

Te Rautaki Hanganga Infrastructure Strategy

How we will manage our infrastructure over the next 3 years

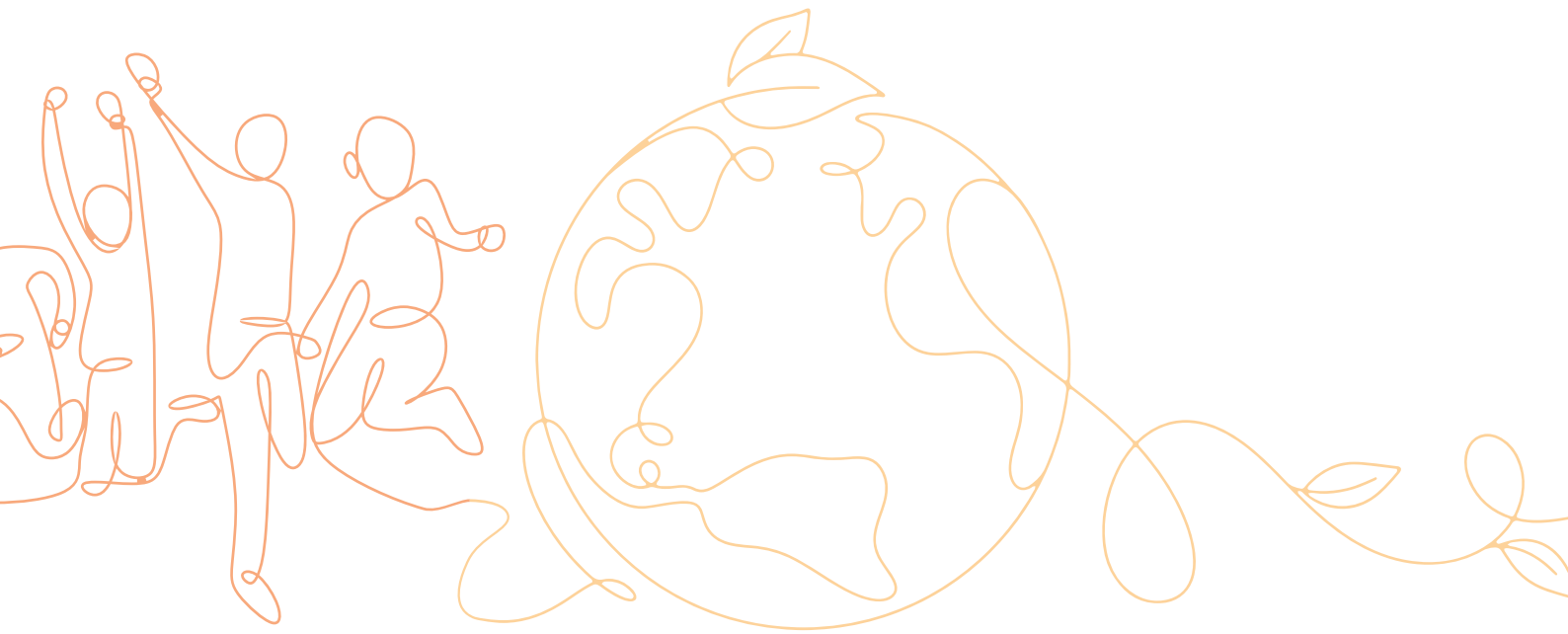


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He Tirohanga Whānui o te Rautaki Hanganga

Overview of the Infrastructure Strategy

This Infrastructure Strategy continues the journey from our 2018 and 2021 strategies. We are still focused on trying to maintain our existing infrastructure, building resilience, and delivering the services our communities and businesses expect. However, in early 2023 our region experienced significant damage to key infrastructure from the impacts of Cyclones Hale and Gabrielle. We now need to recover from these events whilst also keeping our eye on the future.

We still need to respond to changing expectations, higher population growth, and climate change. We also remain mindful of the ability of our ratepayers to fund our infrastructure and the impact of rising cost of living, and severe weather events on our economy.

