

INFRASTRUCTURE STRATEGY

2024-2034



TE WAIROA
WAIROA DISTRICT

WAIROA

DOCUMENT PREPARATION & QUALITY ASSURANCE

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Contents

| | |
|---|----|
| Executive summary | 1 |
| Long term infrastructure planning | 1 |
| Planning for future trends affecting Wairoa | 2 |
| Significant infrastructure issues | 2 |
| Strategic responses..... | 3 |
| Financial summary..... | 4 |
| Introduction | 5 |
| Purpose of the Infrastructure Strategy..... | 5 |
| Strategy timeframe | 5 |
| Infrastructure scope..... | 5 |
| Planning context | 5 |
| Strategic context..... | 7 |
| Direction for infrastructure provision..... | 7 |
| Our partnership approach | 7 |
| Priorities that guide our decision making | 7 |
| Levels of service | 7 |
| How we manage our infrastructure..... | 8 |
| Limitations & assumptions | 9 |
| Planning for future trends affecting Wairoa | 11 |
| Climate change | 11 |
| Society..... | 11 |
| Technology..... | 12 |
| Resources | 12 |
| Significant infrastructure challenges | 14 |
| Challenge 1: Building resilience..... | 14 |
| Challenge 2: Affordability..... | 15 |
| Challenge 3: Sustainable economy | 15 |
| Challenge 4: Changing priorities and legislation | 16 |
| Challenge 5: Sustainable delivery..... | 17 |
| Challenge 6: Protecting our natural environment | 17 |
| Responding to our challenges..... | 18 |
| Infrastructure asset class plans & options | 20 |
| Land transport..... | 20 |
| Wairoa Airport | 25 |
| Water supply..... | 28 |
| Stormwater | 31 |
| Wastewater..... | 34 |
| Solid waste | 37 |
| Financial summary for likely scenario infrastructure investment | 40 |
| Summary of key financial assumptions | 40 |
| Financial forecasts | 40 |
| Key decisions we expect to make | 40 |

Executive summary

Long term infrastructure planning

Wairoa district's infrastructure is key to ensuring Wairoa District Council (Council) can provide the services our community needs and expects. This Infrastructure Strategy (the Strategy) ensures that we provide sustainable infrastructure supported services, by planning and forecasting expenditure for the long term. It **guides long term decisions holistically across the different infrastructure assets.**

This Strategy has been developed to meet the requirements of the Local Government Act 2002 (LGA) section 101B by:

- Identifying the significant infrastructure issues over the next 30 years
- Identifying the principal options for managing those issues and the implications of those options.

We also use this strategy to communicate the infrastructure requirements at a high level to internal and external decision makers, and key stakeholders.

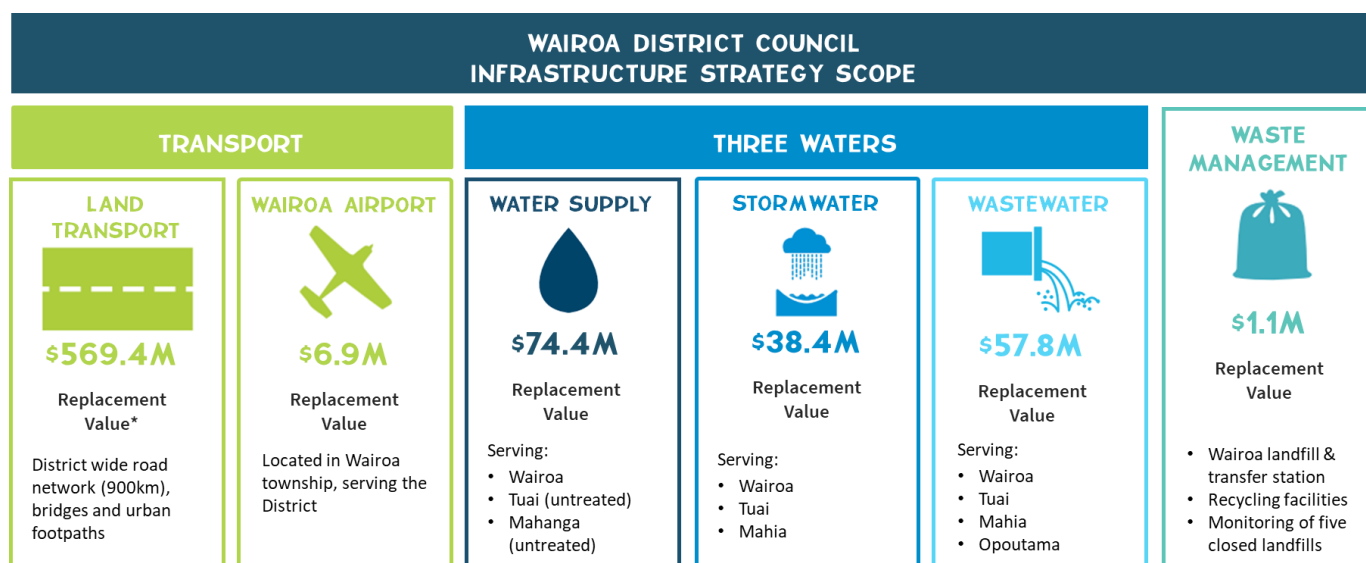
Strategy timeframe

Due to the impacts of Cyclone Gabrielle in 2023 and other weather events, the Government is allowing eight Councils, including Wairoa, to reduce their Long Term Plan (LTP) forecasts to three years rather than the usual 10 years. Our efforts continue to focus on recovery, and in particular our financial planning for the next 3 years.

As a result, we have also reduced the focus of this Infrastructure Strategy from the usual 30-year planning horizon to forecast infrastructure investment needs over the next 10-years. We have, however provided an outlook of the significant infrastructure issues we are facing and, where possible, any significant capital expenditure we may require in years 11-30. This Strategy will be reviewed and refined in 2027.

Infrastructure scope

The Strategy covers the critical infrastructure assets owned and operated by the Council as identified in the LGA, as well as other assets that are important to our community and require strategic decisions over the long term. Infrastructure assets within the scope of this strategy are grouped as follows:



*replacement value including impairment adjustment resulting from Cyclone Gabrielle

Partnering with others

Some services that impact our community are provided by others. Flood protection and control assets are the responsibility of the Hawke's Bay Regional Council (HBRC), while State Highways are the responsibility of Waka Kotahi New Zealand Transport Agency (NZTA). We work with these organisations to advocate for our community and align infrastructure planning.

Improving our management approach

Since our last Infrastructure Strategy was published, we have made improvements to our management approaches across all our infrastructure asset portfolios. We have developed and documented core requirements to help us better:

- manage and use asset data and information to support our asset management decision making
- assess and manage risk, including completing a climate change risk assessment
- prioritise investment decision making
- develop activity management plans that balance level of service, cost and risk.

We have ongoing improvement plans in place to continue improving our management approach and long term investment decisions. This work will include aligning our infrastructure related data and information with other Council functions including regulatory planning and finances.

Planning for future trends affecting Wairoa

In developing this Strategy, Council has considered key trends that are likely to impact on the district and our communities over the next 30 years. We have focussed on the following priority trends that are most likely to impact on Wairoa District, and what these might mean for our infrastructure.



While we want to address all four future trends in our planning, **climate change** is already causing significant environmental, social, cultural and economic impacts. The effects of extreme weather events, like our experience through Cyclone Gabrielle, will in future be accentuated by other climate impacts such as rising sea levels and changing patterns of precipitation. By understanding the potential impacts of climate change, Council can develop effective strategies to maintain infrastructure resilience and ensure long-term sustainability.

There are two core pathways for managing the impacts and risks of climate change:

- **Mitigation** focuses on actions that reduce greenhouse gas (GHG) emissions to limit further climate change
- **Adaptation** focuses on the process of adjusting to the actual and expected changes in the environment because of greenhouse gas emissions already released into the atmosphere and those that will be released in the future.

Climate change is a significant factor considered in Council's decision-making processes, including infrastructure investment. Over the long term Council expects climate trends to have a significant influence decision making.

Even before Cyclone Gabrielle hit, we had identified the need to better understand the key climate change risks to our infrastructure assets. We had commenced an Initial Climate Change Risk Assessment of all of Council's critical infrastructure assets to feed into future infrastructure planning. Understanding these risks allows us to develop effective strategies to maintain asset resilience, reduce the likelihood of asset failure, and ensure long-term sustainability.







Significant infrastructure issues

In preparing this strategy, Council has identified six key infrastructure challenges that will impact on our ability to deliver infrastructure services over the next 30 years:

- Challenge 1: Building Resilience
- Challenge 2: Affordability
- Challenge 3: Sustainable Economy
- Challenge 4: Changing priorities and legislation
- Challenge 5: Sustainable service delivery
- Challenge 6: Protecting our natural environment

Alongside these overarching infrastructure challenges, Council has identified the following key issues (or problem statements) for each of the infrastructure activities included in this Strategy.

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| | ROADS & FOOTPATHS  | WAIROA AIRPORT  | WATER SUPPLY  | STORMWATER  | WASTEWATER  | WASTE MANAGEMENT  |
|---|---|---|---|---|---|--|
| CHALLENGE 1: BUILDING RESILIENCE | Road network vulnerable to damage from increasing climate change impacts resulting in isolated communities and economic disruption | Wairoa's isolated location and lack of specialist health services results in the need to access regional health services | Climate change impacts, particularly higher frequency / intensity of rainfall events results in increased pressure on existing infrastructure | | | |
| CHALLENGE 2: AFFORDABILITY | Shortage of suppliers, resources, people and skills in the Wairoa district results in service level and economic fluctuations | | Water reform, legislation and resource consent changes result in service provision which may be unaffordable to the community | | | Increasing costs & revenue constraints result in unaffordable levels of service for the community |
| CHALLENGE 3: SUSTAINABLE ECONOMY | Heavy vehicle traffic intensity and loading on rural roads results in pavement consumption and increased safety risk for users | Inadequate airport levels of service can result in disruption to economic development of the district | | | | |
| CHALLENGE 4: CHANGING PRIORITIES & LEGISLATION | | | Water reform, legislation and resource consent changes result in service provision which may be unaffordable to the community | | | Legislation changes to reduce waste result in non-compliance issues & limited waste options for the community |
| CHALLENGE 5: SUSTAINABLE SERVICE DELIVERY | Road network not keeping pace with diversity of need, alongside driver behaviours results in lack of transport mode options & increased safety risk for users | The location of the airport in a high flood zone and lack of safety measures results in vulnerability of the district in the case of an emergency | Wairoa River as the main water supply results in conflicts with cultural priorities & long term resilience issues | | | Resource capacity & capability constraints result in reliance on external providers & risk of non-compliance |
| CHALLENGE 6: PROTECTING OUR NATURAL ENVIRONMENT | | | | | Disposal of wastewater into Wairoa River results in conflicts with cultural priorities & consent requirements | Lack of education & convenience of service delivery results in more reliance on Wairoa landfill |

Strategic responses

We have identified a set of overarching strategic responses to address our challenges. As shown below, each response will help to address a number of challenges. We have developed specific options and responses developed for each activity to best address the activity specific problem statements. These are detailed further in this Strategy.

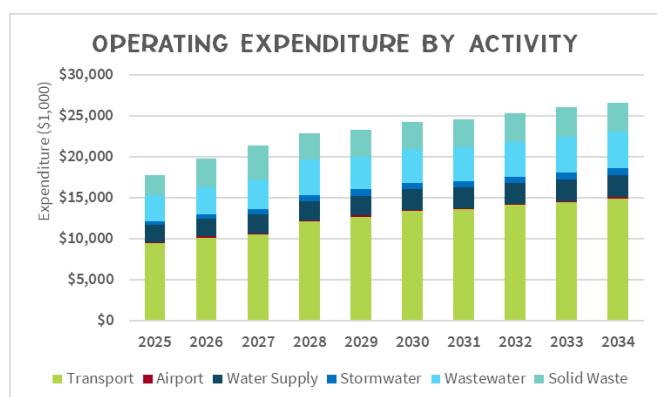
| OUR SIGNIFICANT INFRASTRUCTURE CHALLENGES | STRATEGIC RESPONSES | | | | | | |
|---|------------------------------------|---|--|--|-------------------------|------------------------------|--|
| | Climate change adaptation planning | Integrate land use planning & infrastructure investment | Targeted renewals & improvements for critical infrastructure | Value for money infrastructure management approaches | Leveraging partnerships | Smart procurement & delivery | |
| CHALLENGE 1: BUILDING RESILIENCE | ● | ● | ● | ● | ● | ● | |
| CHALLENGE 2: AFFORDABILITY | | ● | ● | ● | ● | ● | |
| CHALLENGE 3: SUSTAINABLE ECONOMY | ● | ● | | | ● | ● | |
| CHALLENGE 4: CHANGING PRIORITIES & LEGISLATION | | | ● | | ● | | |
| CHALLENGE 5: SUSTAINABLE SERVICE DELIVERY | ● | ● | ● | ● | ● | ● | |
| CHALLENGE 6: PROTECTING OUR NATURAL ENVIRONMENT | ● | ● | | ● | | | |

Financial summary

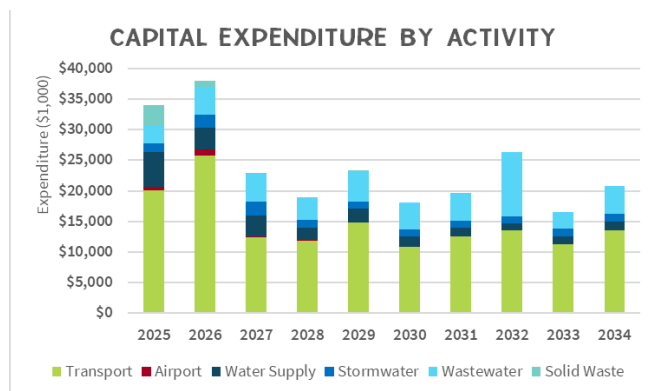
The total expected capital and operational expenditure for each infrastructure activity over the 10-year period 2025 to 2034 is:

| Infrastructure Activity | Operational Expenditure (\$M) | Capital Expenditure (\$M) |
|-------------------------|-------------------------------|---------------------------|
| Roads and footpaths | \$125.52 | \$146.84 |
| Wairoa Airport | \$1.36 | \$1.68 |
| Water Supply | \$24.30 | \$23.78 |
| Storm Water | \$7.22 | \$14.46 |
| Wastewater | \$39.94 | \$46.82 |
| Solid waste | \$33.86 | \$4.62 |
| Total | \$232.18 | \$238.20 |

The breakdown of expenditure for Operations by activity over the 10-year period is summarised below. Operational expenditure accounts for 49% of the expenditure over the 10 year period.



The breakdown of expenditure for Operations by activity over the 10-year period is summarised below. Note emergency works expenditure forecasts (for transport activity only) have not been included.



Funding

Council funds its infrastructure activities through a mixture of rates, subsidies, grants and other fees and charges, seeks central government funding, and potentially development contributions.

Most funding comes from rates, with land transport heavily subsidised by Waka Kotahi NZ Transport Agency (Waka Kotahi). Council also uses debt and reserves to spread the funding of large costs, especially capital expenditure, over the life of the asset.

Over the period of this Strategy Council will be exploring alternative funding sources to maintain its current levels of service to the district.

Introduction

Purpose of the Infrastructure Strategy

Our infrastructure is key to us providing the services our community needs and expects. This Infrastructure Strategy (the Strategy) ensures that we provide sustainable infrastructure supported services, by planning and forecasting expenditure for the long term.

This Strategy has been developed to meet the requirements of the Local Government Act 2002 (LGA) section 101B by:

- Identifying the significant infrastructure issues over the next 30 years
- Identifying the principal options for managing those issues and the implications of those options.

To meet provisions of the Local Government Act 2002, the Strategy must outline how Council (the Council), in managing its infrastructure assets, will take into account the need to:

- renew or replace existing assets
- respond to growth or decline in the demand for services reliant on those assets
- allow for planned increases or decreases in levels of service provided through those assets
- maintain or improve public health and environmental outcomes or mitigate adverse effects
- provide for the resilience of infrastructure assets by identifying and managing risks relating to natural hazards and by making appropriate financial provision for those risks.

The Strategy is intended to guide Council’s long term decisions holistically across the different infrastructure assets as well as meeting the requirements of the Act. The Strategy communicates the infrastructure requirements at a high level to internal and external decision makers, and key stakeholders.

