an overall project plan with clear timelines.

Objective 2 - Engagement: Have the community understand the importance of, and actively manage, their water and wastewater solutions.

Objective 3 - Land Identification: Identification of land suitable for treated wastewater irrigation (and available for purchase, lease or collaboration with owners).

Objective 4 - Flow and Volume Characteristics: Gather comprehensive data and information on flow and volume characteristics of water to be available to farmers/owners.

Objective 5 - Develop Market: Develop means of on-selling available water.

Objective 6 - Develop Infrastructure: Develop plan and implement infrastructure.

Objective 7 - Reduce River Discharge: Over time reduce river discharges and ideally eliminate and direct river (piped) discharge, particularly during lower flows.

Objective 8 - High Flow Land Passage: Any (reduced) discharge to river is via land passage.

A budget provision of $2.5 million is allowed for in the work programme in year 8 for the implementation of the selected option, $643K for preparation of a Resource Consent application and a further $1.9 million provision in year 10 (2033/34) allowed to commence a plant upgrade to stop treated wastewater discharges to the river when the current consent expires in 2034. Further funds are anticipated in the 30-year infrastructure strategy, but outside the scope of this LTP cycle. It is noted that until the Natural Resources Plan is fully implemented, the Homebush upgrade timetable and scope creates significant uncertainty. The impact of not implementing this strategy could potentially incur higher costs in the future.

## Hood Aerodrome

Hood Aerodrome is a prized asset in the Wairarapa – home to the world-famous Wings over Wairarapa show and rare vintage aircraft – but it is not meeting current demands or realising its strategic potential as a critical contributor to building and developing the local

economy. To meet current demand for an efficient, connective transport system, and enable further economic growth through business investment, critical infrastructure improvements need to be made. This infrastructure upgrades will transform Hood Aerodrome into a modern, functional airport, with capacity for growth beyond its current usage. An airport with greater capacity, functionality, and enhanced safety will support a high-value economy, facilitate freight, trade, and further business development within New Zealand. Improving the accessibility to the Wairarapa through an air service option made possible by extended and upgraded infrastructure will increase social connectivity and enhance Hood Aerodrome's already strong local, national, and international reputation.

In July 2020, the Government announced it was contributing $10 million to make the critical investments in our strategic asset. The LTP includes how the $17 million will be spent over Y0 – Y5 (2021-2026).

### Building a new animal shelter:

The current animal shelter does not fully meet legislative requirements and upgrades are required for the welfare of the staff, the animals under their care, and visiting public. The existing facility is temporary and is not suitable for renovation. A new purpose-built facility has been designed and a construction contract tendered for the Council-owned site on Ngaumutawa Road. This facility will accommodate the current and future needs of Masterton in the delivery of a crucial service. The investment will include specialists' areas to care for and protect the animals in the Council's care and will also provide an improved service with the ability for the public to pay for the release of their dogs on site.

The work is expected to start in early 2024 and be completed within the first year of the 2024-34 LTP. The expected budget for the whole project sits at $2.5 million.

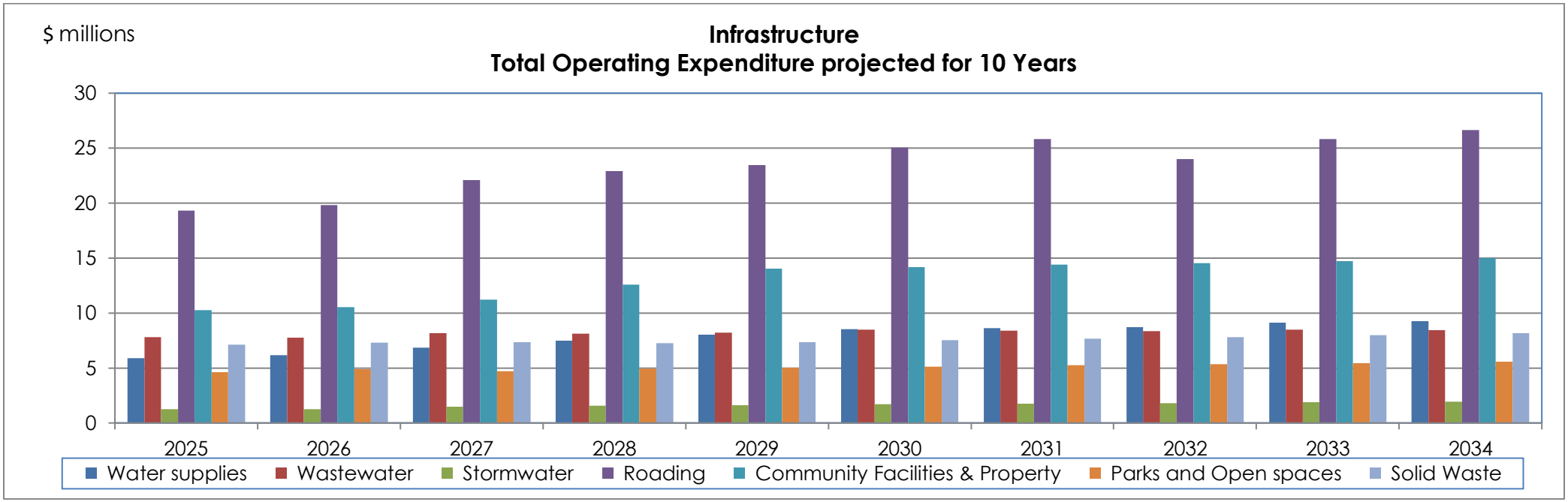
## FUNDING OF OPERATING AND CAPITAL EXPENDITURE

The Council's policy with regard to the funding of capital expenditure is to:

- fund roading renewal expenditure from NZTA subsidies and annual rates.
- fund the replacement programme of other assets from depreciation reserve funds to the extent that those funds are available. Where depreciation reserves are insufficient, loan funding will be used.
- fund assets which increase levels of service with loan funding.
- fund assets needed because of growth, from developers, either by the developer providing the infrastructure or developers making financial contributions at the outset of the development. The early identification of the need for new assets driven by growth allows a long lead time for more developments to contribute and funds to accumulate prior to the upgrade being needed.