We need to strike a balance between progressing recovery mahi and BAU infrastructure needs in a way that is financially sustainable for our communities. Our challenges are great and our Three Year Plan is focused on the challenges that our region faces, including the affordability of Council services and the sustainability of our regional economy. Council wants to be able to protect its environment and its assets, while also planning for the future. We need to meet our statutory obligations, prudently manage our critical infrastructure, and maintain our levels of service in a way that is affordable to our community. Realistically however, we won't be able to do everything as we had planned in the previous 2021-2031 Long Term Plan as we have a large bill for the recovery mahi across our region.

In this Strategy, we have committed to balancing our recovery and future needs by:

- Investing more in water supply resilience so we can recover more quickly after severe weather events until the land stability in the area has improved.
- Repairing and replacing assets across all infrastructure areas due to the cumulative impacts of severe weather events in recent years.
- Completing projects to enable residential growth out at the Taruheru block and starting other projects to enable other areas of our city to grow further.
- Expanding the delivery of the Waipaoa River Flood Control project to provide greater protection to our community and more resilience against floods and climate change, which safeguards both economic development and wellbeing. This will increase the current level of service.
- Investigating and implementing further flood protection options for our rural communities and the city.
- Protecting our water supply, restoring cultural values, and enhancing biodiversity by progressing the Waingake Transformation programme.
- Taking a more proactive role in managing historic landfills and progressing a regional resource recovery service.

We have had to make some difficult choices about which projects we prioritise and fund to make sure we remain within our financial limits for the next three years. Although we are expecting some Government funding to help progress our recovery projects, we will not receive all the funding we need to progress these projects and will have to allocate some of our budgets to ensure these important projects are completed.

1. He aha i arataki te whakawhanaketanga o Te Rautaki Hanganga?

1. What guided development of the Infrastructure Strategy?

We prepare an updated Infrastructure Strategy every three years to inform our Long Term Plan.

Our 2024 Infrastructure Strategy covers:

- Water supply (including the Waingake restoration programme)
- Wastewater
- Urban stormwater
- Land, rivers and coastal (land drainage, flood control, and coastal protection works)
- Roads and footpaths
- Solid waste
- Community facilities (cultural activities, recreation and amenities)

The strategy should be read alongside the Council's Financial Strategy, which provides context and guidelines against which to consider Council's proposed expenditure. Detail about how Council intends to fund its activities can be found in the Revenue and Finance Policy. Another useful source of information is the Activity Summaries in the Three-Year Plan (3YP).

1.1. Severe Weather Emergency Recovery Legislation Act

This strategy is different to our 2018 and 2021 strategies. After the severe weather events of early 2023, the Severe Weather Emergency Recovery Legislation Act was enacted. This Act allows a number of laws to be changed to help communities continue their recovery from recent severe weather events. The mechanism to make these changes is a piece of secondary legislation called an Order in Council.

Affected councils advocated for an Order in Council to change their requirements in preparing the 2024 Long Term Plan and associated documents, including the Infrastructure Strategy. The Order in Council regarding Long Term Plans was gazetted 4 September 2023. Key points for the Infrastructure Strategy are:

- There is no requirement for the strategy to be 30 years. At a minimum it must be the period of the plan (three years)
- Content requirements are different to reflect the level of uncertainty faced by the councils who are exempted from the requirements. There is a focus on providing information on:
 - Significant infrastructure issues
 - Principal options for managing issues
 - Implications of the principal options
 - Major capital projects proposed or mid-implementing (including recovery projects)
 - Likely funding options for projects
 - Implications of the funding options for rates and debt

1.2. Strategic direction – our priorities and community outcomes

A significant proportion of our expenditure is on infrastructure, so investment in infrastructure has a significant influence on how we achieve our strategic priorities and community outcomes. Council has developed a new strategic framework for the 3YP to better reflect the massive amount of recovery mahi we now have on top of BAU priorities.