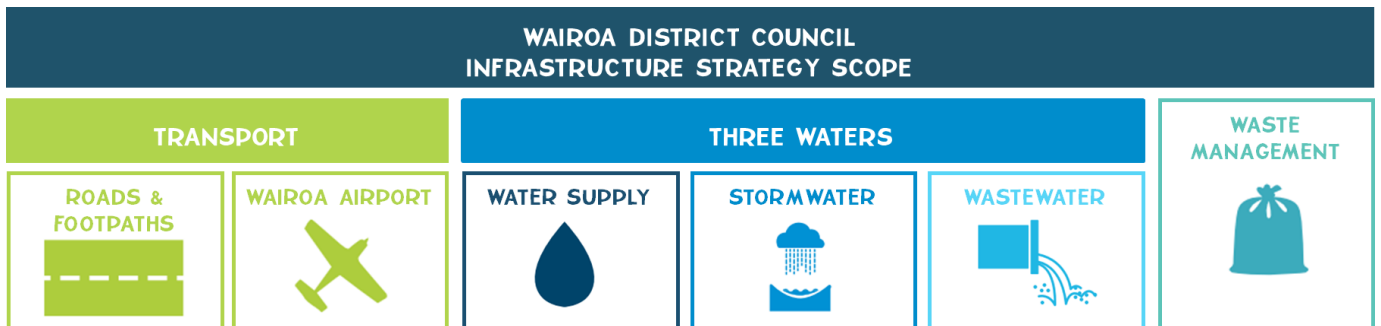
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Infrastructure scope

The Strategy covers the critical infrastructure assets owned and operated by the Council as identified in the LGA, as well as other assets that are important to our community and require strategic decisions over the next 30 years. Infrastructure assets in this strategy are grouped as follows:

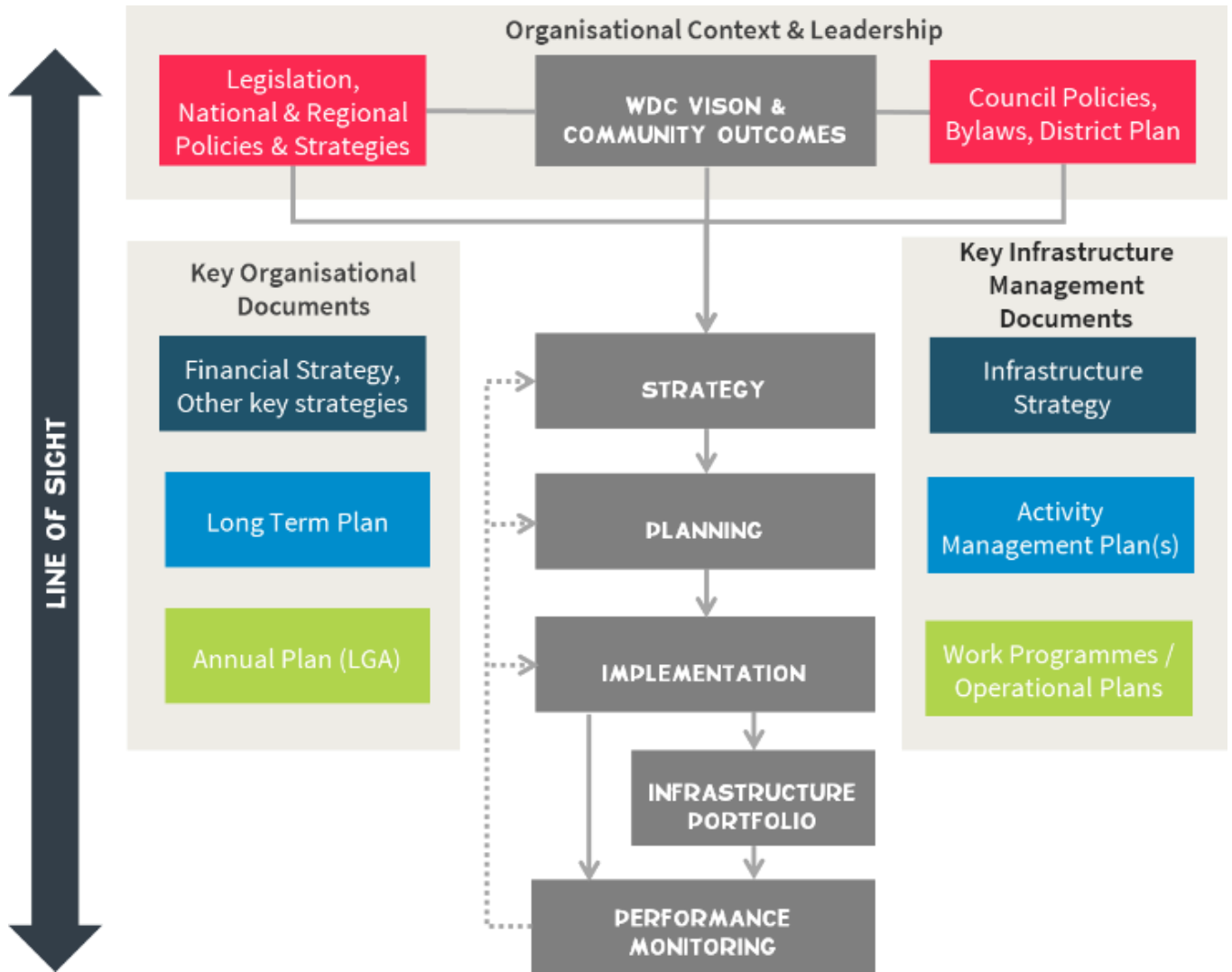


Council has other infrastructure portfolios that have not been included in the Strategy including community facilities, buildings, parks, reserves and cemeteries.

Planning context

This Strategy is a key strategic Council document that links to other core plans and strategies as shown (right).

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Strategic context

Direction for infrastructure provision

Our mission, vision and community outcomes set the direction and guide us to manage our infrastructure to best deliver sustainable Levels of Service to support the wellbeing of our people and district. **Our mission** is our **main job**. **Our vision** is what we see as the best future for our district. **Our community outcomes** are the **big goals** that drive us to support the wellbeing of our people.



We want the Wairoa district to grow and prosper and to ensure that this growth is sustainable. To enable Wairoa to thrive we need intergenerational decision-making that aligns with our ngā pou e whā /community outcomes.

Our future activities need to blend Council’s daily activities with our recovery and encompass:

- He Oranga Ōhanga – a thriving growing economy
- He Oranga Hapori – a vibrant, healthy and innovative community
- He Oranga Taiao – a protected, restored and connected environment
- He Oranga Tikanga – a culturally prosperous community

Our partnership approach

Partnership with Māori

Council acknowledges the inclusion and importance of mātauranga Māori in its infrastructure design and implementation processes. We are committed to meaningful engagement with Māori to achieve the best outcome for the community and the environment.

Relationships with our Māori community remains paramount. We are committed to ensure that Māori are given every opportunity to participate in the decision making process for Council.

Comprehensive cultural advice is provided to Council and its committees, management, and staff to ensure the success of projects across the wider district – this includes supporting the Māori Standing Committee, attending multiple hui across the district and providing positive engagement for staff to increase their knowledge in cultural capability. The Council proactively advocates, on behalf of the Māori community, the principles of the Māori Policy, the Te Reo Māori Policy and any other relevant policy or by-law.

Other partnership opportunities

Working in partnership with others, including the Regional Recovery Agency, other Local Councils, Waka Kotahi and Hawke’s Bay Regional Council, is a key focus when we plan for our infrastructure. We want to take a system wide focus, that ensures holistic outcomes for our community.

Priorities that guide our decision making

This Strategy is guided by the following principles:

- Working together with our partners
- Sustainable financial management that provides the right levels of service for current and future generations
- Proactive provision and management of critical assets
- Integrated provision of infrastructure
- Making the best use of our existing investment
- Robust asset management practices

Levels of service

We provide a wide range of services and activities to our community and visitors. Delivering these services and activities helps us look after the social, economic, environmental, and cultural wellbeing of our people and the district.

Levels of service refers to the standard or level at which these activities are provided. Levels of service for our infrastructure based activities are defined in the Activity Management Plans for each activity, to meet legislative requirements and agreed to / accepted by the communities. Our Activity Management Plans test the affordability of delivering the customer outcomes agreed.

Our performance against levels of service is shown below. Our ability to meet our levels of service commitments has been significantly impacted over the last year by Cyclone Gabrielle. This is particularly evident in our resilience and financial sustainability performance.

| LEVELS OF SERVICE | ROADS & FOOTPATHS | WAIROA AIRPORT | WATER SUPPLY | STORMWATER | WASTEWATER | WASTE MANAGEMENT |
|------------------------------|-------------------|----------------|--------------|------------|------------|------------------|
| SAFETY | ● | ● | ● | ● | ● | ● |
| RELIABILITY | ● | ● | ● | ● | ● | ● |
| AVAILABILITY | ● | ● | ● | ● | ● | ● |
| RESILIENCE | ● | ● | ● | ● | ● | ● |
| ENVIRONMENTAL SUSTAINABILITY | ● | ● | ● | ● | ● | ● |
| FINANCIAL SUSTAINABILITY | ● | ● | ● | ● | ● | ● |

How we manage our infrastructure

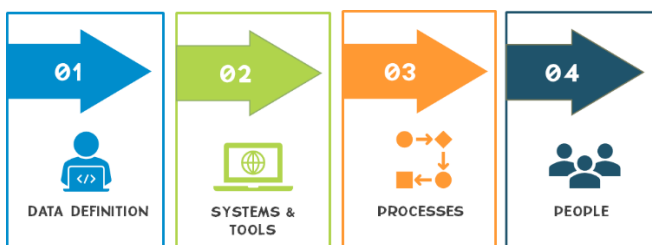
Council is committed to taking a consistent, strategic approach to asset management in order to achieve the desired outcomes and benefits for our communities and represent value for money.

In 2020, we had a review completed to understand how our approach to asset management aligned with good practice. A number of gaps were identified and improvement plan put in place. Over the last three years, we have focussed on priority improvement actions and are steadily improving our approach to managing our infrastructure.

Knowledge management

We understand that evidence based decision making, based on fit-for-purpose and current asset data, is critical to optimising costs and maximising the value our services bring to our communities.

To enable us to make good decisions about how to manage our infrastructure assets, have developed a consistent approach to four key knowledge management enablers:



The collection and management of asset data and information is a core function of asset management. This asset information is the foundation on which asset management processes and programs are based and these require robust inventory, condition and financial information to support informed decision-making.

Since our last Infrastructure Strategy was published, we have made improvements to our data management approach

across all our infrastructure asset portfolios. We have documented core requirements for how staff are to manage and use asset data and information to support our asset management decision making.

We have ongoing improvement plans in place to continue developing quality data to support our long term investment decisions. This work will include aligning our infrastructure related data and information with other Council functions including regulatory planning and finances. In particular, we currently have gaps in information around community development that enable to Council give certainty of what years 11-30 look like across the infrastructure classes.

Risk management

Council uses risk management practices to recognise and manage the risks that have the greatest potential to affect Council’s community outcomes. Our risk management process is based on the international standard for risk management, ISO 31000. It allows us to manage risks at all levels of the organisation as shown below.



An Initial Climate Change Risk Assessment has been completed for all of Council’s critical infrastructure assets.

This has highlighted which assets are most at risk of being impacted by future changes in climate. We have used this risk assessment to make inform long term decision making in this Strategy. Further work is required to complete a more comprehensive adaption planning approach for climate change.

Lifecycle management

We need to ensure that we invest in maintaining, renewing or replacing our existing asset infrastructure to preserve and extend their useful life.

Asset condition

We assess the condition of our assets using a variety of assessment techniques, depending on the type of asset and its criticality. We then equate the various assessment outputs to a consistent condition rating methodology. This allows us to report on condition consistently across all our infrastructure assets.

| Condition Rating | Condition Description | Intervention |
|------------------|---------------------------|---|
| 1 | Very Good Condition | None required |
| 2 | Good Condition | Minor defects only, programme proactive maintenance or monitor |
| 3 | Fair or Average Condition | Some defects, maintenance required to return to accepted level of service |
| 4 | Poor Condition | Substantial defects, consider renewal |
| 5 | Very Poor Condition | Approaching unserviceable, consider disposal or replacement |

Asset performance

We report the performance of assets in terms of their ability to support the Levels of Service we provide for each activity. This means the performance is reported against specific performance measures for each activity.

Maintaining Existing Assets

We operate and maintain assets to achieve the optimum use of the asset, and at the agreed service levels. Maintenance of an asset does not increase the asset's service potential or keep it in its original condition. It slows down deterioration and delays when renewal or replacement is needed. In this Strategy, the maintenance of our existing assets is included in our Operational Expenditure (Opex) costs.

Renewals

Renewals are generally defined as major work which restores, rehabilitates, replaces or renews an existing asset to its

original condition/function. We programme renewals to ensure that the reliability of an asset is maintained by replacing it to its original capacity with an extended life. To ensure a balanced budget under the LGA 2002, asset depreciation is used to fund renewals.

Assets identified for renewal are typically:

- Near or beyond the end of their expected life and are no longer economic to maintain
- Have known condition and/or performance deficiencies
- Have both known deficiencies and are of a critical nature.

Renewals will be targeted towards critical assets.

Capital expenditure

In this Strategy, Capital expenditure (Capex) is split by type:

- **Renewal:** as outlined above this includes replacing or extending the life of our existing assets.
- **Level of service:** this includes projects that help us improve the level of service that we provide to the community.
- **Growth:** this includes projects that allow us to provide additional capacity for a growing or changing community.

Investment decision making

In 2020 we developed an investment decision making approach that could be applied consistently across all infrastructure activities. Included in this approach is a Projects Prioritisation process and Multi Criteria Analysis (MCA) assessment tool. It uses a standard set of criteria, and a weighting / scoring system to evaluate projects and prioritise them consistently score projects across all the things that are important to Council. We use this tool for prioritising capital expenditure projects in the short to medium term.

Improving our management approach

Following our asset management maturity review completed in 2023, we have recognised key improvements made over the last three years and the key areas that should be prioritised for further improvement. These improvement initiatives have been incorporated into our Improvement Plans for each infrastructure based activity as well as organisational level asset management practices.

Limitations & assumptions

In developing this Strategy, there are a number of assumptions Council has had to make. This has flow on effects on the identification of challenges and how Council can best respond. Key assumptions and areas of uncertainty made as part of this planning process and their likely consequences or impact are included below.

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| Limitation / assumption | Impact | Risk Level | Uncertainty level |
|---|--------|------------|-------------------|
| <p>Climate change: We are already being impacted by the effects of climate change, but there is uncertainty around the full extent of future impacts and consequences for our communities. We have completed an initial climate change risk assessment providing high level risk impacts for our infrastructure assets.</p> <p>NIWA has also recently released (June 2024) new NZ climate change projections and data that will help us with future scenario planning.</p> | HIGH | HIGH | HIGH |
| <p>Resource management planning: Resource management reform in recent years head impacted on our ability to plan for the future of our district. Our current District Plan needs updating, and we need to develop clear policy and spatial planning to provide a more robust view of how our future district will look. This needs to account for the future mega trends identified in this Strategy.</p> | HIGH | HIGH | HIGH |
| <p>Delivery costs: Project estimates are based on the best available scope, asset, and market information available at the time of planning. Rising inflationary costs to manage our infrastructure have been included based on industry forecasts, as outlined in our financial policies and strategy. However, there is still a significant amount of uncertainty in our future delivery cost forecast.</p> | HIGH | HIGH | HIGH |
| <p>Scope of infrastructure managed by Council: Regional initiatives being reviewed as part of the revised Water Services Policy and Legislation focused on Local Water Done Well. While this provides uncertainty to our long term planning for three waters infrastructure, we expect there will be some form of regional approach to future water service provision within the Strategy period.</p> | HIGH | HIGH | MEDIUM |
| <p>Compliance: Changing resource consent compliance and monitoring requirements are likely to become more restrictive increasing compliance costs.</p> | HIGH | HIGH | MEDIUM |
| <p>Funding provisions: Key external funding subsidies are critical to ensuring the affordability of our infrastructure based services to our ratepayers. We have assumed that funding from Waka Kotahi will continue at the current financial assistance rate of 75% for roading and footpath activity.</p> | HIGH | MEDIUM | MEDIUM |
| <p>Data reliability: Over the last three years we have been working to improve the quality and reliability of our infrastructure data so we can make better, evidence based decisions. However, we have some gaps in our data for condition of our assets. Asset renewal forecasts are based on the condition and the remaining life of infrastructure assets. Further improvements to our asset data collection and condition assessment procedures are being developed and implemented to provide greater certainty for our longer term renewal forecasts.</p> | MEDIUM | MEDIUM | MEDIUM |
| <p>Changes in demand for services / levels of service: Impact of levels of service changes on asset requirements or operating expenditure.</p> | MEDIUM | MEDIUM | LOW |
| <p>Asset lifecycles: Most of the significant assets will continue to be reviewed every three years. Assets will be replaced at the end of their useful life.</p> | MEDIUM | MEDIUM | LOW |
| <p>Growth: The district's population is expected to increase slightly from 2020 estimate. It is expected that growth will primarily occur in Mahia. This means the rating base remains constant or slightly increasing.</p> | MEDIUM | LOW | LOW |

Planning for future trends affecting Wairoa

In developing this Strategy, Council has considered key trends that are likely to impact on the district and our communities over the next 30 years. We have focussed on the following priority trends that are most likely to impact on Wairoa District, and what these might mean for our infrastructure.