The operating expenditure for services can be funded by rates, user charges, subsidies or reserve funds. For the majority we are aiming at sustaining current service levels over the next 10 years however in a number of areas we are investing in improvements and additions to services that will increase operating costs and require additional rates funding.

These policies are further detailed in our financial strategy.




10 Year Infrastructure Expenditure Forecast

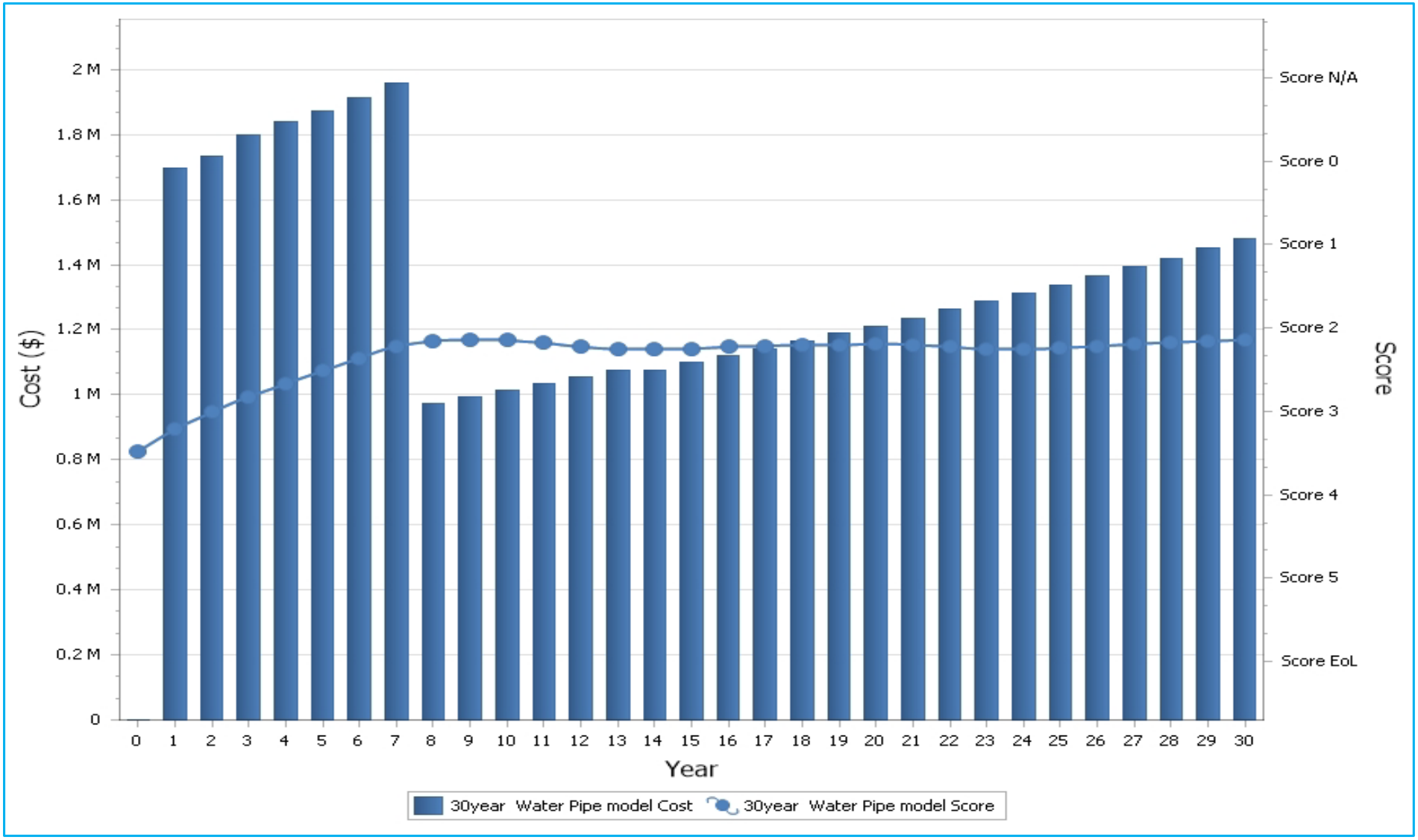
## Renewal and maintenance programmes

The graphs below show the forecast asset condition for the Council's water, sewer, and stormwater networks, with the proposed network renewal spend over the next 30 years. The performance of the network typically deteriorates gradually over time. Therefore, it is not critical that any particular asset is replaced in the specific year shown.

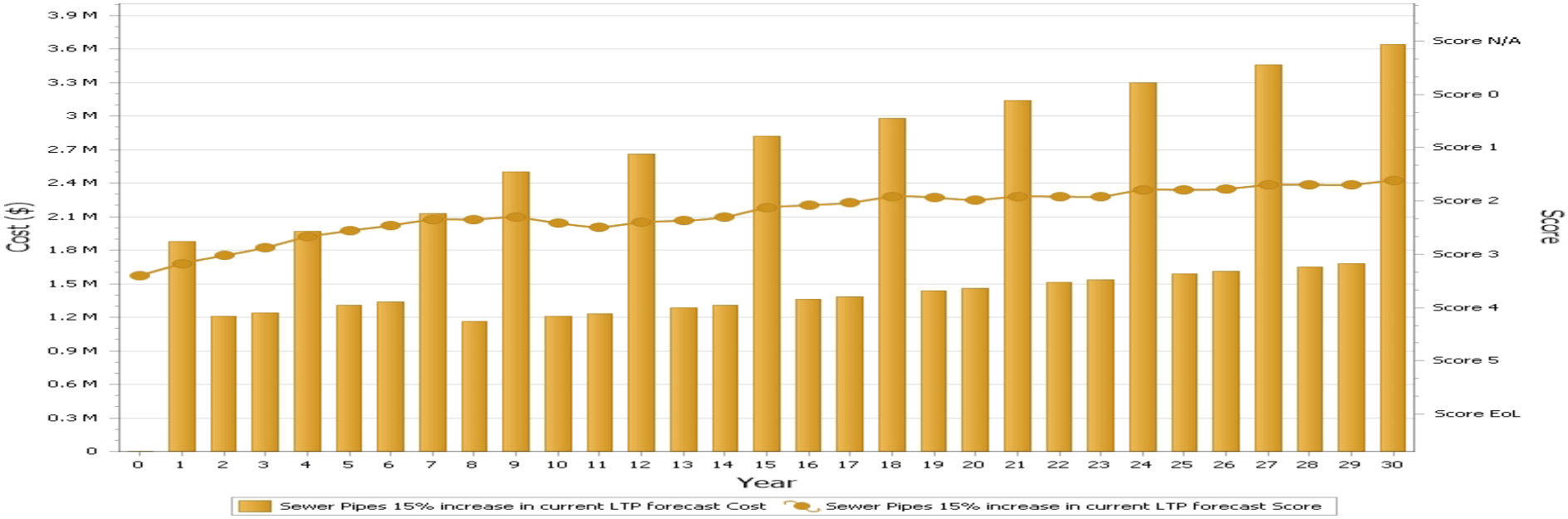
We will smooth the planned renewal programmes based on the optimised renewal decision process to achieve a balance between optimal timing of maintenance and replacement, keeping funding demands on ratepayers even, and ensuring that work that affects street surfaces is integrated with our street resealing programme. There are no plans to differ or delay the renewals programme specified in the asset management plans for any infrastructure assets. (NB: All graphs include an assumed inflation rate source BERL cost adjustors 2023).