Figure 1: 3YP Strategic framework



1.3. Our current operating environment

Tairāwhiti continues to change, new residents are buying and building homes and business is bringing new and expanded industry and offices. Cyclone Gabrielle had an enormous impact on the region, some communities are still living with damaged or absent critical infrastructure. Although external factors are generally beyond our control, it is important we monitor and respond to changes to ensure our infrastructure plans take advantage of new opportunities and remain fit for purpose.

Where is our infrastructure?

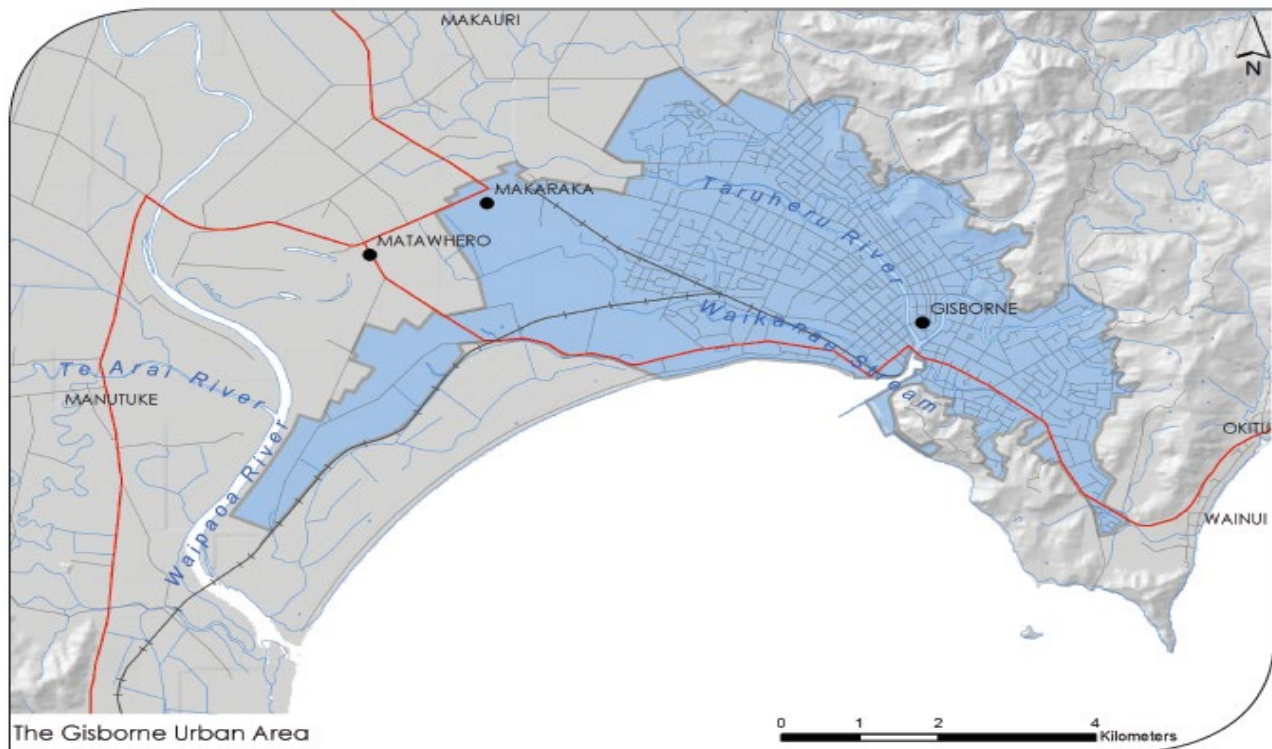
Our roading extends throughout the region (excluding the state highways) and is largely located in the rural areas. We have nearly 2,000 km of road in total. Public transport and cycleways are found in the urban area, but we provide and maintain footpaths in rural and coastal townships.

Stormwater and waste management services are provided to the townships as well as the Gisborne urban area. Kerbside collection occurs in the Gisborne urban area, Makorori, Wainui, Poverty Bay Flats, and Ruatoria.

Community facilities are located throughout the district. Cultural buildings (library, theatres) are centred in the urban area, but services are extended to the wider community using digital tools. Recreation and amenity facilities are found across the Gisborne urban area and townships.