Climate change

While we want to address all four future trends in our planning, climate change is already causing significant environmental, social, cultural and economic impacts. The effects of extreme weather events, like our experience through Cyclone Gabrielle, will in future be accentuated by other climate impacts such as rising sea levels and changing patterns of precipitation. By understanding the potential impacts of climate change Council can develop effective strategies to maintain infrastructure resilience and ensure long-term sustainability.

There are two core pathways for managing the impacts and risks of climate change:

- **Mitigation** focuses on actions that reduce greenhouse gas (GHG) emissions to limit further climate change
- **Adaptation** focuses on the process of adjusting to the actual and expected changes in the environment because of greenhouse gas emissions already released into the atmosphere and those that will be released in the future.

Climate change is a significant factor considered in Council's decision-making processes, including infrastructure investment. Over the next 30 years Council expects the following climate trends to influence decision making:

| Priority Trends | Impact for Wairoa |
|-----------------------------|--|
| Storm Intensity & Frequency | <p>Cyclone Gabrielle is a very recent reminder of the exposure and vulnerability of our communities to climate change hazards. Wairoa has had a number of significant storm events in recent years, which had already impacted on our communities and infrastructure.</p> <p>Wairoa township is located on the banks of the Wairoa River. The short, steep catchment, made up of shallow soils underlain by impermeable mudstone substrata further increases the risk of flooding,</p> |

¹ NZ Sea Rise. Se-level rise: causes and future projections. <https://www.wgtn.ac.nz/antarctic/about/news/nz-searise-factsheets/Factsheet-1-Sea-level-rise-causes-and-future-projections.pdf>

| Priority Trends | Impact for Wairoa |
|----------------------------------|--|
| | <p>with the following impacts:</p> <ul style="list-style-type: none"> • Increased spending on flood protection, flood damage repairs and drainage improvements • Repeated damage to housing, community amenities and businesses • Insurance coverage will be more difficult to get |
| Sea level rise / coastal erosion | <p>By 2050, sea level rise will be 20-30cm in New Zealand regardless of GHG emission levels¹.</p> <p>Wairoa district has exposed coastline, particularly around our urban communities of Mahia and Wairoa. Along with rising sea levels areas of the coastline are subsiding into the sea. This will exaggerate the coastal impacts associated with rising sea levels.</p> <p>Impacts of coastal erosion are already impacting our roads across the district. Many of our communities, in particular Māori cultural heritage sites such as marae (meeting places) and urupa (burial sites), are at risk of rising sea levels. In future, insurance may be difficult to obtain for these areas, forcing retreat of communities and infrastructure.</p> |
| Decarbonisation | <p>Agriculture contributes 50% of New Zealand's GHG emissions². Agriculture is a key contributor to Wairoa's economy, but with increased pressure on agriculture industries that produce methane, land-use change from agriculture to forestry may increase.</p> |

Society

Society is changing. Across New Zealand, urban area populations are growing, but for rural districts like Wairoa, there is less growth and the average age is increasing. The pressures on rural communities are increasing and this in turn is impacting mental health. By planning for these anticipated changes, Council can meet the future demand on infrastructure while supporting social well-being.

Over the next 30 years Council expects the following societal trends to influence decision making:

| Priority Trends | Impact for Wairoa |
|---------------------|---|
| Changing population | <p>Significant population growth is not projected for Wairoa district, but changes in the split between urban and rural populations is likely. With this comes differing requirements for services across the district, often with competing demands. For urban areas, it is anticipated to be in</p> |

² Ministry for the Environment (April 2022). New Zealand's Greenhouse Gas Inventory 1990–2020

| Priority Trends | Impact for Wairoa |
|------------------|--|
| | <p>Mahia with an increase in people retiring to the area, or people that whakapapa to the area returning home, or people building holiday homes. However, the area is particularly exposed to climate change with ongoing coastal erosion impacting on access roads. In future it is expected that there will be increased pressure on key services in the area.</p> <p>With the changing population comes pressure on housing. There was already a shortage of housing in Wairoa before Cyclone Gabrielle hit, and this event has only exacerbated the situation. The lack of housing options results in worsening housing affordability, reducing living standards and increasing pressure on social services.</p> |
| Aging population | <p>Statistics NZ projects 1 in 4 people in Wairoa District will be 65+ by 2048 (higher than the mean).</p> <p>It is projected that average life expectancy will continue to rise while birth rates decrease (or plateau). To support this aging population, Wairoa will need more multi-generational homes. To date, Wairoa has no purpose-built housing options for kaumātua. There will also need to be healthcare services available for elderly.</p> |
| Mental Health | <p>Mental wellbeing has been declining, in particular for people with disabilities, low incomes and single parents. For Wairoa, the psychosocial impacts of Cyclone Gabrielle are expected to have prolonged effects for the community with heightened levels of anxiety across the motu.</p> |

Technology

Technology is changing how we live and work. People are becoming more digitally connected, more business is being done online and smart data use is playing a bigger role in informing decision making.

For Wairoa, the changing face of technology brings with it opportunities such as, people relocating while still being able to work remotely, improving productivity, and better data to support decision making. However, widespread adoption of technology is also accompanied by increased cyber security risks and jobs at risk of replacement from automation. Understanding these trends is important for our infrastructure planning and digitally upskilling the future workforce.

Over the next 30 years Council expects the following technology trends to influence decision making:

| Priority Trends | Impact for Wairoa |
|---------------------|---|
| Smarter use of data | <p>Understanding the local context and impacts of Cyclone Gabrielle from collected data is helping Wairoa to prioritise and plan its recovery.</p> <p>Available data obtained through the Recovery Hub and by other partner</p> |

| Priority Trends | Impact for Wairoa |
|-------------------------|--|
| | <p>organisations, such as HBRC and Waka Kotahi, will allow Wairoa to understand and meet the needs of flood affected community and whānau members.</p> <p>Priority will be given to the development of a flood warning system based on live video, telemetry data and text warning to build resilience for Wairoa's primary sector and rural community.</p> |
| Remote service delivery | <p>A key priority for Wairoa will be attracting staff to the area to provide sufficient resource for recovery work. While remote and flexible working are not suited to everyone, this option of working may make it easier and more appealing for families to relocate to Wairoa.</p> <p>Remote practices may also allow a shift of some service offerings, such as, online health services. However, for equitable access to online services, digital connectivity will need to be improved.</p> |

Resources

Wairoa is a relatively isolated part of the country and future availability of key resources is critically important to the prosperity of Wairoa. Prior to Cyclone Gabrielle, there were already challenges around key resources including water, energy and workforce. The impacts of the Cyclone have highlighted Wairoa's vulnerability to changing resource availability. It will be critical that Council work in partnership with Māori to ensure resource management aligns with Te Ao Māori.

Over the next 30 years Council expects the following resource trends to influence decision making:

| Priority Trends | Impact for Wairoa |
|----------------------|--|
| Circular economy | <p>There is growing demand for local, environmentally friendly waste management solutions. To reduce demands on the landfill, opportunities to reduce waste generation is a high priority.</p> <p>Wairoa has set a goal to increase the amount of material diverted from landfill. There are also efforts to educate the community on zero waste and product stewardship.</p> <p>Government is planning to make food scraps collection services available to households in all urban areas by 2030. Wairoa will need funding support to implement kerbside collection, which can be applied for through the Waste Minimisation Fund. Funding for organic waste processing facilities and resource recovery infrastructure can also be applied for through the Waste Minimisation Fund.</p> |
| Workforce capability | <p>Ageing population along with plateauing numbers of graduates is going to affect Wairoa's supply of highly skilled workers. A shortfall of construction workers may</p> |

| Priority Trends | Impact for Wairoa |
|--------------------------------|---|
| | <p>increase the challenge of recovering from Cyclone Gabrielle for Wairoa. However, there is an opportunity to re-skill and up-skill members of the community whose jobs may be at risk of automation in construction, as well as technology use.</p> |
| <p>Water management</p> | <p>Traditional water management may be at odds with Te Ao (world view) Māori which views water as a taonga (treasure). Investment in water infrastructure will need to consider future climate change risks and involve working in partnership with mana whenua, as stated under Te Mana o te Wai. Investment is also required over the next 30 years to reduce the vulnerability of aging infrastructure and to meet future demand.</p> |
| <p>Biodiversity management</p> | <p>As Wairoa recovers there has been a focus on restoring access for farming and horticultural activities. There is also some uncertainty around urban recovery and areas most at risk of future flooding. As both the rural and urban communities recover, infrastructure planning needs to take biodiversity into account to reduce further loss of species and degradation of ecosystems. Council is also responsible for protecting, maintaining and restoring indigenous biodiversity under the National Policy Statement for Indigenous Biodiversity.</p> |

Significant infrastructure challenges

Council has identified six key infrastructure challenges that will impact on our ability to deliver infrastructure services over the next 30 years.

| OUR SIGNIFICANT INFRASTRUCTURE CHALLENGES |
|---|
| CHALLENGE 1: BUILDING RESILIENCE |
| CHALLENGE 2: AFFORDABILITY |
| CHALLENGE 3: SUSTAINABLE ECONOMY |
| CHALLENGE 4: CHANGING PRIORITIES & LEGISLATION |
| CHALLENGE 5: SUSTAINABLE SERVICE DELIVERY |
| CHALLENGE 6: PROTECTING OUR NATURAL ENVIRONMENT |

- Power and communications outages at water and wastewater treatment plants impacted the ability of staff and suppliers to remotely monitor and manage treatment plants, as well as causing disruption to treatment and supply of safe drinking water.
- All three waters systems were overwhelmed by large volumes of stormwater, silt and debris. This has caused damage to our already vulnerable critical assets and components.
- Wairoa River banks have experienced significant erosion and deposition along the entire length of the river.

Solid waste generated by the Cyclone, resulted in significant additional volumes of refuse to landfill than Wairoa would normally deal with. We had already identified sustainability issues with the long term viability of our landfill service, and the impacts of the cyclone have further exacerbated this.

As part of our recovery, we have been developing our Wairoa District Recovery Plan. Key aspects of this plan have been incorporated into our short to medium term infrastructure investment.

Challenge 1: Building resilience

Climate change and natural hazards are putting our communities and infrastructure at risk. We need to develop an approach to adaptation that will shape the future of affected communities and guide investment in and provision of infrastructure.

Cyclone Gabrielle impacts

This challenge has been very evident over the last 18 months since the February 2023 Cyclone Gabrielle. Like the rest of Hawke's Bay, Wairoa District was significantly impacted by the cyclone as the Wairoa River breached its stop banks and had hundreds of people evacuate their homes. The district was completely cut off by road as all highways were badly damaged. Food, water, and fuel were limited after the cyclone and all communications were down.

Key impacts from this event included:

Wairoa's land transport network was severely impacted isolating whānau and making it difficult for communities to connect and access services, including:

- All state highways in and out of the Wairoa district closed
- 4 local road bridges destroyed requiring full replacement
- 13 local road bridges significantly damaged requiring repairs
- 44 land slips impacting road accessibility
- 50 drop-outs impacting road accessibility and stability
- 50 other sites damaged, due to flooding, silt/debris, etc.

These disruptions along the roading network required access to goods and service via air transport, highlighting **Wairoa Airport's** critical role for the future.

Wairoa's 3-waters networks were impacted highlighting vulnerabilities and the lack of resilience to significant weather events, including:

Risk-based levels of service

Extreme weather events and patterns will continue to impact our infrastructure and Council's ability to deliver services to the levels needed by the community. More frequent and intense weather events will continue to create increased risk and damage to the Council's infrastructure and activities.

Our planning helps us identify key risk areas, recognise impacts in asset and financial modelling, and prioritise funding for resilience. We will identify critical components of our networks and prioritise renewals and resilience related infrastructure improvements.

Climate change risk

Even before Cyclone Gabrielle hit, we had identified the need to better understand the key climate change risks to our infrastructure assets. We had commenced an Initial Climate Change Risk Assessment of all of Council's critical infrastructure assets to feed into future infrastructure planning. Understanding these risks allows us to develop effective strategies to maintain asset resilience, reduce the likelihood of asset failure, and ensure long-term sustainability. The table below summarises the risk assessed for critical infrastructure assets as a result of key climate projections and impacts.

| Response | Impact | Risk level |
|----------------------------------|--|-----------------|
| Changes in precipitation | Extreme rainfall events are already causing issues for several of the assets assessed. This will only continue to get worse with the expected increase in frequency of rainfall. | High to Extreme |
| Increase in Sea Level Rise (SLR) | The increasing SLR increases risk of those assets located near the coast. Opoutama and Mahia and most of the critical connecting roads along the coastline are at high risk. | High to Extreme |

| Response | Impact | Risk level |
|---------------------------|---|------------|
| Increases in temperatures | The projected increase in temperature is expected to have minimal impact on the majority of assessed assets. The exception is wastewater treatment plants, where increased temperature may cause higher algae and bacterial growth. | High |

Challenge 2: Affordability

To keep providing the levels of service our community expects we need to make a significant investment in our infrastructure. Even before the impacts of Cyclone Gabrielle, this was becoming increasingly difficult as our infrastructure gets older and changes to legislation and regulations increase costs.

Ability to pay

While Council aims to deliver its services in an affordable way, we face challenges in spreading the cost over a small number of ratepayers. We also face significantly higher ability to pay challenges than for the Hawke’s Bay region as a whole and nationally, in terms of the demographic, economic and income factors and deprivation index. The average standard of living (or GDP per capita or per person) in the district is 81% of the Hawkes Bay level and 63% of the national level.

With a small rating base and higher ability to pay challenges, Council needs to think more broadly about how to fund its infrastructure programme. This challenges Council to look for alternative funding sources.

Understanding what Council can afford to pay is critical and may require Council to consider potential changes to levels of service in the future. Over the life of this strategy Council needs to understand the funding options available, including recovery funding for Cyclone Gabrielle, Waka Kotahi subsidies, other grants and subsidies, user fees and charges, potential development contributions, and partnerships to deliver services to the district. Alternative funding sources will enable Council to reduce the financial impact of increased infrastructure costs to our ratepayers.

Aging infrastructure

Much of our communities infrastructure assets were developed at the same time, after World War II. This means that a lot of our infrastructure assets are reaching the end of their useful lives at the same time. This is particularly the case for our longer life assets, such as three waters assets and bridges. The condition of these assets is deteriorating, and it is becoming harder to keep up with the amount of renewal work required to replace failing or at risk assets.

Inflation cost pressures

The costs of keeping our infrastructure maintained, renewed and meeting our levels of service requirements is continuing to increase. Costs are rising for many reasons including:

- Labour cost increases
- Materials and logistic cost increases
- Legislative changes, including minimum wage

- Other pressures, including cyclone impacts on availability of labour and materials

Taken together, the various increases across the board mean that funds previously allocated for future projects in previous planning rounds won’t stretch as far today. This means we need to undertake the difficult task of determining the prioritisation of projects to be delivered within a smaller envelope.

This issue is accentuated for Wairoa because of the remoteness of our district and limited options for supply of resources. As noted in Waka Kotahi Investment Audit Report (2021):

“In terms of the maintenance expenditure, Wairoa District Council has the second highest cost per kilometre when compared with the approved organisations in the rural districts peer group, for the 2018 – 2021 NLTP period.”

Challenge 3: Sustainable economy

While increased economic development is needed and desired in our district, servicing the whole district is becoming increasingly challenging. Competing priorities between enhancing the urban economy and connecting rural communities, mean expectations around service levels are difficult to meet. Changes in land use continues to put additional pressure on our infrastructure.

Enhancing the urban economy

Both Wairoa township and Mahia are key urban economy hubs for the Wairoa District. Council needs to support economic development in these areas to ensure the long term viability of these communities. However, this development has an impact on the capacity of our existing infrastructure and comes with service level expectations which Council may not be able to meet.