**Please note that 30 year projections are based on inflating Year 10 figures and are indicative only beyond year 10.**

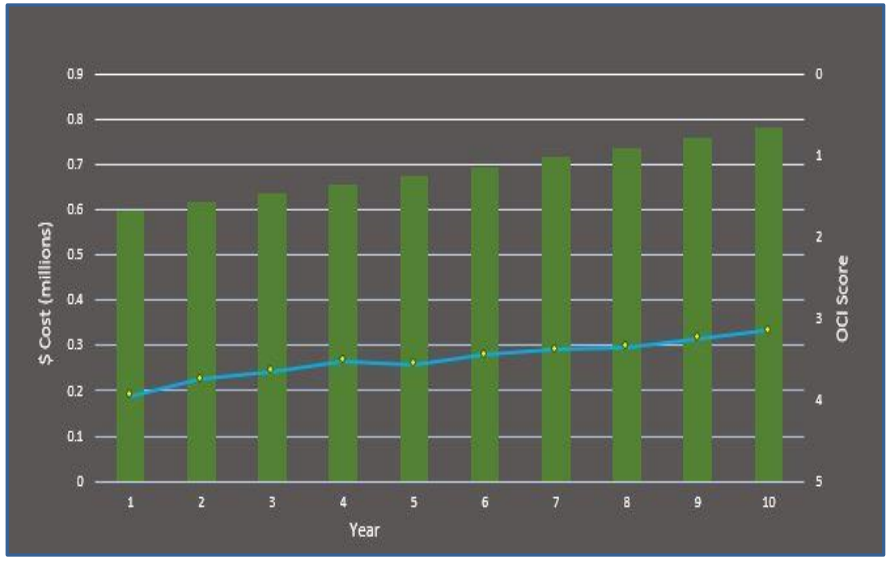
30-year scenario modelling for Water Supply reticulation pipes. Condition score and spend (Assumed 2.4% inflation) 2024-2053



30-year scenario modelling for Wastewater reticulation pipes. Condition Score and Spend 2024 –2033 (assumed 2.4% inflation)

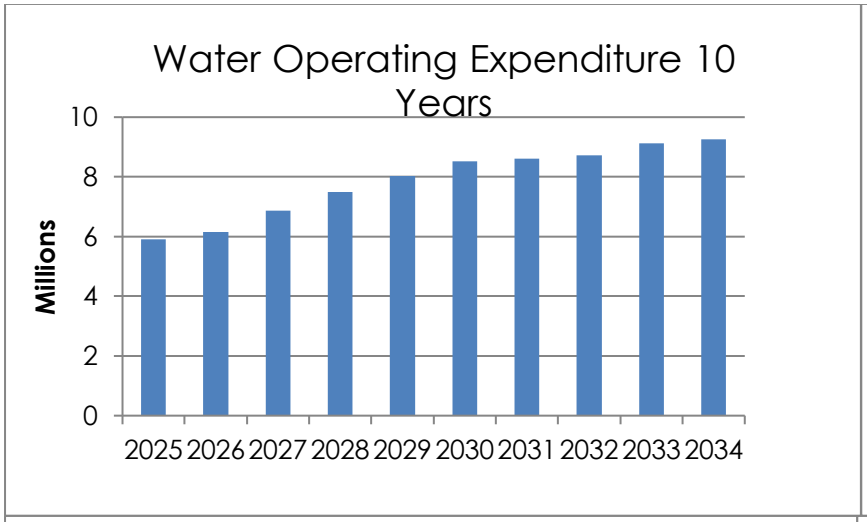


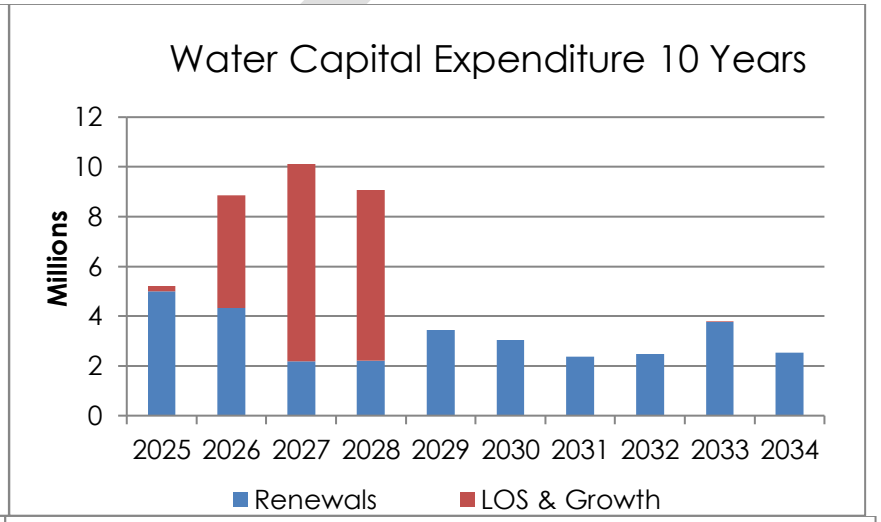

10-year scenario modelling for Stormwater reticulation pipes. Condition Score and Spend 2024 –2033 (assumed 2.4% inflation)