Reticulated water and wastewater services are provided to the urban area of Gisborne – the reticulation boundary is set out in Tairāwhiti 2050 and Tairāwhiti Resource Management Plan and shown in Figure 2.

Figure 2: Reticulated services boundary



Reticulation of additional communities has been discussed in the past but not progressed. For example, provision of reticulated water and wastewater to Wainui was considered in 2007 but not adopted. In the 2021 Infrastructure Strategy, we agreed to review water and sanitary services and make subsequent decisions on whether to increase reticulation and introduce water metering. The timing of these has been pushed out due to the large unanticipated recovery work programme and will be confirmed in the 2027 Infrastructure Strategy.

Since the 2021 Infrastructure Strategy was adopted there have been a few changes to our infrastructure including:

- Kiwa Pools Complex – In 2020, The Infrastructure Reference Group (IRG) identified the Kiwa Pools Complex project to receive government stimulus funding. The complex, codesigned with Ngāi Tāwhiri hapū and built by Apollo Projects, opened in September 2023 and has been an exciting and joyous milestone for our community.
- Wastewater Treatment Plant Upgrade – Practical completion of stage 2 upgrades to the Wastewater Treatment Plant are complete and substantial progress has been made to improving the quality of treated wastewater on an environmental and culturally significant level.
- Waipaoa flood control climate change resilience project – aims to enhance flood protection along the Waipaoa River. Flood mitigation at Tangihanga Station, construction of the Mahunga Stream floodgate and implementation of stopbanks along both the Waipaoa and Te Arai River were completed. Work will be ongoing entering into 2024.

Expectations have changed and will continue to change

In recent times Government had revised its expectations for Council, ushering in a period of substantial change in the local government sector. Major reforms entail significant shifts in governance, regulation, and our approach to infrastructure. The release of updated policy directions under the new Government elected in October 2023 concerning resource management and infrastructure delivery will significantly impact our planning and management processes. We still expect more active monitoring of our performance and more information sharing required with central government agencies.

While changes are on the horizon, our commitment to delivering infrastructure services and planning for the future remains steadfast. More information on how we are responding to the expectations of Government and the community can be found in section 2.

Climate change leadership

We have resolved to take a leadership position on climate change, particularly in response to the significant threat climate poses to Tairāwhiti following recent weather events. This commitment is reflected in the GDC Climate Change Roadmap to 2050 which seeks to align climate change strategy projects with our Long-Term Plan priorities. A national climate change emergency was also declared in 2020. The recent cyclones and severe weather events have reinforced the need for Council to continue to be more active role in planning and preparing our infrastructure for climate change and reducing greenhouse gas emissions associated with building and operating our infrastructure.

Recovery from Cyclones Hale and Gabrielle

Cyclone Hale and Cyclone Gabrielle devastated the region in early 2023. These weather events caused widespread flooding, landslips, and significant damage to infrastructure along the East Coast. The region was confronted with a herculean task – repair the damage caused by the cyclones and rebuild infrastructure in a way that is resilient to any future challenges. Civil Defence emergency kits have also been distributed to isolated Tairāwhiti areas to enable community led responses should they be cut off after another catastrophic event.

The recovery efforts have been characterised by determined community efforts and a \$204 million government contribution to the region's recovery plan. Progress has been significant, focusing on infrastructure, rehabilitation, and community resilience against future weather events. Notably, key initiatives included the reopening of crucial roads like SH35 and SH2 and restoration of the Waingake pipeline. Flood risk resilience has also been a priority in tandem with a \$64 million investment in storm and drainage improvements.