Wairoa Township Development: With the impacts of the cyclone, there has been significant impact on the Wairoa Township and our ability to support economic development. A key economic hub for the town is the Marine Parade area, which were significantly damaged. This impacted three waters infrastructure along the Wairoa River. The cyclone has also exacerbated the lack of housing options. We need to be able to improve the capacity of our infrastructure to attract new people and businesses to the area and in turn enhance the economy.

Servicing Mahia: Growth in the district is anticipated to be in Mahia with an increase in people retiring to the area, people that whakapapa to the area returning home, or people building holiday homes. There is also significant population swell at Mahia over the holiday periods. The population of Mahia can fluctuate from less than 1,000 permanent residents to over 15,000 people during peak periods. Shock loading on Council’s infrastructure is challenging as design capacities are breached. Council will need to invest in Mahia’s stormwater and wastewater infrastructure to ensure capacity is available.

Connecting rural communities

The rural parts of our district provide the backbone for our economy. Our land transport network is key to keeping our rural communities connected, both to our urban areas and to the wider district. Accessibility is important to our rural economy to ensure producers get their product to town, the

Ports of Napier and Gisborne and other destinations. As a district we have been successful in supporting rural economic development, including the development of the Rocket Lab at Mahia Peninsula. The challenge we have is supporting rural economic growth, while managing ongoing accessibility challenges.

Land use changes

Much of the Cyclone recovery assumes no changes to infrastructure demand and use. However, changes to land categorisation and land use activities (e.g. potential decisions around climate change adaptation) may impact infrastructure demand, so needs to be considered as part of our longer term Strategy for infrastructure provision. At this stage, we do not have a good understanding of the impacts on long term land use changes.

To date, a significant land use change has been the conversion of pastoral land to forestry. Forestry harvesting has put considerable strain on our rural road network. The impacts of the cyclone cast an uncertainty on further land conversion, however even with the current land use, forestry harvesting is predicted to have a significant impact on infrastructure over the course of this Strategy.

Land use changes from pastoral to fruit have also been occurring, and there has been an expectation that wider horticultural use may continue. However, with the impacts of the cyclone on State highway connections, we are likely to see less land conversion in the short to medium term due to costs to get the produce to market.

Any changes to land use, increase community expectation around road sealing and the need for ongoing maintenance from regular heavy vehicle use has significant cost implications.

Challenge 4: Changing priorities and legislation

There are significant changes to legislation that are either planned or underway that will impact the delivery of infrastructure in the district. While change is continuing to occur as a result of changing government, it is important that we focus on making our infrastructure plans and management approach agile to respond to these changes.

Central Government priorities

Central Government changes are impacting the role and responsibilities of local government. With the change of government previous legislation is now being repealed and new priorities for infrastructure are being developed. Key uncertainties include:

Resource management reform: The new government has repealed the Spatial Planning Act and Natural and Built Environment Act and have committed to further reform to the Resource Management Act.

Water Services reform: The new government has announced repeal the previous government's three waters reform. Water Services Policy and Legislation is now focused on Local Water Done Well. There are regional initiatives being reviewed as part of the revised legislation. Therefore for the period of this Strategy, we expect there will be some form of regional approach to future water service provision.

Until more certainty is given, Council will need ongoing funding support as it repairs, restores and rebuilds resilience into its three waters infrastructure following the impact of Cyclone Gabrielle.

Infrastructure reform: The new government plans to establish a National Infrastructure Agency to coordinate government funding, connect domestic and offshore investors with New Zealand infrastructure, and improve funding, procurement and delivery.

Solid waste reform: Government is planning to update the waste legislation to standardise waste management practices, set national waste standards and improve the availability, quality and consistency of waste data. The new legislation is anticipated to be enacted in 2024 and will replace the Waste Minimisation Act 2008 and Litter Act 1979.

Government Policy Statement (GPS) on Land Transport: The GPS outlines the Government's strategy for investing in the land transport system and sets out the priorities for the following 10-year period. The GPS 2024 has been released. It provides more focus on maintaining existing infrastructure. There is no development of new infrastructure that will service the Wairoa District.

Zero Carbon Act

The Climate Change Response (Zero Carbon) Amendment Act includes a target of reducing emissions of biogenic methane within the range of 24 to 47% below 2017 levels by 2050, and an interim target of 10% by 2030. It also has a target of reducing net emissions of all other greenhouse gases to zero by 2050. The Act does not explicitly exclude any activities such as methane produced at wastewater treatment plants. It will also impact the solid waste asset portfolio with increasing Emissions Trading Scheme costs and to a lesser degree transport costs used to collect and cart to landfills.

Solid Waste

There are a number of changes impacting on our ability to provide waste management services to our communities:

Waste Levy: From the 1 July 2021, the Government introduced progressively increasing levy rates for landfills. The levy rate has also been expanded to cover construction and demolition waste.

Recycling changes: Materials collected from households for recycling will be standardised across Aotearoa from 2024. This requires Council to provide kerbside recycling services for urban areas by 2027. As part of Government's focus to divert household waste from landfill, Council will need to meet an increasing minimum standard for the amount of household waste (recycling and food waste) diverted from landfill. Funding has been granted to Council to support its transition to the new system.

Emissions Reduction Plan (ERP): Under the ERP, the priority for the Waste Sector is a reduction of organic waste and diversion from landfill for households and businesses. This will impact Council by requiring the provision of kerbside collection of organic waste for households from 2030. Investment in organic waste processing facilities or transport costs to collect and take organic waste to these facilities will also impact Council. The Emissions Reduction Plan also includes a commitment to require all municipal (Class 1) facilities to have a landfill gas capture system in place by the

end of 2026, which means capture systems will need to be installed.

Emissions Trading Scheme: The New Zealand Emissions Trading Scheme (NZ ETS) is the Government's main tool for reducing greenhouse gas emissions to meet its international obligations and domestic targets. Under this scheme, waste disposal facilities are required to report and surrender NZ units corresponding to the amount of emissions emitted (primarily biogenic methane).

Challenge 5: Sustainable delivery

Having the resources to deliver key infrastructure services is becoming an increasingly large challenge. A shortage of suppliers, supply chain costs, resource constraints (e.g. aggregate extraction restrictions) and lack of skilled workers impact on our ability to deliver infrastructure services.

Capacity of the market to deliver

This is an overarching issue for Wairoa that also contributes other problems. Historically, the district was not successful in attracting and maintaining a skilled workforce. Council have struggled to attract suppliers to tender for term maintenance contracts, restricting the ability for price tensioning and value for money outcomes.

One of the historical issues has been the limited pipeline of work (comparative to surrounding region), providing less opportunity for a sustainable and competitive market in the district. We expect this will continue to be a longer term problem for Wairoa, without a concerted effort to continue to develop our local market.

However, with the ongoing cyclone recovery work required in the district, this is not an issue in the short to medium term. The challenge now lies in the fact that the wider regional Cyclone impacts and recovery work across the East Coast, is putting considerable pressure on the whole contracting market. All road controlling authorities are struggling to complete immediate priorities due to the significant supply chain constraints.

Construction materials availability

Council faces challenges around the availability and cost of locally sourced, quality construction materials for infrastructure maintenance and construction work.

This is a significant issue in terms of aggregate supply. The lack of suitable hard rock quarries in the district places considerable pressure on river sources, which are facing increased restrictions by the Hawkes Bay Regional Council's consenting requirements. This means that supply of construction materials is often from outside the district, increasing the costs of construction.

Challenge 6: Protecting our natural environment

Ensuring we are looking after our natural environment is a key focus and challenge going forward. We need to work together with our communities to ensure we meet our environmental compliance requirements.

Solid Waste Management now and into the future

A key focus area for protecting our environment is managing our solid waste now and into the future. Our current landfill site is nearing the end of its usable life, so we have been reviewing alternative options for the future. Cyclone Gabrielle and subsequent flooding events have exacerbated the situation, by causing more dumping into the landfill from damaged properties.

We will need a community-wide approach with a shift in focus to waste minimisation rather than waste management. We need people to take responsibility for their own waste generation and actively be better kaitiaki. If everyone makes an effort to reduce their waste, it will result in less waste to manage and, therefore, lower costs while protecting our natural environment.

Looking after our environment

Some of our infrastructure activities have specific resource consent requirements, to ensure we provide appropriate infrastructure and monitor environmental impacts. This is particularly important for our three waters activities and solid waste management.

As resource consents come up for renewal, it is likely that consent conditions will require higher design standards, management and monitoring than the existing consents. This means we not only need to allocate funding and resourcing to secure new resource consents, but also to implement new consent conditions.

Responding to our challenges

We have identified a set of overarching strategic responses to address our challenges. As shown below, each response will help to address a number of challenges.

| OUR SIGNIFICANT INFRASTRUCTURE CHALLENGES | STRATEGIC RESPONSES | | | | | | |
|---|------------------------------------|---|--|--|-------------------------|------------------------------|--|
| | Climate change adaptation planning | Integrate land use planning & infrastructure investment | Targeted renewals & improvements for critical infrastructure | Value for money infrastructure management approaches | Leveraging partnerships | Smart procurement & delivery | |
| CHALLENGE 1: BUILDING RESILIENCE | ● | ● | ● | ● | ● | ● | |
| CHALLENGE 2: AFFORDABILITY | | ● | ● | ● | ● | ● | |
| CHALLENGE 3: SUSTAINABLE ECONOMY | ● | ● | | | ● | ● | |
| CHALLENGE 4: CHANGING PRIORITIES & LEGISLATION | | | ● | | ● | | |
| CHALLENGE 5: SUSTAINABLE SERVICE DELIVERY | ● | ● | ● | ● | ● | ● | |
| CHALLENGE 6: PROTECTING OUR NATURAL ENVIRONMENT | ● | ● | | ● | | | |

Climate adaptation planning

We need to develop an approach to adaptation that will shape the future of affected communities and guide investment in and provision of infrastructure. We are working in conjunction with Hawke's Bay Regional Council, to start this approach, through flood modelling and review of flood protection options for Wairoa.

Development of a climate adaptation strategy/ framework will help make tough decisions, so we can build resilience and better incorporate climate change in future management and investment in infrastructure assets.

This approach will likely focus on:

- Planning (Year 1)
- Adaptation of existing infrastructure where applicable (Year 3-10)
- Potential for managed retreat in future (Year 11-30)

Some specific focuses include:

- **Transport infrastructure (airport):** Our airport is a key alternative transport option to our roading network. We need to make this more resilient and improve capacity by lengthening runway to take larger aircraft
- **Transport infrastructure (roads):** Mahia connection - Blowhole, Waikokopu
- **Wastewater network additions:** North Clyde and bottom of Kopu Road

Integrate land use planning & infrastructure investment

We want to be proactive about growth, developing a new view of how our future district will look. This will include developing clear policy and planning. To do this we will consider:

- **Hazard risk areas:** Where development should not intensify, and where it should be directed away from, to avoid natural hazards such as flooding. We will use hazard information from various sources including HBRC's recent flood plain modelling and management review.
- **Demand projections:** A projection of housing need, and analysis of available capacity (vacant lots), within and outside of risk areas.
- **Land use controls:** Review the different controls we can use where risk and consequence justify land use controls to avoid intensification or set building consent requirements.
- **Development options:** Review options for development of lower risk areas and or identify retreat options. Alongside this we will need to determine how best to roll out infrastructure renewals and upgrades.
- **Developer contribution support:** ensure Council policy around developer contributions aligns with other planning considerations.

Having this plan in place will help us:

- Avoid developing in areas of high risk
- Avoid developing in areas of that significantly impact our natural environment

- Provide certainty to our community around future service provision
- Support economic development
- Allow for potential take up of existing infrastructure capacity to be better understood, planned and budgeted for

Targeted renewals & improvements for critical infrastructure

Because of the large portfolio of infrastructure assets we have, we must take a risk based approach to renewing and improving them. We do this by having a consistent way of assessing and prioritising our critical infrastructure. To do this we consider:

Contingency planning: Develop improved contingency plans and work programmes to manage risk across the network.

Compliance and criticality: Complete required upgrades and maintenance to ensure compliance with new legislation.

Urban Development: A lot of our key assets are service our urban communities. Development of critical infrastructure for the likes of our Wairoa and Mahia communities will support further economic opportunities. We will work collaboratively with industry, tourism providers and Rocket Lab to understand their ongoing requirements for access and provision of other infrastructure services.

Infrastructure management approaches

Data & information improvements: Invest in condition assessments of our assets, particularly older networks. Where possible we will use technology advancements to assist (e.g. use of drones). Data will then be used in optimised decision making based to ensure appropriate renewals programmes.

Rationalising assets & services: we need to review whether we need all our current assets to deliver the core services our future generations will want. We may be able to sell or decommission assets that are expensive to operate, but only used by a few people, or may be made redundant by changes in technology. We will look at developing a clear Disposal Strategy.

Compliance management: ensuring we are meet compliance requirements for our assets and services is a critical part of the service Council provides. Requirements to prepare and renew resource consents are likely to increase (e.g. environmental impact assessments). New consent conditions will also likely increase requiring more monitoring increasing the overall operational costs to provide service. So we need to allocate funding and resourcing for securing new resource consents and monitoring of conditions.

Leveraging partnerships

Regional collaboration approaches: Council continues to collaborate with Hawke's Bay Council's on key changes that affect us all. This is particularly important in the case of water services reform. In future we will also look for opportunities to share services, where there is benefit to our communities in terms of service levels and affordability.

Partnership with Māori: We are already engaging with our Maori partners and communities to make sure we are meeting their needs. For example, the Body Representing Māori (BRM) embodies a strong partnership between Māori and Council, which was formed as part of the Wairoa Wastewater

Treatment Plant consent. This group is made up of six members, four representing Tātau Tātau and two representing Ngāti Kahungunu Iwi Incorporated. The BRM's role is to advise and help prepare the Mauri Monitoring Protocols as well as help to form the Māori Wastewater Working Party (MWWP). We will continue to work on these partnership initiatives to determine the best focuses for future management and investment in infrastructure.

Leverage wider collaboration opportunities: including central government, Waka Kotahi and Hawke's Bay Regional Council (HBRC), to deliver for the community. This provides the opportunity to reduce the financial impact through grants, shared services or partnerships. We are already working closely beside HBRC around engagement for flood mitigation options. Waka Kotahi are a key contributor to funding our local roads investment and emergency / recovery works.

Cyclone recovery funding: The magnitude work to restore Wairoa's infrastructure requires significant external funding - it is not affordable for the district's ratepayers. As part of our recovery planning we have signalled to external agencies and the NZ Government that we can fund some recovery activities, but will still require major external financial support.

Development contributions: We are reviewing how developers contribute to funding the development of new infrastructure. As we look to reshape the assets and services we provide in future, we need to make sure those benefiting from this work are also contributing.

Smart procurement & delivery

We need to work hard to make sure we are paying the right amount of money to deliver the services we provide. We rely on external suppliers for asset management and physical works capabilities and resources. To ensure we get value for money we will consider:

Procurement Review: we have completed a review of sealed and unsealed maintenance service delivery in 2023. This will inform procurement of the new term maintenance contracts.

Programming: improving our future works programmes will enable early supplier engagement, with the potential to identify future efficiencies through flexibility of programmes.

Local Procurement: with a focus on increasing the capability of smaller local suppliers and contractors, we can ensure more availability of resources to complete our work programmes. We are also supporting the local economy by using local providers.

Broader outcomes: Identify and implement cost effective opportunities for broader outcomes to be delivered as part of large contracts, with a specific focus of local employment and workforce development.

Infrastructure asset class plans & options

Land transport

Activity overview

Wairoa has a large roading network to provide access for our communities and land owners. 90% of our district's road network is rural and 64% of the network is unsealed. Providing a robust road network is key to the district's economy.

The Waka Kotahi subsidy for roading (the Financial Assistance Rate or FAR) is a critical factor in the delivery of Council's land transport (roads and footpaths) activity. The base FAR provided by Waka Kotahi is 75%. The remaining 25% is funded through local rates. If this subsidy was no longer available at this rate, there would be a significant impact on rates and levels of service.

Land Transport assets

| Assets | Description |
|--------------------------|--|
| Road Pavements | Total length of 869km, 323km of which is sealed roads. Other roads are all unsealed. |
| Structures | 178 bridges and 448 retaining structures |
| Cycling & Walking assets | 54km of shared footpaths and 7.4km cycleways |
| Other assets | Numerous drainage and furniture (guardrails, signs, lighting etc) and parking assets |

Network resilience

Even before Cyclone Gabrielle hit, resilience had been identified as the key issue for Wairoa. The Cyclone was the latest in our history of storm events causing flooding, slips and dropouts on the road network. This time the impact has been severe and widespread. The resilience of the road network is exacerbated by the geology and poor soil in some areas of the network, resulting in erosion and sediment risks.