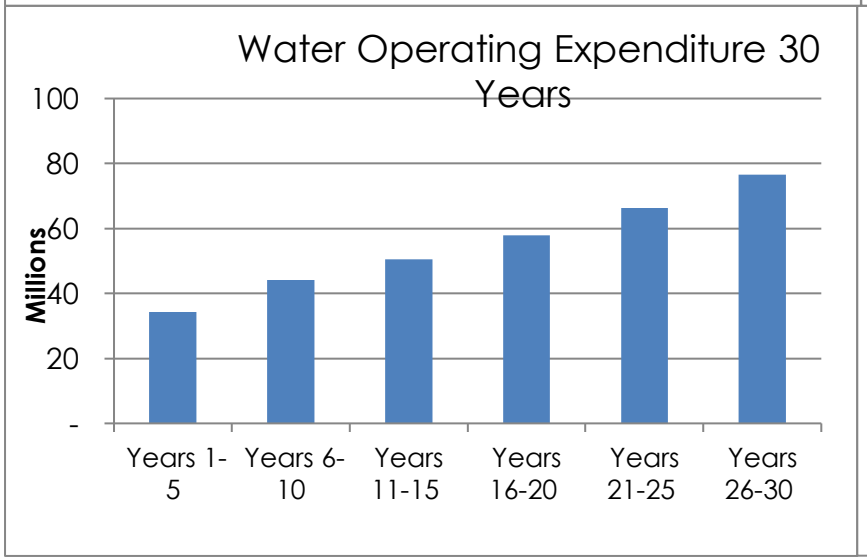


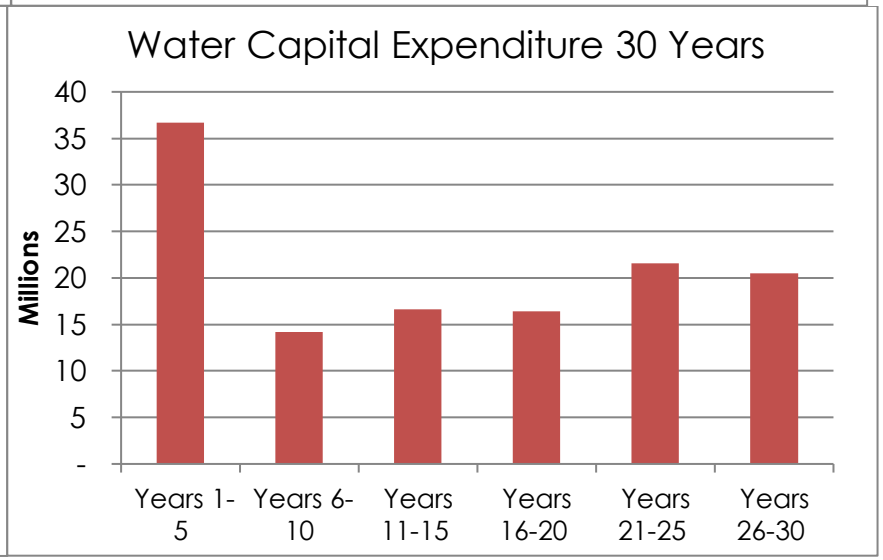
## Planned expenditure – water assets

The graphs below show the projected expenditure on water assets over the next 10 to 30 years.