Following the devastating impact of Cyclone Gabrielle, the Government announced a system of land categorisations Government's Future of Severely Affected Land Programme (FOSAL) to deal with the risks from future severe weather events on affected properties. Properties have been categorised under 3 main categories:

- Category 3: Highest risk – areas are not safe to live in because of the unacceptable risk of future severe weather events of flooding or landslide and a threat to life. Homes in these areas should not be rebuilt on their current sites.
- Category 2: Managed Risk – community or property-level interventions will manage future severe weather event risk. This could include the raising of nearby stop banks, improving drainage or raising the property. Category 2 is divided into 3 sub-categories 2C, 2P, 2A.
 - 2C: Community level interventions are needed to manage future severe weather event risk, including in tandem with property level interventions.
 - 2P: Property level interventions are needed to manage future severe weather event risk, including in tandem with community level interventions.
 - 2A: Potential to fall within 2C or 2P but significant further assessment is required.
- Category 1: Low risk – repair to previous state is all that is required to manage future severe weather event risks. This means that once any flood protection near the property is repaired, the home can be rebuilt at the same site.

Provisional maps were developed in 2023 showing which category affected properties in our region may fall under. They have been updated as further assessments have been undertaken. As of 17 June 2024, the number of properties covered by a FOSAL classification is:

- 67 Category 3
- 0 Category 2A
- 178 Category 2P
- 15 Category 2C

Council continues to progress the FOSAL programme categorising weather-affected properties across Gisborne to assess their vulnerability to future weather events. More information on FOSAL can be found at this link: [Future of Severely Affected Land – FOSAL](#).

The effects of these devastating weather events are still evident in our communities, but rehabilitation of the region's infrastructure is progressing, and the community's resilience has been the backbone for our recovery. There is still a lot of work to progress and this 3YP balances BAU and recovery priorities over the next three years.

More information on recovery developments can be found at this link: [Tairāwhiti regional recovery | Gisborne District Council \(gdc.govt.nz\)](#)

Three waters reform – what we know now...

In mid-2017, following the [Government Inquiry into Havelock North Drinking Water](#), the Government established the [Three Waters Review](#) to look at how to improve the regulation and service delivery arrangements of drinking water, wastewater and stormwater – the three waters – to better support New Zealand’s environment, health, and safety. The findings of the Review were consistent with many of the Havelock North Inquiry’s findings and raised system-wide questions about the effectiveness of the regulatory regime for the three waters, and the capability and sustainability of water service providers.

The Government, in July 2020, then announced the Three Waters Reform Programme in response to mounting evidence of the challenges facing three waters service delivery nationally. These include ageing infrastructure, historical under-investment, a bow-wave of wastewater plants to be reconsested, source water contamination, higher consumer expectations, required resilience for impacts of climate change and natural hazards, evolving demographics and huge looming costs.

A series of reports augmented by economic modelling puts the cost of a fit-for-purpose, future-proofed three waters service at somewhere between \$120 billion and \$185 billion nationally, over and above already planned investment, in the next 30 years. Most three waters assets and services, but not all, are owned and delivered by local councils. The Government’s view was that current arrangements will not be able to address these intergenerational challenges and that transformational reform is required. Informed by this evidence, the Government took decisions in October 2021 to progress the reforms so that all New Zealand communities can benefit from the reforms.

In early April 2023 the Government decided on changes to the water services reform programme. These changes included increasing the number of new water services entities from four to ten in order to strengthen local representation and voice.

The Three Waters Review’s mahi also led to the recent establishment of Taumata Arowai, the new water regulator for Aotearoa and a strengthened regulatory environment for three waters services. [Taumata Arowai](#) has a strong focus on the safety of New Zealand’s drinking water and on 15 November 2021 became the drinking water regulator. In 2024, it will assume responsibility for wastewater and stormwater networks, becoming the three waters regulator for Aotearoa.

After the change in Government following the 2023 elections, repealing the Water Services Entities Act is one of the priorities of the 100 day plan identified by the National, ACT and NZ First Government. The new Government announced on 14 December 2023 a new direction for water services – ‘Local Water Done Well’.

It is still not certain at the time of adopting the strategy the exact details of what new rules or structures the Government will put in place however, Council expects to retain ownership and responsibility for the operations of drinking water, wastewater and stormwater for the next three years. The The Local Government (Water Services Preliminary Arrangements) Bill (the Bill) was introduced in late May 2024, with submissions having just closed prior to adopting this strategy. The Bill provides some indication at a high level of potential options for Council to explore, there is further detail to come in a Bill expected in December 2024. As a Bill is not enacted legislation we do not have 100% certainty of the Government’s direction at the time of adopting the strategy.