To ensure communities remain connected and to unlock the potential of Wairoa's land, providing a resilient network is critical. Specific impacts of road resilience include Lifeline Routes. These are critical routes where failure will have significant impact on communities' access to health, education, and economic opportunities. At the peak of the Cyclone Gabrielle event there were up to 30 roads closed which caused 227 km or 26% of the network to be inaccessible. Six months later in August 2023 there were still 14 roads closed or severely affected. Road damage ranges from washouts, bridge damage, major slips, tree fall, etc.

Rural network demand

Rural land use in our district primarily includes agriculture, horticulture and forestry. Much of the product from farms needs to be transported out of the district, particularly forestry products to the ports at Napier or Gisborne. Forecast predictions based on maturing age of forests in the Hawke's Bay Region indicate demand on some roads will increase from their current heavy vehicle movements.

Ongoing increases to heavy vehicle volumes on the local road network, largely as a result of these primary sector activities,

put pressure on our rural network. Wairoa district has seen a significant growth in the High Productivity Motor Vehicle (HPMV) permits since 2020. These increases in heavy traffic cause our roads to deteriorate more and increase the safety risks for other road users. This requires additional, and often unplanned, investment to mitigate.

Safety

Safety is on our district's roads is also a key concern. The Waka Kotahi New Zealand Transport Agency 'Communities at Risk Register 2023' highlights personal risk to road users. Wairoa District Council has the highest overall personal risk in the country. Wairoa District Council has the highest personal risk ranking in the 'Open road loss of control and/or head on' and 'Motorcyclist involved' crash categories.

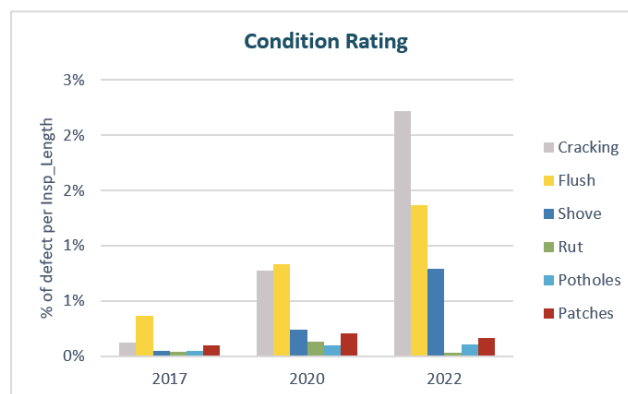
Large vehicles, including HPMVs increase safety risks. 54% of council roads have a width of 5m or less, insufficient for a log truck and another vehicle to safely pass.

Assets condition

Condition for our key asset groups is outlined below. However, most of our condition assessments were last completed prior to Cyclone Gabrielle, and do not reflect any impacts since this time.

Pavements

Visual Condition Rating is completed every three years on our network, with the most recent rating survey completed in September 2022. Key trends in condition rating results over the last three surveys are shown below. All the faults have increased, with a significant increase in cracking, flushing, and shoving.



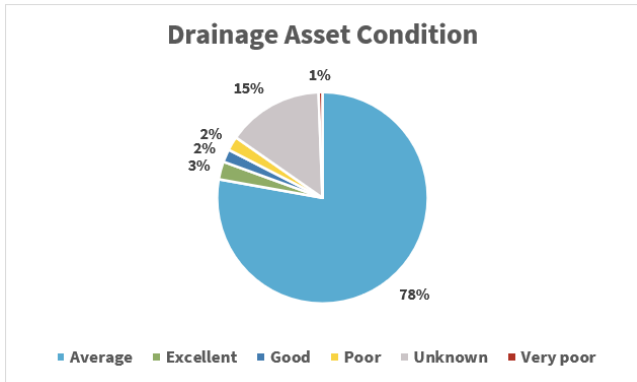
Bridges

Most of the bridges (approx. 80%) are between 50 and 85 years old, and still have 15 or more years remaining useful life. However, over the next 30 years approximately 59 structures will reach the end of their (theoretical) remaining useful life. Asset condition is regularly assessed with inspections.

Drainage

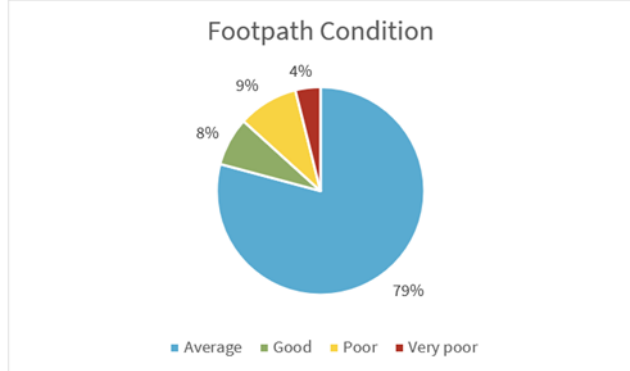
The drainage structures vary considerably throughout the district. Assets include culverts, surface water drainage and other below ground assets, such as sumps and subsoil drains. Visual condition rating surveys are completed for surface water drainage. But condition of culverts and other under ground

drainage structures is not as well understood. As of 2023, the condition of drainage assets is as shown below.



Footpaths

A full network visual condition inspection was undertaken in 2019. Since then, we have completed further updates to some of our condition records. The condition of the footpaths in 2023 is shown below. 87% of Council’s footpaths are in average or better condition, with 13% of the network being assessed as having poor or very poor condition.



Service performance

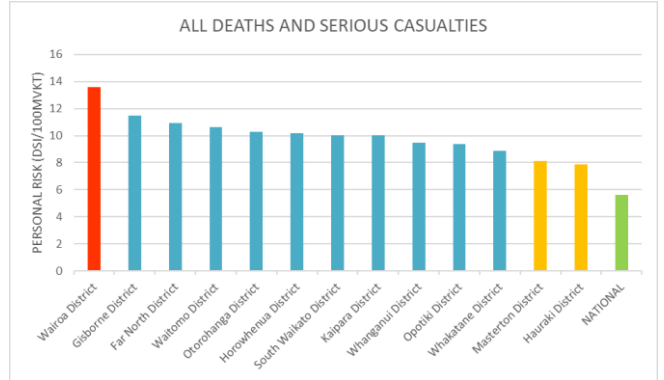
Service performance included in this section are reflective of the service provided in the 2022/23 financial year.

Safety

We aim to design and maintain a safe land transport network. The safety performance against our defined performance measures and target is:

| Measure | Result compared to target |
|--|---------------------------|
| The change from the previous financial year in the number of fatalities and serious injury crashes on the local road network | Above target threshold |

While we meet the safety performance target, Wairoa’s road network is currently performing below other Council’s with similar networks in terms of safety as shown below.



The top crash roads on our network are Nuhaka-Opoutama Road and Mahia East Coast Road.

Reliability

We aim to maintain a fit-for-purpose land transport network. The overall performance of the network against our defined performance measures and targets is: shown below.

| Measure | Result compared to target |
|--|----------------------------|
| The average quality of ride on a sealed local road network | Above target threshold |
| The percentage of footpaths in average condition or better | Below target threshold |
| The percentage of residents “very satisfied” or “satisfied” with the standard of maintenance of unsealed roads | Significantly below target |
| The percentage of residents “very satisfied” or “satisfied” with the standard of maintenance of sealed roads in the district | Significantly below target |

Availability

We aim to manage our land transport network in a manner that assists the economic development of the district. A key requirement is that Council’s bridge network is accessible to heavy vehicles that support the district’s economy. The bridge performance against our defined performance measures and target is:

| Measure | Result compared to target |
|---|---------------------------|
| The number of bridges not meeting heavy commercial vehicle Class 1 requirements | Below target threshold |

Most of our bridge network (80%) is single lane. Council has identified that single lane bridges particularly with poor approach alignment are a problem for oversized dimension loads. This may increase the frequency that structural damage occurs to the bridge.

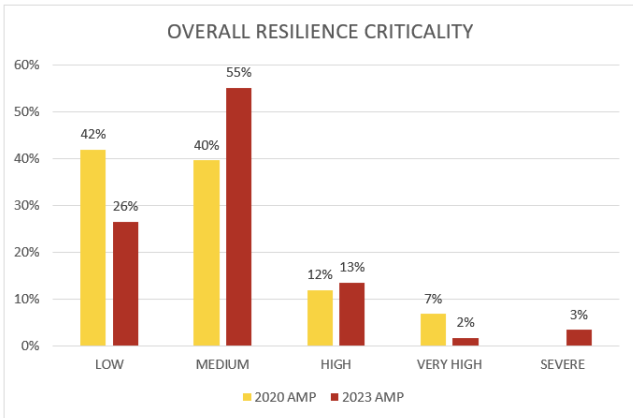
Resilience

We aim to provide a land transport network is resilient to unplanned events. Obviously Cyclone Gabrielle, as well as other previous storm events, have significantly impacted network resilience performance:

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| Measure | Result compared to target |
|--|--------------------------------------|
| The change from the previous financial year in the number of journeys impacted by unplanned events | Significantly below target threshold |
| The change from the previous financial year in the number of instances where road access is lost | Significantly below target threshold |

Bridge availability has a big impact on the overall resilience of the network. There are 6 severely critical, and 17 very highly critical structures in the network. Criticality considers route criticality, structure capacity, structure resilience and condition.



Environmental sustainability

We aim to minimise the effects of land transport activities on the natural environment. We have a new performance measure and target for compliance for 2023/24, but have not yet measured performance.

| Measure | Result compared to target |
|--|---------------------------|
| The number of abatement notices, infringement notices, enforcement orders or convictions received as a result of Council's land transport activities | Above target threshold |

Financial sustainability

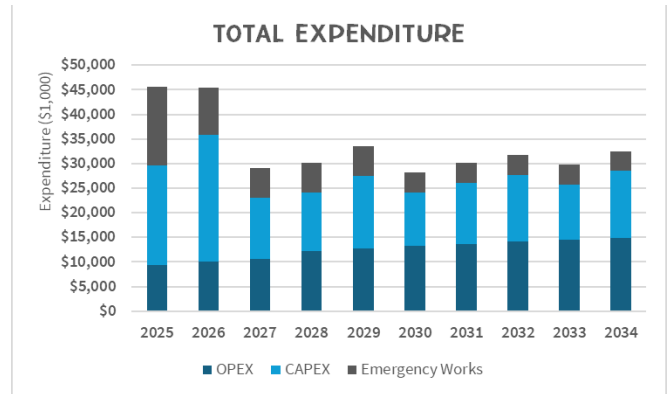
We aim to manage road assets prudently to ensure long term financial sustainability for current and future generations. Performance against our defined performance measures and target is:

| Measure | Result compared to target |
|--|---------------------------|
| The percentage of the sealed local road network that is resurfaced annually. | Above target threshold |

Expenditure forecasts

The forecast expenditure to provide the land transport activity to the Wairoa Community over the next ten years is **\$272 million, excluding emergency works**. Operational expenditure represents 46% of the ten-year forecast total.

The forecast expenditure for emergency works over the next ten years is an additional \$64 million.



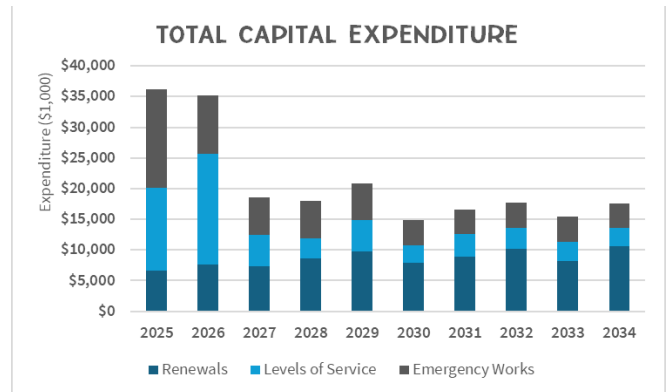
Forecast Expenditure is based on the following assumptions:

- The FAR will remain at 75%
- Levels of service will remain the same
- The access route to Mahia will need to be improved to ensure resilience of the route, otherwise alternative access may need to be investigated and constructed.

Capital expenditure

Capital expenditure is focussed on the following areas:

- **Renewal:** Ongoing renewal of all assets including resurfacing, pavement rehabilitation, structures renewal and other assets renewal.
- **Increased level of service:** Resilience works including Mahia Resilience, Te Reinga Bridge replacement and other road improvements
- **Growth:** No growth related capital expenditure is forecast for the next 10 years.



The graph above also denotes our current forecast of emergency works investment required in response to Cyclone Gabrielle and other significant weather events that have occurred in the last two years.

Funding this activity

Council funds its roads and footpaths services through:

- Waka Kotahi subsidies (FAR)
- Targeted rate based on land value
- Fees and charges for road corridor access applications
- Other funding sources.

WAIROA

Significant infrastructure issues and key responses

The significant issues and key responses for the Airport activity for the next 10 years is summarised below.

| Significant Issue | Strategic response | Key initiatives to address significant issues | Opex / Capex | Timeframe | Cost Implications |
|------------------------------|---|--|--------------|-----------|-------------------|
| Building resilience | Climate change adaptation planning | Mahia Resilience: Route between Nuhaka and Opoutama has been compromised by erosion. This work will include retreat of the road around the Blowhole dropout, and then coastal erosion protection to reduce the risk of further dropouts. | Capex | 2025-2026 | \$8.15M |
| | | Targeted Improvements: Improvements we can make to our roading network to make them more resilient to natural hazards and the effects of climate change. This work will focus on stabilise key routes including drainage Improvements, bridge Improvements (scour protection and seismic strengthening), retaining wall management and other resilience improvements. | Capex | 2025-2034 | \$27.4M |
| | | Emergency Response Plans & Detour Routes: To improve the resilience level of service delivery, Emergency Response Plans need to be developed. Draft plans are currently underway. The plan will cover the effects of moderate and significant events on vulnerable and critical assets. | Opex | | |
| Affordability | Smart Procurement & Delivery | Procurement review: The two main road maintenance contracts (sealed and unsealed) are extended through to 2025 and 2026 respectively. A formal review will be undertaken at least 18 months prior to the next procurement round commencing. | Opex | | |
| Sustainable economy | Integrated land use planning & infrastructure investment | Te Reinga Bridge replacement: Connecting rural communities by maintaining rural access and facilitating heavy vehicle movements for land owners (e.g. farmers, forestry). | Capex | 2025-2026 | \$13M |
| | | HPMV Pre-approved routes: With continued assessment and strengthening programmes on going in the region, pre-approved routes will simplify the permit process and offer financials savings in the future. | Opex | | |
| | Targeted renewals & improvement for critical infrastructure | Safety Improvements: Improvements we can make to our roading network to make them more resilient to natural hazards and the effects of climate change. This work will focus on stabilise key routes and bridges by: | Capex | 2025-2034 | \$7.7M |
| | | New Footpaths: construction of footpaths to enhance walking options and make more safe for pedestrians | Capex | 2025-2034 | \$2.9M |
| Sustainable service delivery | Targeted renewals & improvement for critical infrastructure | Targeted Renewals: Capital Renewals expenditure increases the life of an existing asset with no increase in service level. It replaces existing deteriorated assets or components of assets to restore their remaining life and service potential. | Capex | 2025-2034 | \$85.7M |
| | Value for money infrastructure management approaches | Asset management improvements: Development of clear policy and strategy for asset management, including review of investment decision making processes | Opex | | |

WAIROA

| Significant Issue | Strategic response | Key initiatives to address significant issues | Opex / Capex | Timeframe | Cost Implications |
|-------------------|--------------------|--|--------------|-----------|-------------------|
| | | Aggregate Sustainability Investigations: Continue to engage with HBRC, Ngati Pahauwera, and contractors to understand and manage risks related to aggregate supply | Opex | | |
| | | Collate data for critical assets: Data collection plan to be established to better understand asset inventory, condition, age and for reporting against new level of service performance measures, where data is not currently being collected. Develop and implement a condition monitoring programme for critical assets including drainage assets and retaining walls. | Opex | | |
| | | Road Maintenance Programming: Work with the road maintenance contractors to agree a process for improving the sealed pavement maintenance treatment selection, and construction quality requirements using a shared risk approach | Opex | | |

WAIROA

Wairoa Airport

Activity overview

The Wairoa Airport provides an important alternative transport link for Wairoa. The airport is primarily used by private light aircraft, charter flights and helicopters, with the recent addition of SunAir operating regular commercial flights from Wairoa to Napier. The airport is particularly important for supporting Wairoa's health and emergency services options. Medical specialists and Air Ambulance operations utilise the airport to transport health professionals and patients from Wairoa to the Hawke's Bay Regional Hospital in Hastings.