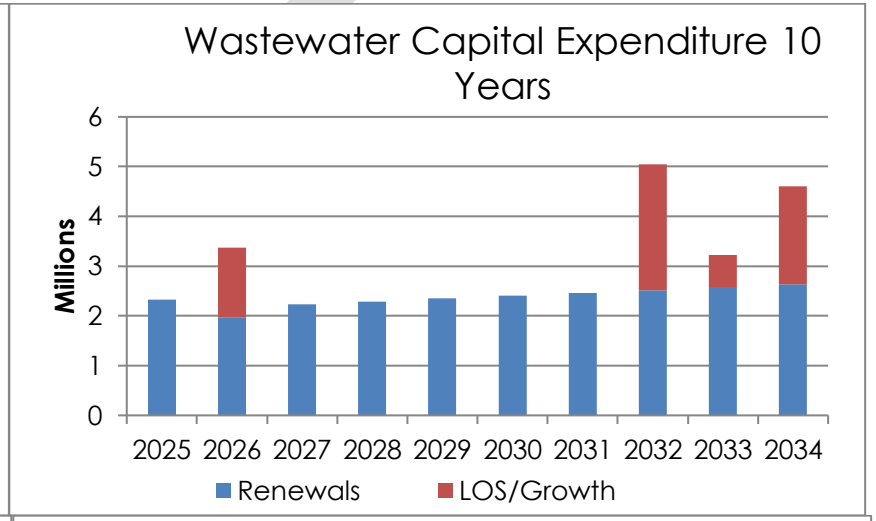



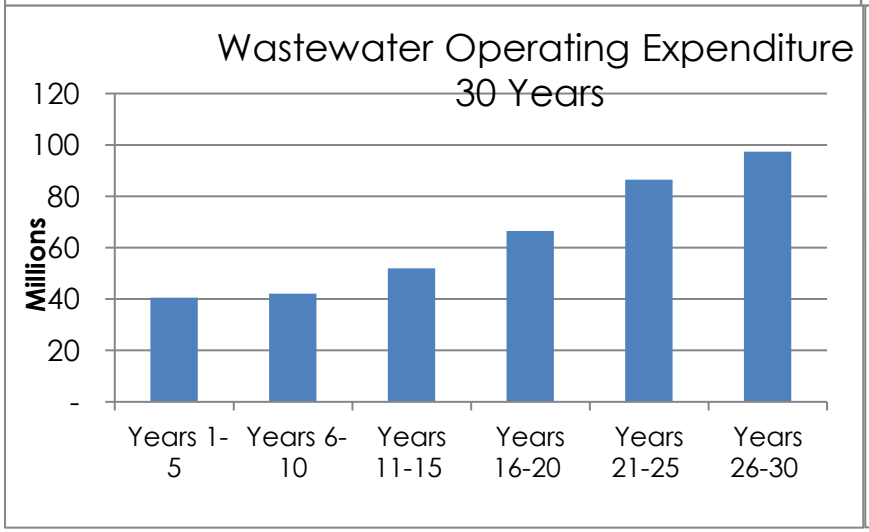



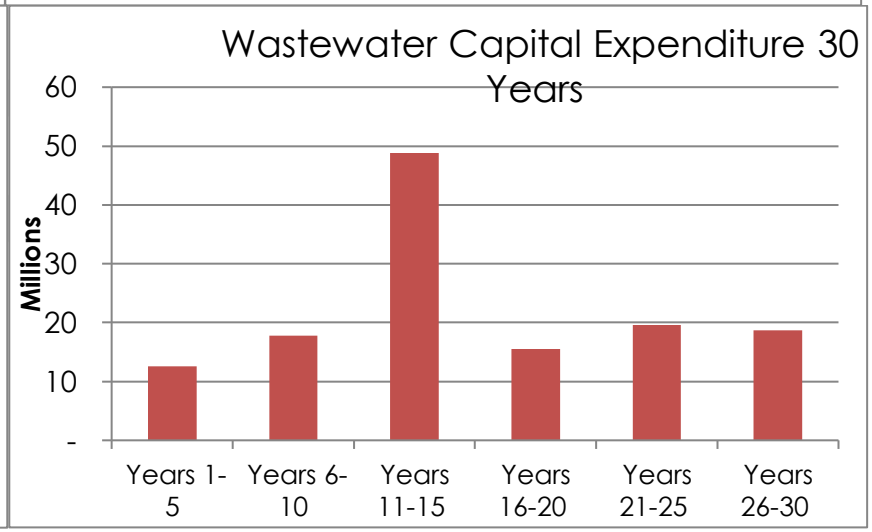



## Planned expenditure – wastewater assets

The graphs below show the projected expenditure on wastewater assets over the next 10 to 30 years.