It is likely that there will be opportunities for partnering with neighbouring Councils, for “shared services” agreements, water services council controlled organisations, or other structures to gain the benefits of scale and provide more affordable water service solutions. However, our water service activities (including water supply, wastewater and stormwater) could be provided by a larger water provider outside of Council. This depends on the outcome of the next steps in the Government’s Three Waters reform programme. This creates an added level of complexity for Council, where the future of this asset is uncertain.

This Strategy and the 3YP has included the forecast projects and budgets for our water infrastructure. Taking this approach ensures we continue to keep our community in the loop about what is needed, how much it will likely cost, and ensure we budget what is needed for the renewal and operation of the assets. Under the Bill, Council would need to deliver a Services Delivery Plan to outline what the transition or changes will be to its services with any new options available under new enacted legislation which is then submitted to the Secretary for Local Government for acceptance after being adopted by Council. It is anticipated that would be required in advance of the 2027 Long Term Plan.

Changing technology

Technology can have a large impact on the type and timing of infrastructure required. It can also be used, to help deliver services differently and alter what infrastructure is required.

Managing infrastructure systems in a smarter way could reduce the need to construct new assets in the face of increasing demand. Also, technology can increase the effective capacity of our infrastructure, reduce maintenance and operating costs and improve reliability and safety.

New technology may increase the demand for certain infrastructure, redefine how we use infrastructure, or even lead to an entirely new infrastructure system. This would need to be supported by an accessible and sustainable charging infrastructure system.

Council's planning for technological change is driven through new technologies being incorporated into relevant Activity Management Plans as part of their 3-yearly review.

1.4. Our partnerships

We cannot provide all of Tairāwhiti's infrastructure and community needs. We continually look for opportunities to partner with others to provide services and infrastructure. Key partners involved in the delivery or planning of infrastructure include:

- Trust Tairāwhiti
- Sport Gisborne Tairāwhiti
- Community and philanthropic organisations
- Iwi and hapū
- Developers
- Kāinga Ora
- New Zealand Transport Agency Waka Kotahi
- Other Government agencies

We consider potential partnership opportunities when we are prioritising what infrastructure investment decisions to progress.

Council needs enduring funding arrangements with Government on key issues, especially as we try to rebuild and recover. For example, much of the roading network future resilience and reinstatement far exceeds the amount our community could pay. As we go into this 3YP, we know that the total damage to our roading network has been assessed as requiring between \$465 to \$725 million. The Support Package from Central Government is \$125 million, with an additional \$85 million for initial emergency response costs. This leaves us with a significant shortfall, where we will be needing to work in partnership with Central Government to address our damaged roading network.. Our roading network is our lifeline for both our communities and our economic development.

1.5. Māori responsiveness

Over half of the population in Te Tairāwhiti are Māori. Tangata whenua have a long historical settlement and connection to Tairāwhiti and an equally long-term role in the future planning and decision-making for the region. Our approach to working with Māori is set out in two documents: *Tairāwhiti Piritahi: Te Whakarite Whai-wāhitanga Māori ki ngā Whakataunga Kaunihera Fostering Māori Participation in Council Decision-Making* and *Te Tiriti Compass*.

Tairāwhiti Piritahi outlines Council's approach and plans to achieving sustainable Tairāwhiti outcomes in partnership with Māori. The *Compass* is a tool that supports organisational understanding and application of Te Tiriti o Waitangi across our mahi. It guides the standard to which we hold ourselves in our role as a Treaty partner. More information about these can be found at this link:

[Tūtakitanga Iwi Māori Engaging Māori](#)

We are committed to working with iwi and hapū to deliver effective and well-designed infrastructure solutions guided by a tangata whenua worldview and reflect the identity of tangata whenua across Te Tairāwhiti.