The strategic importance of the Airport was highlighted during Cyclone Gabrielle. The airport was the only way of transporting people and resources in and out of the district, with State Highways being closed for some time. It is important to recognise the airport as a critical infrastructure asset as a lifeline for emergency services.

Council has secured central government funding to extend the airport's existing 910m long runway, to accommodate larger planes. Other assets include taxiway and aprons, runway edge lighting, and perimeter fencing.

Council operates the airport as the controlling authority in accordance with Civil Aviation Authority guidelines. Council leases the terminal building off the Wairoa Aero Club.

Funding of the airport service is made up of a combination of user charges, general rates, land leases and third part grants (e.g. government funding). Council has made improvements in its data gathering on the number of flights in and out of the airport, and increased reporting has resulted in increased landing fees being taken. Regardless of this, Council must maintain the airport to an adequate standard to enable it to be used by emergency services and to meet legislative requirements.

Assets condition

Condition assessments of the various components of the airport (including both land and onsite improvements) are based on visual assessments and age of assets only.

The current condition of key airport assets is:

| Asset | Condition |
|------------------------|----------------------------|
| Sealed Runway | Very Good |
| Other Sealed Areas | Good |
| Buildings | Poor |
| Edge Lighting | Good |
| Runway & Taxi Markings | Average |
| Fencing | Varies – Good to Very Poor |
| Windsocks | Very Good |

Over the duration of this strategy, the development and implementation of a condition monitoring programme will become part of a higher level of management at the airport.

Service performance

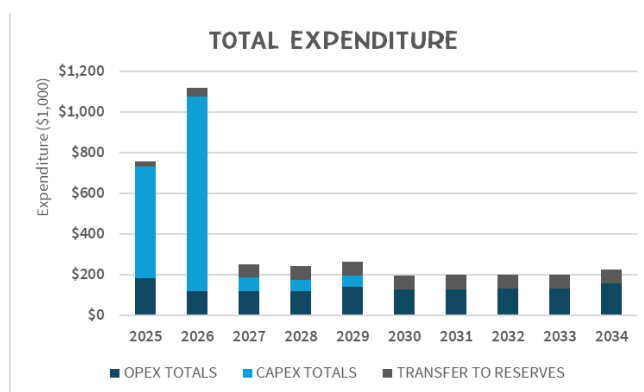
The performance of the airport activity is based on the availability of the airport to users. The overall performance of the airport against our defined performance measures and targets is:

| Measure | Result compared to target |
|---|---------------------------|
| Number of times when the airport is closed (not available to be used), per year | Below target threshold |

The gaps in service performance for 2023 were caused by the impact of Cyclone Gabrielle. The sealed areas of the airport received minimal water damage, which included the lifting of a 4m² section of seal due to underground stormwater pipe pressure. The airstrip usage was restricted for 3 days whilst repairs were completed. Emergency medical flights were still able to be catered for.

Expenditure forecasts

The forecast expenditure to provide the Wairoa Airport service to the Wairoa Community **over the next ten years is \$3.7 million**. Operational expenditure represents 45% of the ten-year forecast total.

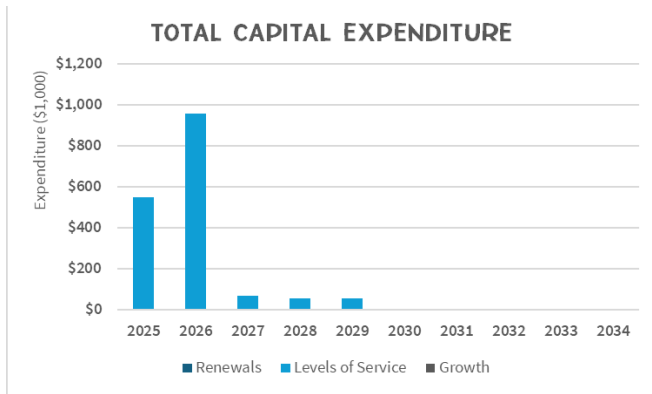


Capital expenditure

Capital expenditure is focussed on the following areas:

- **Renewal:** No significant renewals capital expenditure is forecast over the next 10 years
- **Increased level of service:** Improvements to the terminal building, security and resilience of the airport
- **Growth:** No growth related capital expenditure is forecast for the next 10 years.

WAIROA



Funding this activity

Council funds its airport activity services through:

- General rates based on land value
- User pays based on landing, facility and other airport fees – accurate landing data will result in more accurate charging to users charges
- Rent from farmland
- Subsidies from other parties for some capital projects

WAIROA

Significant infrastructure issues and key responses

The significant issues and key responses for the Airport activity for the next 10 years is summarised below.

| Significant Issue | Strategic response | Key initiatives to address significant issues | Capex / Opex | Timeframe | Cost Implications |
|-----------------------------------|---|---|--------------|-------------|------------------------------|
| Building resilience | Climate change adaptation planning | Runway extension: 350m runway extension to facilitate landing of larger planes and the Skyline Jet Air Ambulance. External funding from Kānoa, regional investment for the runway extension project. | Capex | 2025-28 | \$1.2M (External funding) |
| | | Electrical supply upgrade: Installing backup generators and solar panels for power, upgrading the electrical system | Capex | 2025 – 2027 | \$0.15M |
| | | Stormwater drainage upgrade: Ensure Airport is included in Future flood protection and storm water drainage upgrades, currently on outer perimeter of Awatere Stream Scheme | Capex | 2027 - 2029 | \$0.11M |
| Affordability | Leveraging partnerships | Partnering with government: to get airport recognised as critical lifeline infrastructure, which will open up avenues to funding and future development of the airport. | Opex | | |
| Changing priorities & legislation | Smart procurement & delivery | Funding mechanisms: Reassess fee structure for landing fees and commercial flights. | Opex | | |
| Sustainable service delivery | Infrastructure management approaches | Compliance Management: Staff training on legislation, compliance and management of the airport, with input from external consultant. | Opex | | |
| | Integrate land use planning & infrastructure investment | Airport Management Plan Development: a specific Airport Management Plan is being developed to ensure the airport operates efficiently and meets compliance standards. | Opex | | |
| | Value for money infrastructure management approaches | Asset Condition Assessments: A condition assessment programme will be developed and implemented to inform and update the forward works programme. | Opex | | |
| | | Maintenance Programme Development: Develop proactive process for regularly programming maintenance to ensure airport remains accessible for local farmers and helicopters as required. | Opex | | |
| | Targeted renewals & improvements for critical infrastructure | Security Installation: Installing security gates and fences | Capex | 2024/25 | \$0.12M |
| | Aero Club Lounge/Hanger: Development of hanger and lounge area to enhance service to users | Capex | 2024/25 | \$0.4M | |
| | Terminal Upgrade: Purchase 120m2 airport building and upgrade building to suitable standard. | Capex | 2025/26 | \$0.87M | |
| Protecting environment | Infrastructure management approaches: compliance management | Airport bird control: Development of bird control programme to ensure species protection & safety of users | Capex | 2024/25 | \$0.04M |

WAIROA

Water supply

Activity overview

We produce 2.9 million litres of drinking water per day from our water supply systems in **Wairoa, Frasertown, Tuai and Mahanga**. We maintain a compliant and efficient service that is safe for people and the environment, all day, every day.

Outside of these reticulated areas communities rely on self-serviced water supplies, mainly through private water tanks.

Our water supply assets are split into two key groupings:

- **Water treatment assets:** these are assets we use to source, treat and store water for supply
- **Water supply reticulation assets:** these are the pipes that carry water from the treatment plant or source to the community.

Water treatment assets

| Assets | Description |
|------------------------------------|---|
| Wairoa Water Treatment Plant (WTP) | Draws raw water from the Waiau River and pumped to Frasertown and treated. |
| Other Wairoa Supply assets | Three reservoirs at Wairoa Boundary (total capacity 3000m ³) and one pump station Three reservoirs at Tawhara (total capacity 5780m ³) One reservoir at Frasertown (capacity 13m ³) |
| Tuai | Water supply sourced from the Waimako spring and is untreated . Approx 59 connections Three reservoirs (each with capacity of 13m ³) |
| Mahanga | Water supply comes from a shallow bore located in farmland and is untreated . Approx 61 connections One reservoir (capacity 13m ³) and one pump station |

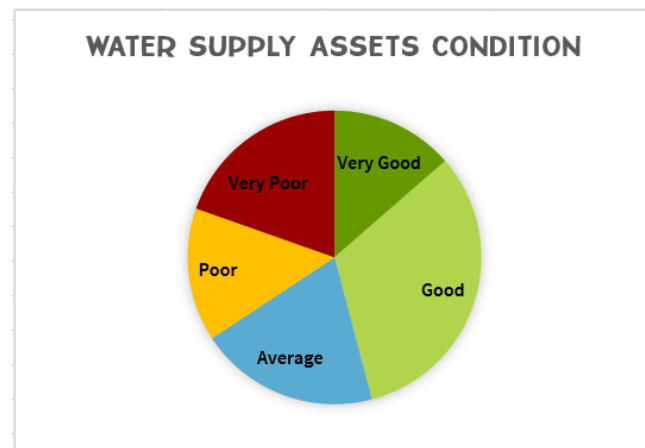
Water supply reticulation assets

| Network | Description |
|---------------------|--|
| Wairoa / Frasertown | The trunk main is a low-pressure pipeline, approximately 6.7km long that connects the WTP with the Boundary Reservoirs in Wairoa, which is then distributed to Wairoa and the AFFCO meat works. Wairoa - 76.7km of reticulation Frasertown - 5.4km Wairoa peri-urban - 18km |
| Tuai | 6km of reticulation |
| Mahanga | 1km of reticulation |

Because the district's population is not predicted to increase significantly, and the existing capacity is above current use, Council does not anticipate any capacity issues for its water treatment plants. However, because of Cyclone Gabrielle, compliance requirements and climate change risks outcomes, there is a need to invest in our current assets to build resilience.

Assets condition

Most of the water supply network (almost 80%) is between 30 and 60 years old so about midway through its asset life, with **35% of the reticulation pipes in Poor or Very Poor condition**.



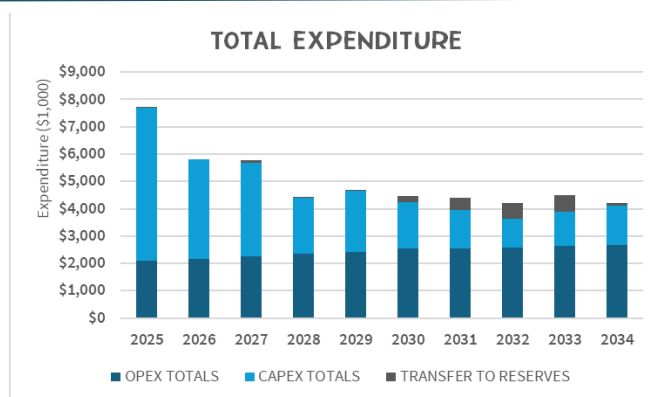
Service performance

Service performance of Council's water supply network is assessed in terms of compliance with drinking water standards, water loss and water quality is:

| Measure | Result compared to target |
|---|---------------------------|
| DIA Mandatory Non-Financial Performance Measure 1: Safety of Drinking Water | Compliant |
| Residents satisfied with the water supply | Below target threshold |
| DIA Mandatory Non-Financial Performance Measure 4: Customer Satisfaction | Above threshold target |
| DIA Mandatory Non-Financial Performance Measure 2: Maintenance of the Reticulation Network – Water Loss | Below threshold target |
| DIA Mandatory Non-Financial Performance Measure 3: Fault Response Times | Below threshold target |
| DIA Mandatory Non-Financial Performance Measure 5: Demand Management | Below threshold target |

Expenditure forecasts

The forecast expenditure to provide stormwater service to the Wairoa Community **over the next ten years is \$50.3 million**. Operational expenditure represents 51% of the ten-year forecast total.



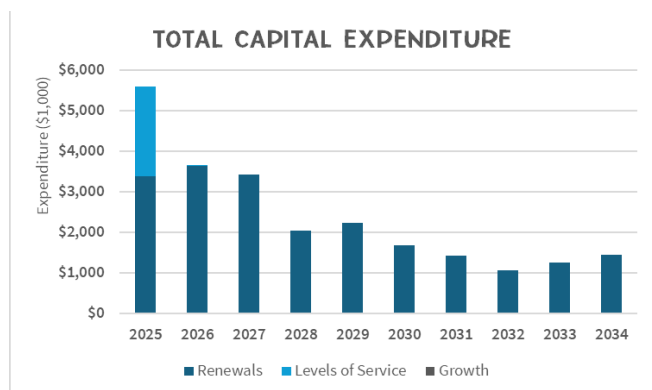
Forecast Expenditure is based on the following assumptions:

- Capacity exists in the network to accommodate any growth
- Levels of service will primarily remain the same
- Legislative and regulatory changes will require water treatment process changes, although the extent of the impact on investment is uncertain

Capital Expenditure

Capital expenditure is focussed on the following areas:

- **Renewal:** underground assets and pipeline renewals, reservoir renewals and other water treatment asset renewals
- **Increased level of service:** Marine Parade replacement main in 2025
- **Growth:** No growth related capital expenditure is forecast for the next 10 years.



Signalling longer term capital investment needs

Within the longer term out to 30 years, there is expected to be significant capital investment required to complete ongoing renewal of the existing reticulation network and reservoirs.

The total indicative capital investment likely to be required to complete these initiatives is **estimated to be in excess of \$30 Million over the 20 year period from 2034 to 2054.**

Funding this activity

Council funds its water supply activity through:

- Targeted water rate (fixed charge) and volume charge (where meters are installed)
- Fees and charges from bulk water carriers.

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Significant infrastructure issues and key responses

The significant issues and key responses for the Water Supply activity for the next 10 years is summarised below.

| Significant Issue | Strategic response | Key initiatives to address significant issues | Capex / Opex | Timeframe | Cost Implications |
|-----------------------------------|---|---|--------------|-----------|-------------------|
| Building resilience | Climate change adaptation planning | Resilient Communications Link: installation of resilient communication links with our pumpstations and treatment plants to enable better management during natural disasters. | Capex | 2025 | \$0.15M |
| Affordability | Value for money infrastructure management approaches | Leakage Management: Continue with existing leakage management, including detection using drones consistent with good industry practice | Opex | | |
| Changing priorities & legislation | Leveraging partnerships | Collaborative Regional approach to local waters done well: Council continues to collaborate with Hawke's Bay Council's as we assess options for future water services provision. | Opex | | |
| | Value for money infrastructure management approaches | Tuai Water compliance upgrades: install Chlorination & Monitoring Tuai Water Supply | Capex | 2025 | \$0.21M |
| Sustainable service delivery | Targeted renewal & improvements for critical infrastructure | Marine Parade reticulation upgrades: These assets are requiring upgrade to ensure safe water supply to continue to the Wairoa township. | Capex | 2025 | \$1.9M |
| | | Reticulation network & reservoir renewals: Work has been re-prioritised to meet increased compliance requirements. Planning and costing of forward works includes these increased requirements. | Capex | 2025-2034 | \$21.1M |
| | | Water treatment plant renewals: Ongoing renewals to ensure critical components at treatment plant are kept in good working order | Capex | 2025-2034 | \$0.43M |
| | Value for money infrastructure management approaches | Collate data for critical assets: Invest in condition assessments of our assets, particularly older networks. | Opex | | |
| Protecting environment | Value for money infrastructure management approaches | Proactive planning for consent renewal: Two resource consents need renewing during the 10-year planning period. Requirements to prepare each resource consent are likely to increase (e.g. environmental impact assessments). New consent conditions will likely increase requiring more monitoring increasing the overall operational costs to provide service. | Opex | | |

Stormwater

Activity Overview

We maintain networks of stormwater pipes, open drains and outlets in the **Wairoa, Tuai and Māhia** areas, ensuring a compliant and efficient system that is safe for people and the environment, all day, every day.

Stormwater systems in urban areas are provided to manage runoff of rainwater, by balancing maintaining and enhancing natural watercourses and underground piped assets. Council is required to manage the effects of collecting and treating stormwater runoff to minimise the impact on the receiving environment. Stormwater assets in the other areas are primarily rural roading open drains.

Stormwater assets

| Network | Description |
|---------|---|
| Wairoa | Approximately 41.86km of stormwater reticulation assets, including pipes, culverts, channels, urban open drains, manholes, sumps and inlet structures |

Flood protection

Cyclone Gabrielle and subsequent storm events have been a significant reminder of the exposure of Wairoa township and other areas to significant flooding. Wairoa district has many low lying areas and there are few measures in place to protect our communities.