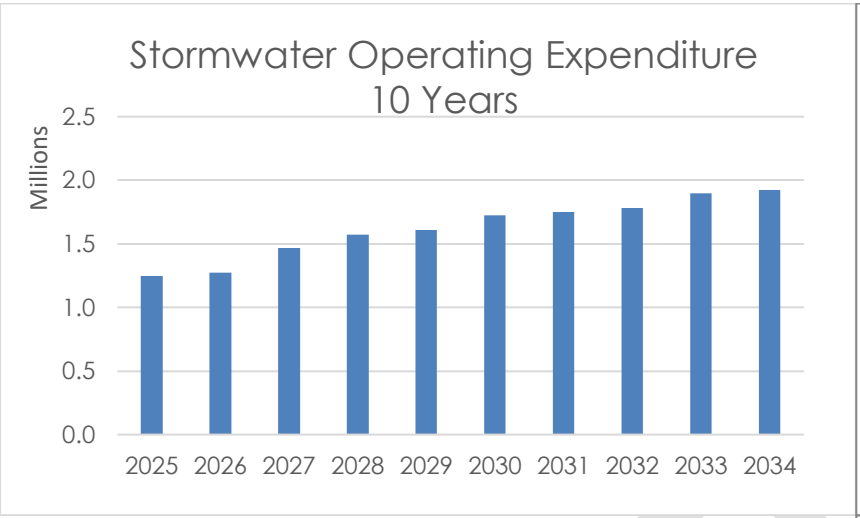



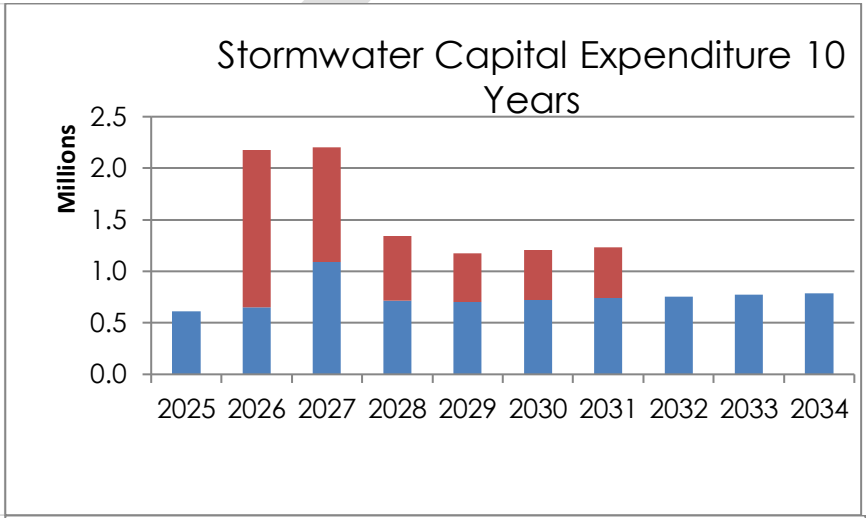



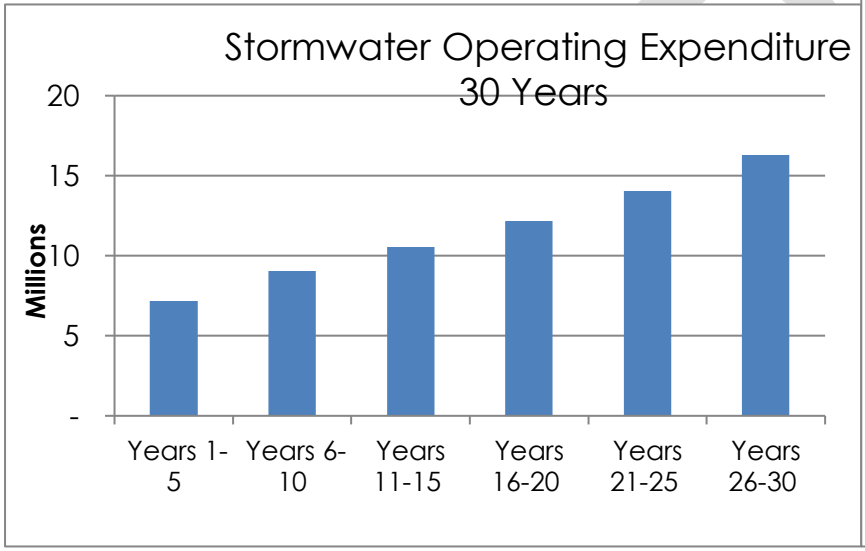



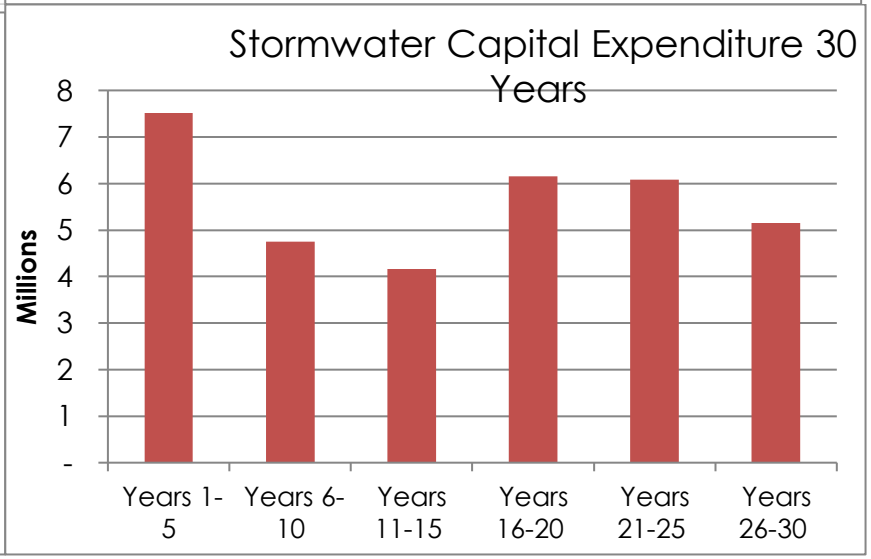
## Planned expenditure – stormwater assets

The graphs below show the projected expenditure on stormwater assets over the next 10 to 30 years.



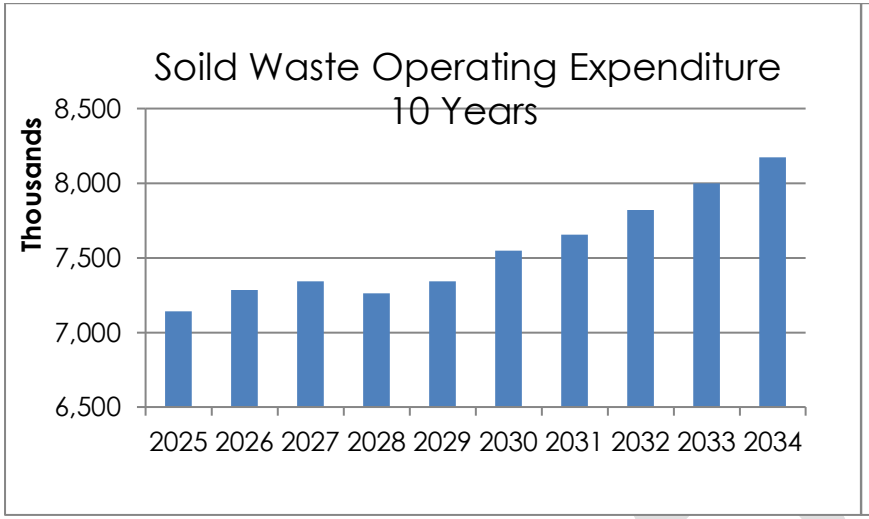



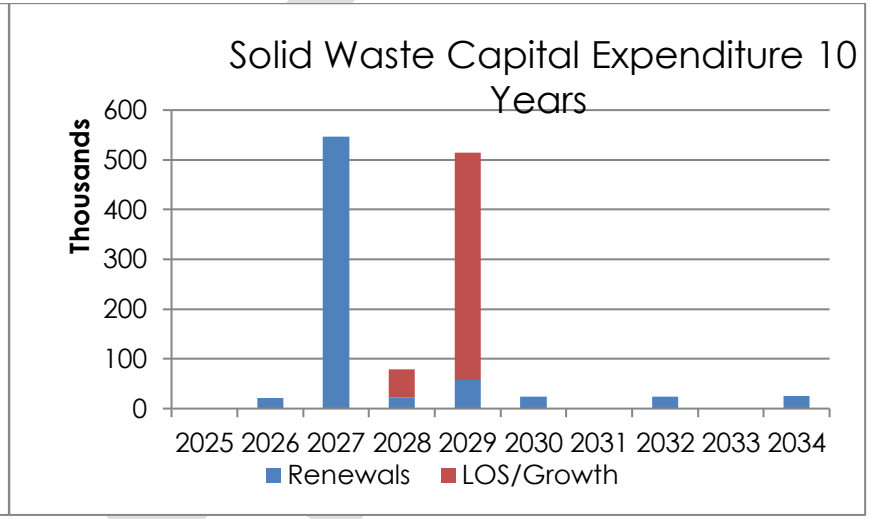



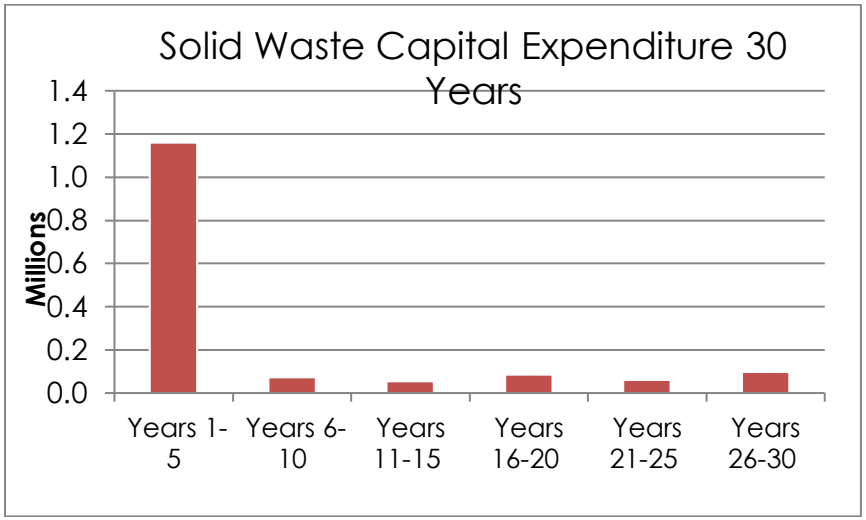



## Planned expenditure – solid waste assets

The graphs below show the projected expenditure on solid waste assets over the next 10 to 30 years.