Examples include:

- Co-management arrangements with mana whenua over reserves, such as Titirangi, Waihirere, and Kopututea.
- While the long term vision is whenua back in the hands of tangata whenua, Council is undertaking restoration of Waingake (Pamoa forest) in partnership with the Maraetaha Incorporation, supported by Ngai Tāmanuhiri. This will stabilise and protect the Waingake water supply pipeline and restore and protect biodiversity and cultural values.
- The KIWA group, which provides expert cultural advice, stakeholder liaison and technical support to develop our wastewater management programme, and reports to the Wastewater Management Committee.
- Work with Rongowhakaata and Te Hononga o Nga Awa on roading and bridge rebuilds post Cyclone Gabrielle.
- Working with Ngai Tawhiri on the Kiwa Pools development and the ongoing operation of the facility.
- Working with tangata whenua to identify opportunities to incorporate historical and cultural references within new infrastructure.
- Including monitoring of cultural elements, and making monitoring relevant to kaihoe waka, shellfish gathering, and other customary practices.
- Engaging with tohunga and other tangata whenua representatives around wāhi tapu and other important cultural sites, including archaeological sites.
- Integrating mauri and other tangata whenua cultural values into the Integrated Catchment Management Plans (due for completion in 2025).

1.6. Legislation and national direction

Our infrastructure decisions are also influenced and guided by several national policies and plans including:

- Aotearoa New Zealand Freight and Supply Chain Strategy.
- Te Rautaki Para Waste Strategy.
- Arataki 30 year plan.
- Government Policy Statement on Land Transport (new draft to be released).
- Te Waihanga Sector State of Play reports
- National Adaptation Plan
- National Emissions Reduction Plan
- New Zealand Infrastructure Strategy

More information on these and how they relate to our infrastructure is in Appendix 4.

We are keeping a watching brief on legislative, policy and regulator change that impact on our core assets to ensure we understand and can plan for changes that impact on the way we deliver our infrastructure.

Council's response to legislation change will enable it to understand timing implications for change and prioritise its responses. It will enable Council to understand the potential impacts on asset and financial modelling and prioritise funding. It will ensure that Council identifies the critical components of its infrastructure networks and prioritises renewals. It will also enable Council to have strong relationships with key government departments and industry groups to ensure that it has the opportunity to communicate potential impacts on the district and identify alternative options to help inform legislative and policy direction.