Council has also submitted a request to the Hawke’s Bay Regional Council (HBRC) to be included in the new flood protection scheme, particularly for Wairoa township and surrounding areas. Flood modelling and protection options are currently being analysed by HBRC. The outcomes of this review will impact on our future infrastructure investment planning.

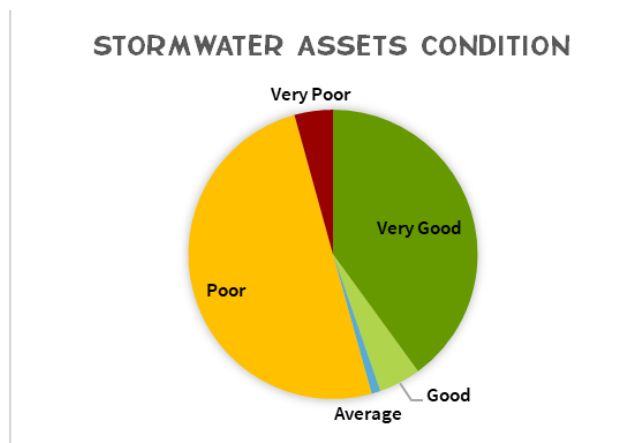
There is limited formal stormwater infrastructure in Mahia, where growth is anticipated. The existing stormwater assets are private. It is likely that Council will need to further invest in its stormwater infrastructure for Mahia to cope with increased scale and severity of rain events.

Resource consents

Council is preparing a global resource consent application to address all public stormwater systems in Wairoa township. Subject to the duration of this consent, it may need to be renewed over the life of this Strategy. Through this process there is the likelihood that the quality of stormwater being discharged into the environment will need to be improved.

Assets condition

We currently determine the condition of our stormwater assets based on their age. About two thirds of the stormwater network assets are more than 50 years old and are reaching the end of their useful life. This means approximately 50% of reticulation pipes are assumed to be in poor condition.



While considerable progress has been made to determine condition through desktop analysis, further validation of the condition will be completed through formal survey as part of the asset management improvement programme.

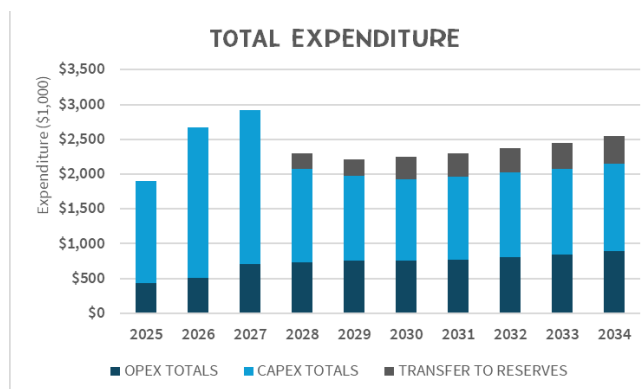
Service performance

Cyclone Gabrielle had a significant impact on our ability to meet our performance targets over the last year as follows:

| Measure | Result compared to target |
|--|--------------------------------------|
| DIA Mandatory Non-Financial Performance Measure 1: System Adequacy – mitigating flood risk | Above threshold target |
| Council Performance Measure: Residents satisfied with stormwater network | Significantly below threshold target |
| DIA Mandatory Non-Financial Performance Measure 3: Response Times | Significantly below threshold target |
| DIA Mandatory Non-Financial Performance Measure 2: Discharge Compliance | No consent – application underway |

Expenditure forecasts

The forecast expenditure to provide stormwater service to the Wairoa Community **over the next ten years is \$21.7 million**. Operational expenditure represents 33% of the ten-year forecast total.



The following limitations apply to expenditure forecasting:

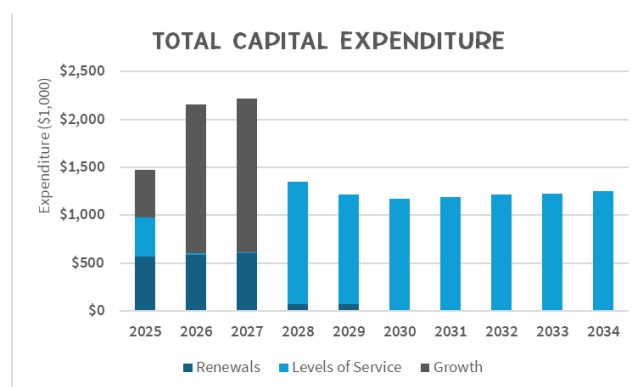
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- HBRC flood protection options assessment is still being progressed and the impact on future stormwater investment needs is uncertain
- Global stormwater consent yet to be approved and resulting compliance and monitoring costs are yet to be confirmed
- Legislative and regulatory changes may result in increased costs for managing stormwater treatment
- Future modelling will clarify likely future impacts of climate change.

Capital Expenditure

Capital expenditure is focussed on the following areas:

- **Renewal:** CCTV investigations to understand condition of underground assets and pipeline renewals
- **Increased level of service:** Piping open drains
- **Growth:** Resilience and capacity improvements, Master Planning and stormwater modelling



Funding this activity

Council funds its stormwater services through:

- Targeted drainage rate on a uniform basis in Wairoa urban area and Mahia township area
- Rural roads drains are included in the road assets.

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Significant infrastructure issues and key responses

The significant issues and key responses for the Stormwater activity for the next 10 years is summarised below.

| Significant Issue | Strategic response | Key initiatives to address significant issues | Capex / Opex | Timeframe | Cost Implications |
|-----------------------------------|--|--|--------------|-----------|-------------------|
| Building resilience | Climate adaptation planning | Resilience and Capacity Improvements, Master Planning and Stormwater Modelling: Upgrade infrastructure to cope with climate change impacts on source, including increasing capacity of pipes to cope with projected climatic variations as they are replaced, or new infrastructure is installed. | Capex | 2025-2028 | \$3.66M |
| Changing priorities & legislation | Leveraging partnerships | Collaborative Regional approach to local waters done well: Council continues to collaborate with Hawke's Bay Council's as we assess options for future water services provision. | Opex | | |
| Sustainable service delivery | Targeted renewals & improvements for critical infrastructure | CCTV inspection of underground network assets: Condition of underground stormwater assets can be assessed using CCTV inspections which will inform future maintenance and renewals programming. | Capex | 2025-2030 | \$0.35M |
| | | Pipeline renewals: renewal of existing stormwater drainage assets coming to the end of life | Capex | 2025-2028 | \$1.55M |
| | | Piping Open Drains: by piping open drains, less debris can enter the stormwater system and the risks of blockage will be greatly decreased while lifespan of the asset increases. | Capex | 2025-2034 | \$8.8m |
| Protecting environment | Value for money infrastructure management approaches | Global resource consent application: Council is preparing a global resource consent application to address all public stormwater systems in Wairoa Township | Opex | | |
| | | Litter Trap Installation | Capex | 2025-2033 | \$0.1M |

Wastewater

Activity overview

We operate and maintain wastewater systems in the **Wairoa, Tuai, Māhia and Ōpoutama** areas, aiming to ensure a compliant and efficient wastewater service that is safe for people and the environment, all day, every day.

The wastewater activity focuses on protecting public and environmental health by collecting and treating wastewater prior to its discharge into receiving environments.

Wastewater treatment assets

| Assets | Description |
|----------|---|
| Wairoa | Wastewater treatment plant (WWTP) discharging into river estuary (approx. 1,724 connections) Five pump stations lift the sewage into a gravity sewer trunk main feeding into the treatment plant |
| Tuai | Wastewater treatment system (approx. 60 connections) |
| Opoutama | Treatment plant discharging to ground soakage (approx. 107 connections) |
| Mahia | Mahia township wastewater scheme with three treatment ponds (approx.. 436 connections) Irrigation system over 14km2 of plantation |

Wastewater reticulation assets

| Network | Description |
|---------------------|--|
| Wairoa / Frasertown | 36.9km of reticulation |
| Tuai | 4.5km of reticulation, including separate reticulation systems for grey water and sewage |
| Opoutama | 5km of reticulation |
| Mahia | 11.3km of reticulation |

Resource consent challenges

Resource consents are required for discharging contaminants from Wastewater Treatment Plants (WWTPs) into rivers or land applications. All consents will expire between 2034 and 2036. Council is uncertain as to the conditions of new consents, and the costs to comply and monitor those conditions, however it is expected that these will increase over time.

Partnership with Māori

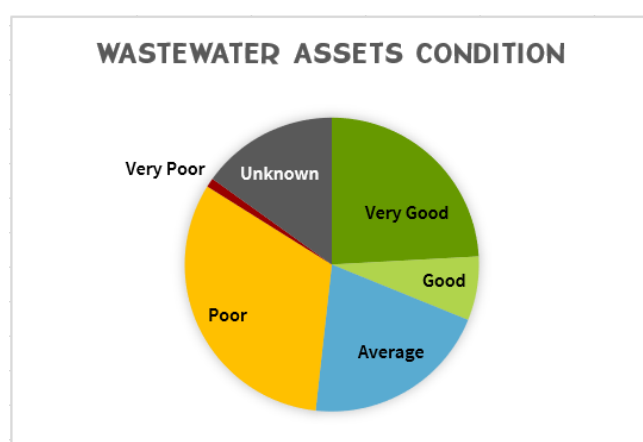
The Body Representing Māori (BRM) embodies a strong partnership between Māori and Council, which was formed as part of the WWTP consent. This group is made up of six members, four representing Tātau Tātau and two representing Ngāti Kahungunu Iwi Incorporated. The BRM's role is to advise and help prepare the Mauri Monitoring Protocols as well as help to form the Māori Wastewater Working Party (MWWP).

The MWWP's role is to assist with decision making around the review, operation and management of the Wairoa wastewater discharges. As well as identify and discuss opportunities to integrate tikanga Māori into implementation of the Consented Activities and to recommend changes.

Asset condition

About half of the wastewater reticulation network is greater than 50 years old so it is towards the end of its asset life. There is a peak of approximately 14km of pipeline coming to the end of its useful life in 2032, which correlates with the age of the pipe network.

About two thirds of the wastewater reticulation network is in average to good asset condition, with **33% of the reticulation pipes are in Poor or Very Poor condition**. 15% of the reticulation assets have unknown condition.



Condition of other above ground assets, such as pump stations and treatment plant assets, is assessed on a case-by-case basis. An assessment of wastewater pump stations completed in November 2020, indicated that one out of the five pump stations inspected was in poor overall condition, while all pump stations had some components in poor to very poor condition. Further condition assessments of above ground assets are scheduled as future improvement items.

Some of the pump stations were impacted by Cyclone Garielle as they are located adjacent to the Wairoa River. We have capital renewals works planned for 2025 to 2027 to address these issues.

Service performance

Asset performance of Council's wastewater network is assessed in terms of unconsented discharge of sewerage and inflow and infiltration as follows:

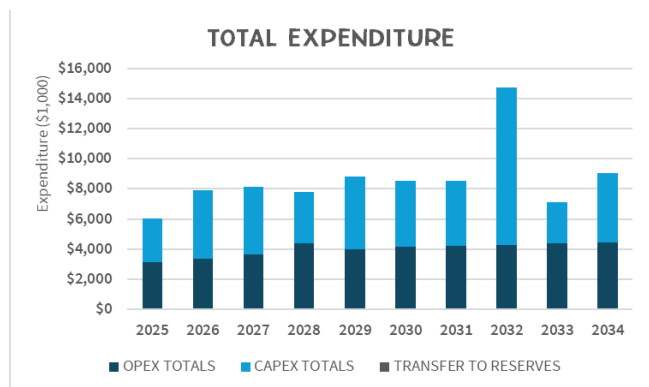
| Measure | Result compared to target |
|--|---------------------------|
| DIA Mandatory Non-Financial Performance Measure 1: System Adequacy – dry weather overflows | Compliant |
| DIA Mandatory Non-Financial Performance Measure 4: Customer Satisfaction (complaints) | Below threshold target |
| DIA Mandatory Non-Financial Performance Measure 2: Discharge | Compliant |

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| Measure | Result compared to target |
|---|---------------------------|
| Compliance | |
| DIA Mandatory Non-Financial Performance Measure 3: Fault Response Times | Below threshold target |

Expenditure forecasts

The forecast expenditure to provide wastewater service to the Wairoa Community over the next ten years is \$86.8 million. Operational expenditure represents 46% of the ten-year forecast total.



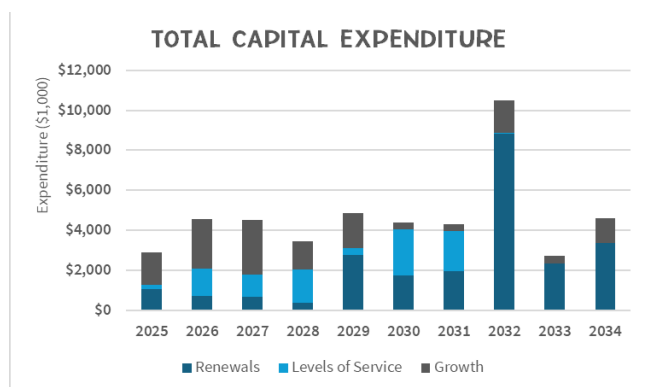
Forecast Expenditure is based on the following assumptions:

- Consent compliance costs will be higher
- Capacity exists in the network to accommodate limited growth
- Levels of service will remain the same
- Legislative and regulatory changes will require wastewater treatment process changes

Capital Expenditure

Capital expenditure is focussed on the following areas:

- **Renewal:** underground assets and pipeline renewals, pump station renewals
- **Increased level of service:** Wairoa WWTP storage and irrigation expansion work
- **Growth:** Wastewater network extension within Wairoa and Mahia



Signalling longer term capital investment needs

Within the longer term out to 30 years, there is expected to be significant capital investment required to complete the following:

- Disposal of wastewater treatment plant discharge to land (rather than into the Wairoa River)
- Ongoing renewal of the existing reticulation network
- Upgrade and resilience works to be completed for all pump stations (this may include relocating them to less exposed locations)
- Upgrade works for all wastewater treatment plants.

The total indicative capital investment likely to be required to complete these initiatives is **estimated to be in excess of \$100 Million over the 20 year period from 2034 to 2054.**

Funding this activity

Council funds its wastewater services through:

- Targeted rate for sewerage disposal based on a per pan charge
- Trade waste fees and charges.

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Significant infrastructure issues and key responses

The significant issues and key responses for the Wastewater activity for the next 10 years is summarised below.

| Significant Issue | Strategic response | Key initiatives to address significant issues | Capex / Opex | Timeframe | Cost Implications |
|-----------------------------------|---|---|--|------------------------|-------------------|
| Building resilience | Climate change adaptation planning | Resilience work for Pump Stations: All of our pump stations are exposed to climate change impacts, and had some form of damage during Cyclone Gabrielle. Work will be completed to renew and protect pump station assets. | Capex | 2025-2027 | \$1.38M |
| | | Resilient Communications Link: installation of resilient communication links with our pumpstations and treatment plants to enable better management during natural disasters. | Capex | 2025 | \$0.15M |
| Sustainable economy | Integrated land use planning & infrastructure investment | Wairoa reticulation network extension: development of reticulation network to align with housing development requirements. | Capex | 2025-2029 | \$6.8M |
| Changing priorities & legislation | Leveraging partnerships | Collaborative Regional approach to local waters done well: Council continues to collaborate with Hawke's Bay Council's as we assess options for future water services provision. | Opex | | |
| Sustainable service delivery | Targeted renewals & improvement for critical infrastructure | Reticulation renewals: renewal of existing wastewater reticulation assets coming to the end of life. This includes both the Wairoa and Tuai reticulation networks | Capex | 2025-2034 | \$15.5M |
| | | Wairoa wastewater treatment renewals: Wastewater treatment plant component renewals, including access provision | Capex | 2025-2034 | \$1.7M |
| | | Tuai wastewater treatment renewals: Wastewater treatment plant component renewals, including access provision | Capex | 2030-2034 | \$4.86M |
| | | Mahia Beach Sewage system: | Capex | 2025-2034 | \$7.1M |
| | Value for money infrastructure management approaches | Collate data for critical assets: Invest in condition assessments of our assets, particularly older networks. | Opex | | |
| Protecting environment | Integrated land use & infrastructure investment | Water Storage and Irrigation Expansion: Community and iwi do not want the wastewater discharged into the river. Alongside this desire, legislative changes are likely to lead to higher discharge standards for wastewater, and greater treatment of stormwater. The intention is to transition over time to land discharges (irrigation) which will also require storage ponds to be built for holding treated wastewater during winter so it can be irrigated in summer or discharged to the river when it is flowing faster. Over the next 10 years we will develop storage facilities. | Capex | 2025-2032 (Storage) | \$8.9M |
| | | Value for money infrastructure management approaches | Resource consent management & renewal: Consent monitoring and management of requirements and planning for consent renewal | Capex | 2025-2034 |

Solid waste

Activity overview

We provide waste management facilities and ensure refuse can be disposed of in a controlled manner. We operate a large open landfill and recycling centre in Wairoa, open to the public for 4 days a week, 6 hours per day to take domestic and commercial refuse. We monitor and manage five closed landfills.