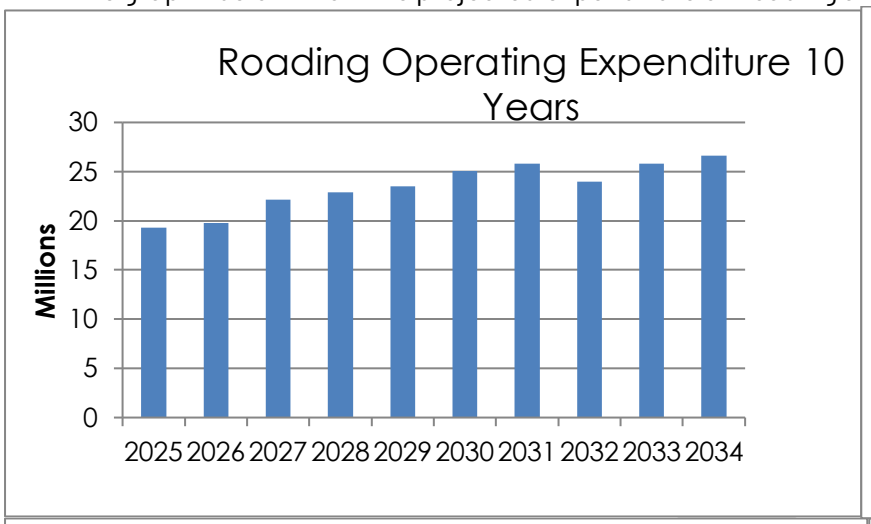


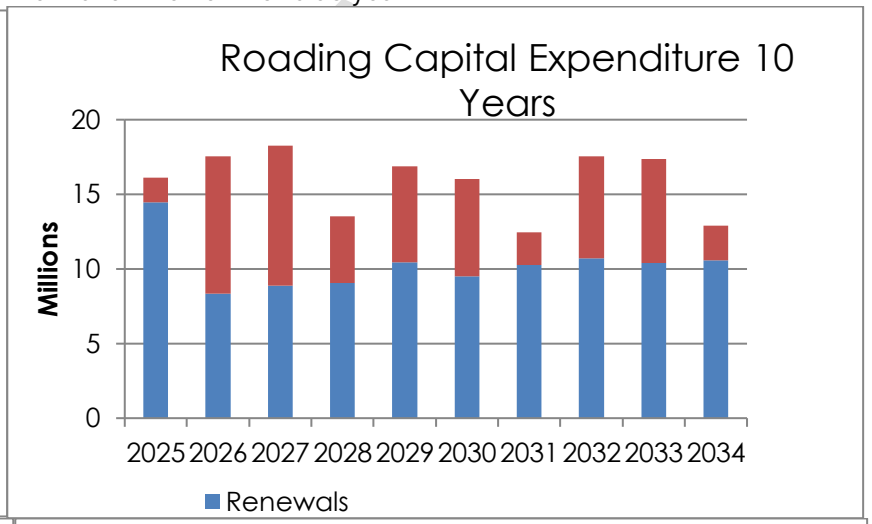



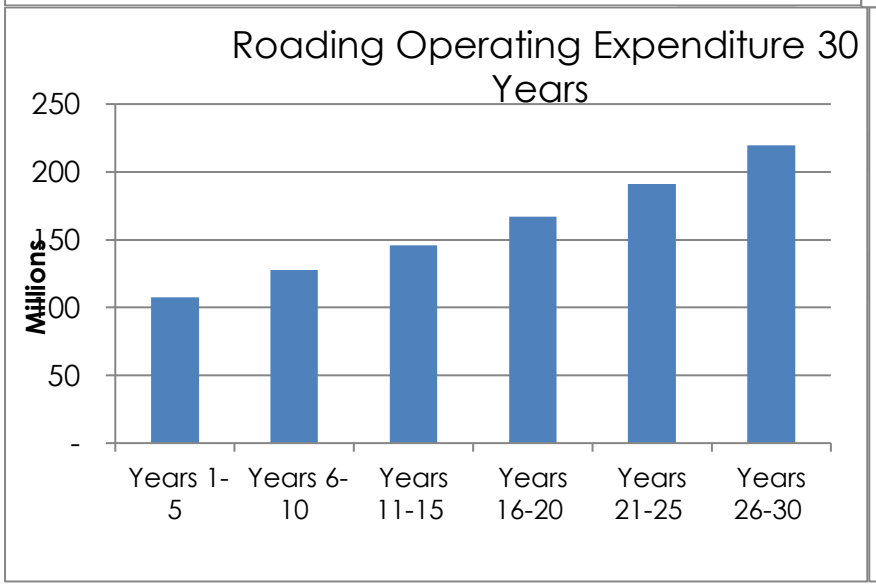

Solid Waste Capital Expenditure 30 Years
Millions
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Years 1-5
Years 6-10
Years 11-15
Years 16-20
Years 21-25
Years 26-30