Council also manages litter and domestic refuse collection and recycling. Kerbside collection services for waste are currently provided for Wairoa and most rural settlements on a user pays/bags basis. Wairoa is the only town to receive a kerbside recycling service with drop off points for recycling in Tuai and Raupunga.

Solid Waste Assets

| Assets | Description |
|------------------------------------|---|
| Wairoa Landfill & Recycling Centre | The Wairoa Landfill consists of cells for waste, access road, buildings and other structures, drainage system, weighbridge and compactor. |
| Closed Landfills | There are five closed landfills holding consents in the District, there are: <ul style="list-style-type: none"> • Frasertown • Mahia • Nuhaka • Raupunga • Ruakituri |
| Other assets | Public litter bins in Wairoa & Mahia |

Wairoa Landfill sustainability

Council's waste management and minimisation goal is to manage waste in a cost-effective way that reduces harmful effects and improves efficiency of resource use. While Council is committed to its waste goals, its diversion targets do not help the financial viability of the landfill, which has been marginal in recent years.

It is becoming increasingly challenging to manage the Wairoa Landfill capacity and service in the aftermath of Cyclone Gabrielle and other storm events.

Prior to Cyclone Gabrielle, the Wairoa Landfill had a filling rate of 4,000-4,300 m³ per year (accounting for waste and capping volume). In March 2023, 9,666 tonnes of waste from the cyclone was dumped (over and above standard waste volumes). This includes 8,402 tonnes of silt. This material has been generally utilized as landfill cover where appropriate. Based on these volumes, it is expected that the current landfill will be at capacity within the next 2-3 years.

As Council is deciding on the future of Wairoa's Solid Waste disposal two different investment programmes have been considered:

- Option 1 is the construction of a new cell within Wairoa landfill site
- Option 2 is to close the existing landfill cell and transition to a transfer station only model with waste being disposed at Ōmarunui landfill (Hawke's Bay).

Option 2 is the preferred option and has been reflected in the financial forecasts in this Strategy.

Council is engaging with Iwi and the community around this decision, and is also having conversations with the Ōmarunui Joint Committee to discuss the possibility of receiving waste from the Wairoa District.

Solid waste legislation

The **Waste Minimisation Act (WMA) 2008** sets out the overarching legislation for solid waste management in New Zealand, which is implemented in Wairoa through its Waste Minimisation and Management Plan and solid waste activities.

The **Emissions Reduction Plan (ERP) 2022**, sets a priority focus for the Waste Sector to reduce methane emissions from landfill. With a target that all municipal landfill sites include landfill gas management by 2026

Te rautaki para – The New Zealand Waste Strategy (NZWS) 2023, provides new targets and direction for local councils, including the move to standardise the materials collected for recycling and recommended introduction of separate kerbside food waste collections by 2027. Council are considering how it can meet these objectives, with the potential introduction of an expanded kerbside collection service along with upgrades to its waste infrastructure and the potential processing of organics.

The **New Zealand Waste Disposal Levy** is applied to all waste when disposed to landfill and provides a significant revenue stream for waste minimisation, including directly funding councils waste minimisation efforts and through a contestable fund (Waste Minimisation Fund). In May the Government introduced new legislation which would see the current rate of \$60/tonne for class 1 landfills increase by \$5/year to \$75/tonne in July 2027. This will see an increase in waste disposal costs being passed onto our community.

Asset condition

All waste management assets are adequate for current use. Based on visual inspections the buildings in the portfolio are in acceptable condition.

However, over the last few years there have been two infringements at the Wairoa Landfill for the leachate system. During high rainfall events, stormwater overtops the containment bund between the landfill and the stormwater pond, resulting in additional stormwater entering the leachate system.

Service performance

The performance of the Wairoa landfill and general waste collections has been impacted by Cyclone Gabrielle as follows:

| Measure | Result compared to target |
|---|---------------------------|
| Number of times when minimum frequency of kerbside refuse and recycling service in Wairoa & Frasertown is not met, per year | Above threshold target |
| Number of times when minimum frequency of collection from specified drop-off points from Māhia, Nuhaka and | Above threshold target |

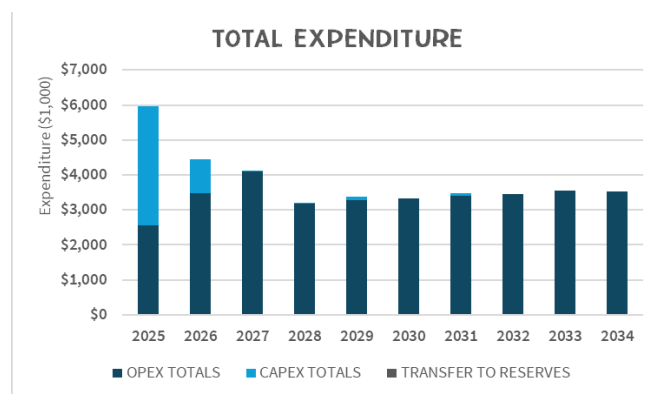
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| Measure | Result compared to target |
|---|---------------------------|
| Mohaka is not met, per year | |
| Number of health and safety breaches by waste services contractors, per year | Meets target |
| Percentage of missed household refuse service requests responded to by 12 pm the next day | Meets target |
| Council will operate and maintain the Wairoa landfill for the disposal of domestic and commercial refuse, being open for the public | Below threshold target |
| Number of non-compliance events with the resource consent conditions for the Wairoa Landfill, per year | Compliant |
| Number of non-compliance events with the resource consent conditions for the closed landfill sites, per year | Compliant |
| The amount of material diverted from landfill by the Wairoa community in tonnes (target excludes green waste) | Above threshold target |

The performance of the Wairoa five closed landfills is not currently completely meeting consent conditions. Consent monitoring improvements have been made to ensure all consent conditions are complied with in future.

Expenditure forecasts

The forecast expenditure to provide solid waste service to the Wairoa Community **over the next ten years is \$38.5 million**. Operational expenditure represents 88% of the ten-year forecast total.



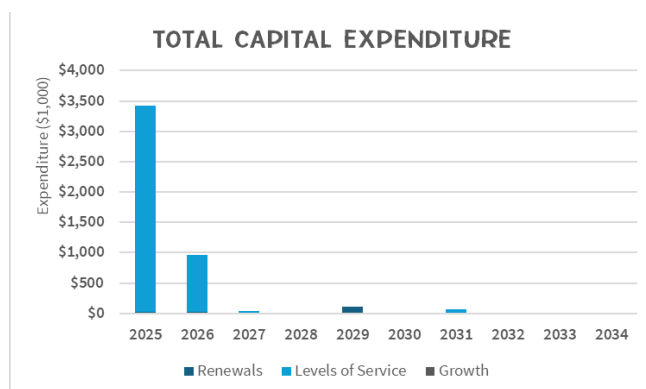
Forecast Expenditure is based on the following assumptions:

- Changes to the Emissions Trading Scheme are anticipated in the near future that are likely to have a subsequent increase in landfill disposal costs
- Based on Ministry for the Environment announced landfill levy changes costs for landfill service will increase
- Capacity of existing landfill from recent surveys indicates there is approximately 2-3 years life remaining in the existing cell based on current fill rates.

Capital Expenditure

Capital expenditure is focussed on the following areas:

- **Renewal:** Wairoa landfill cover fill and effluent system requirements
- **Increased level of service:** Wairoa recycling centre upgrade, landfill closure and expanding kerbside collection to include food & organics separation and new bins.
- **Growth:** No growth related capital expenditure is forecast for the next 10 years.



Funding this activity

Council currently funds its solid waste services through:

- Targeted waste management rate charged on a uniform basis
- User charges (landfill weighbridge)
- User pays (bags).

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Significant infrastructure issues and key responses

The significant issues and key responses for the Solid Waste activity for the next 10 years is summarised below.

| Significant Issue | Strategic response | Key initiatives to address significant issues | Capex / Opex | Timeframe | Cost Implications |
|-----------------------------------|--|---|--------------|-----------|-------------------|
| Affordability | Leveraging partnerships | Transport waste out of district (Option 2): Close Wairoa Landfill and send waste to Ōmarunui landfill (Hastings/Napier landfill). This option will still require the upgrade of the Wairoa landfill site transfer facilities (see below). | Opex | | |
| | Smart procurement & delivery | Assess resourcing requirements and partner with specialist providers: Assess requirements and recognise value of existing partnerships while developing internal staff and taking a collaborative approach. | Opex | | |
| Changing priorities & legislation | Leveraging partnerships Smart procurement & delivery | New kerbside collection system: Expanding kerbside collection to include food and organics separation and provision of new kerbside bins and crates. \$100k MfE funding for feasibility study started December 2023 to explore different options and costs. | Capex | 2025-2026 | \$0.98M |
| Sustainable service delivery | Targeted renewals & improvements for critical infrastructure | Wairoa Transfer Station Upgrade: Upgrading Transfer Station to process kerbside collection upgrade and facilitate emergency storage of waste in case roads are closed (IF we chose the Omarunui option). Council is in the process of a funding application for the transfer station upgrade (potentially 75% funded by MfE) | Capex | 2025 | \$2.55M |
| Protecting environment | Value for money infrastructure management approaches | Waste reduction initiatives: Update Waste Minimisation Management Plan and ensure community are educated on how and why they need to reduce waste. | Opex | | |
| | | Wairoa Landfill compliance: Meeting consent requirements to protect our environment through ensuring appropriate cover for landfill and management of the effluent system. | Capex | 2025-2029 | \$0.17M |
| | | Monitoring of closed landfills: We have five closed landfills that have resource consents which will expire during the term of this Strategy. These consents will require renewal in the next 10 years. | Opex | | |

Financial summary for likely scenario infrastructure investment

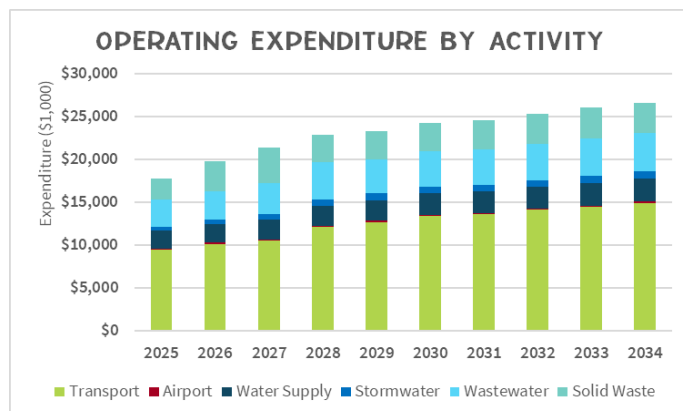
The Strategy is aligned with Council’s Financial Strategy which sets out financial objectives that align with the updated Revenue and Financing Policy.

expenditure accounts for 49% of the expenditure over the 10 year period.

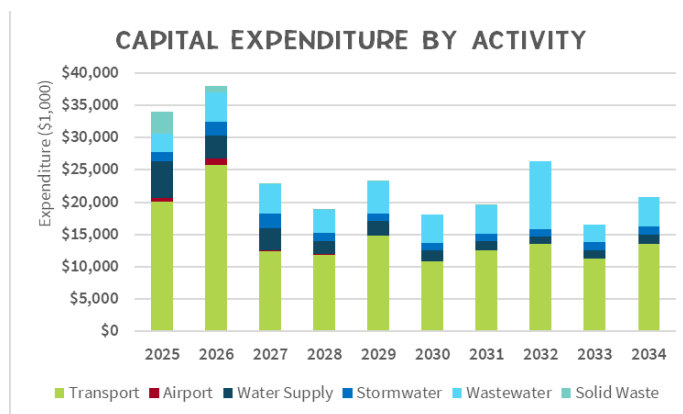
Summary of key financial assumptions

The following financial assumptions have been made in the development of this Strategy:

- In our financial forecasts we have applied the nationally recognised inflation rates provided by Business and Economic Research Ltd (BERL) based on their assessment of a ‘mid-scenario’.
- Where possible for the year ended 30 June 2024 we have applied known contract rates. Prices rarely decrease and in the public sector they often go up more than normal. In Wairoa we have the added challenge of remoteness and size, making the local market less competitive due to the small number of suppliers. Noting the inflation rates applied are averages across the entire country, the Wairoa experience may be quite different.
- The forecast expenditure is based on need, however any cuts in funding made by our funding partner Waka Kotahi will have a significant impact on the programme of work outlined in this Strategy.
- An allowance has been made for emergency works for land transport. The Waka Kotahi subsidy for such work is usually higher than 75%. All emergency works funding applications will be considered by Waka Kotahi on a case by case basis.
- Council has adopted a funding approach that it considers prudent and sustainable. In most cases our expenditure forecasts do not include an allowance for depreciation (via a transfer to reserves). We will not expense depreciation where other funding sources are available.



The breakdown of expenditure for Operations by activity over the 10-year period is summarised below. Note emergency works expenditure forecasts (for transport activity only) have not been included.



Financial forecasts

The total expected capital and operational expenditure for each infrastructure activity over the 10-year period 2025 to 2034 is:

| Infrastructure Activity | Operational Expenditure (\$M) | Capital Expenditure (\$M) |
|-------------------------|-------------------------------|---------------------------|
| Roads and footpaths | \$125.52 | \$146.84 |
| Wairoa Airport | \$1.36 | \$1.68 |
| Water Supply | \$24.30 | \$23.78 |
| Storm Water | \$7.22 | \$14.46 |
| Wastewater | \$39.94 | \$46.82 |
| Solid waste | \$33.86 | \$4.62 |
| Total | \$232.18 | \$238.20 |

The breakdown of expenditure for Operations by activity over the 10-year period is summarised below. Operational

Funding

Council funds its infrastructure activities through a mixture of rates, subsidies, grants and other fees and charges, seeks central government funding, and potentially development contributions.

Most funding comes from rates, with land transport heavily subsidised by Waka Kotahi NZ Transport Agency (Waka Kotahi). Council also uses debt and reserves to spread the funding of large costs, especially capital expenditure, over the life of the asset.

Over the period of this Strategy Council will be exploring alternative funding sources to maintain its current levels of service to the district.

Key decisions we expect to make

Council will need to make a number of key decisions over the duration of our strategy. Some of these decisions will be significant to the district and some will not. Key decisions that will need to be made by elected members over the next 10 years are:

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| Activity | Decision | Timing |
|-----------------------|---|------------------|
| Land Transport | Determine how funding will be secured to ensure resilient access route for Mahia Peninsula. | Next 3 years |
| | Future investment in very low volume roads. We need to consider options to ensure sustainability for wider rate payers. This may include options for decommissioning or reduced level of service. | Next 10 years |
| Water Supply | Council considers a regional approach to the delivery of the three waters activities to be the most significant decision we will have to make, subject to the new government's Local Water Done Well legislation. | Next year |
| | Identification of an alternative water source to avoid reliance on the Wairoa River | Next 10 years |
| | Development of water network to align climate adaptation needs. | Next 3 years |
| | Upgrades to Mahanga water treatment to meet water safety requirements | Next 3 years |
| Wastewater | Community and iwi do not want the wastewater discharged into the river. Legislative changes are also likely to lead to higher discharge standards. Council need to confirm the intention is to transition over time to land discharges (irrigation) which will also require storage ponds to be built for holding treated wastewater. | Next 10 years |
| | Development of water network to align climate adaptation and urban development and urban development needs. | Next 3 years |
| Stormwater | Development of water network to align climate adaptation needs. | Next 3 years |
| Solid Waste | Confirm option for landfill service: transport waste outside the district or develop new cell. If a new landfill is to be constructed ahead of capacity running out at the existing site, and to secure a new consent prior to expiry of the existing consent. | Next 3 years |
| All activities | Integrate land use planning & infrastructure investment work feeding into decisions on key infrastructure impacts. | Next 10-30 years |
| | New development contributions policy being developed | Next 3 years |