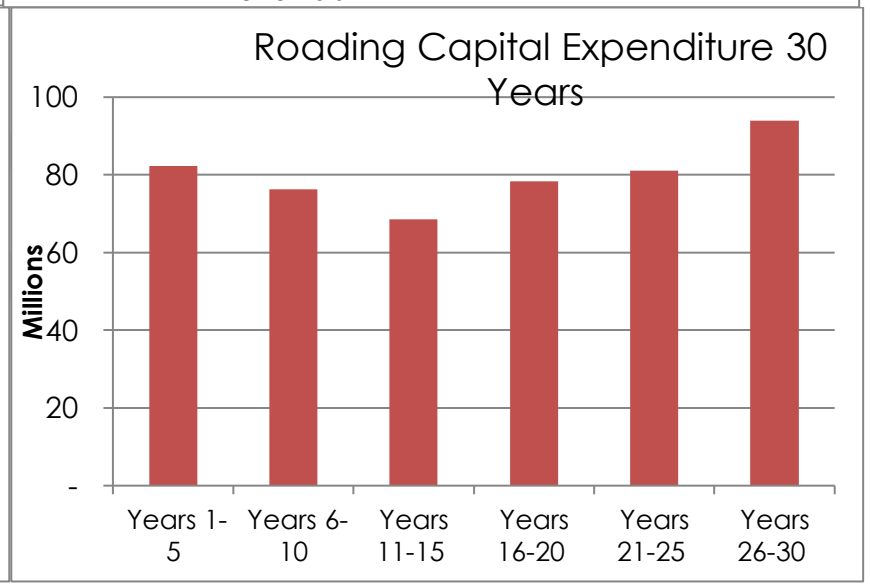
## Planned expenditure – roading assets

The graphs below show the projected expenditure on roading assets over the next 10 to 30 years.



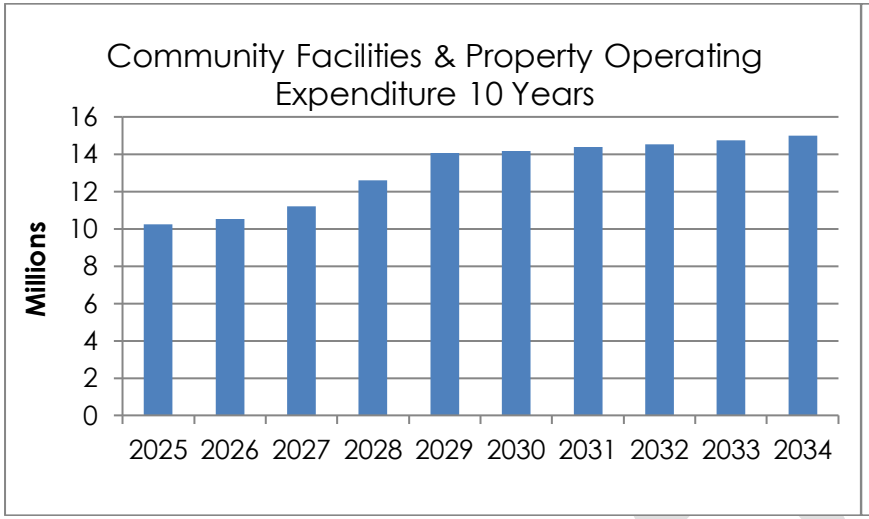



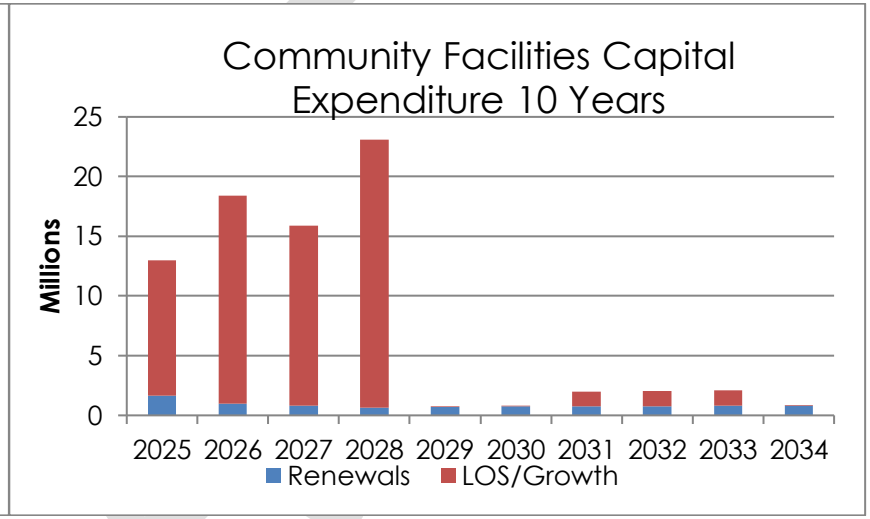



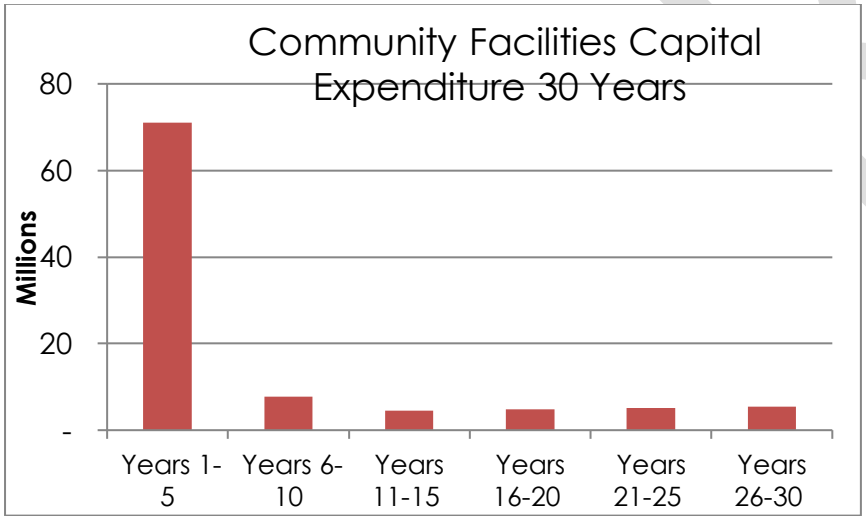



## Planned expenditure – community facilities and property assets

The graphs below show the projected expenditure on community facilities and property assets over the next 10 to 30 years.



## Planned expenditure – parks assets

The graphs below show the projected expenditure on parks assets over the next 10 to 30 years.