Table 1: Summary of our response to legislative changes

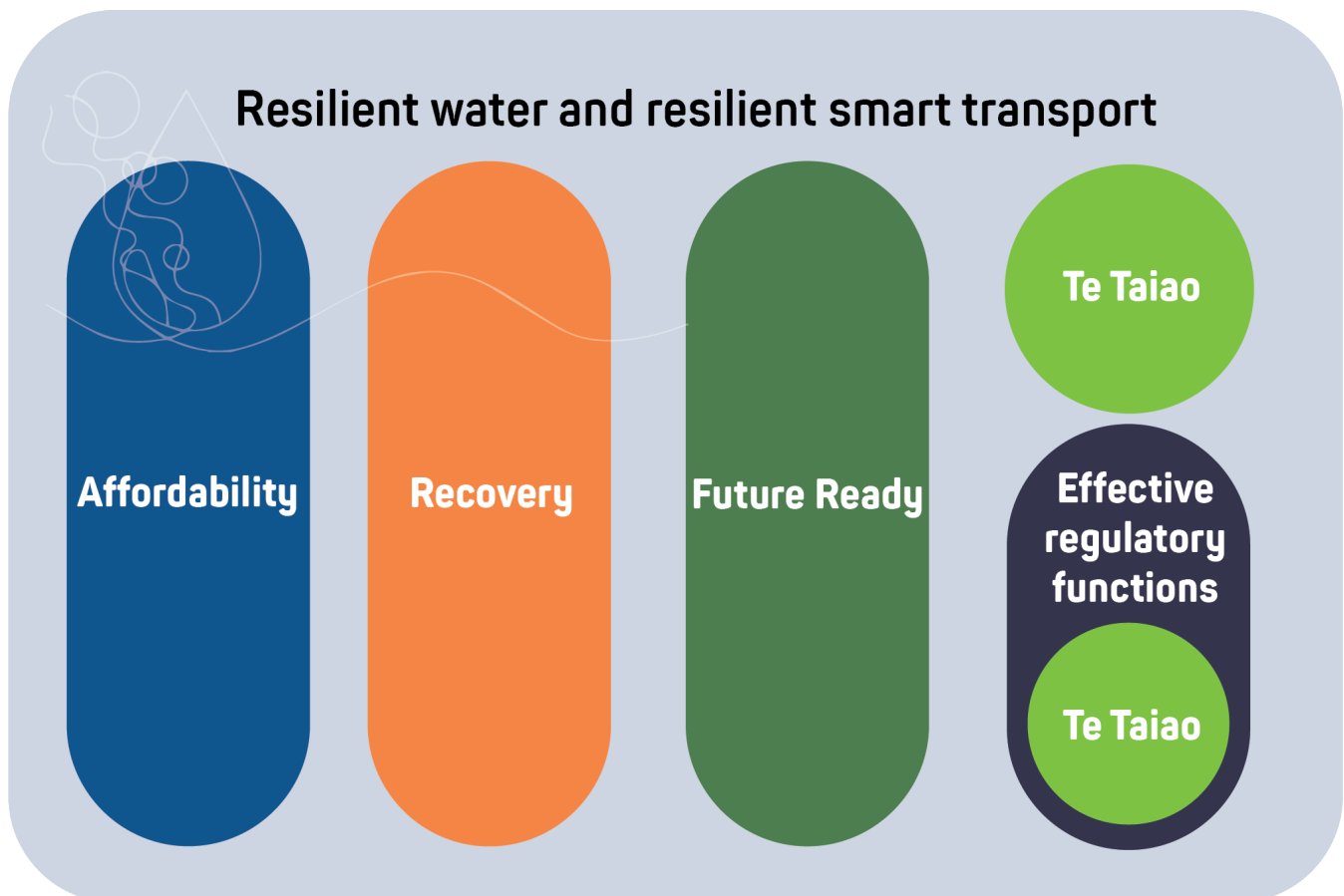
Response	Impact
<p>Plan and budget on the basis of increased costs to meet legislative change.</p> <p>Routinely review service delivery models.</p>	<p>Early financial modelling of potential cost scenarios will better enable Council to understand the potential impacts on rates and if necessary, identify alternative funding sources to manage these costs.</p> <p>Ensures renewals planning and budgets factor in increased compliance costs.</p> <p>Enables early engagement with the community around costs and potential impacts on levels of service.</p>
<p>Manage relationships with key industry partners and government departments.</p>	<p>This will help Council to ensure up to date information is used to inform early planning.</p> <p>Relationships will better enable Council to ensure it is able to communicate potential impacts on the district and its ratepayers early on and help inform the development of legislation and policy as it relates to smaller rural councils.</p>

2. Ngā whakautu ki ngā kaupapa hanganga tino hiranga

2. Responding to the significant infrastructure issues

Resilient waters, resilient transport and effective regulatory functions have been identified as the most important priorities to focus our projects and activities on over the next three years to complete our mission and achieve our vision. We have identified four significant infrastructure issues, which are shown alongside our priorities for the 3YP below.

Figure 3 How the significant infrastructure issues align with our strategic priorities for the 3YP



Resilient waters include flood control and drainage, clean and clear rivers, water security, while also recognising the relationship between catchment planning, Tairāwhiti Resource Management Plan (TRMP), and addressing wood debris with urgency. Resilient transport means infrastructure, roads, footpaths, bridges. It includes building back better, TRMP, connectivity and access, and recognition that this is carried out in a SMART way (i.e. specific, measurable, achievable, realistic and timebound). Under all of the four infrastructure issues are projects and activities that relate to these two strategic priorities:

- Making sure we recover from the significant damage and ensure that we consider how we build back to make sure our infrastructure network and environment are the best they can be.
- We still need consider what we need in the future and start to put solutions in place that enable our communities to continue to function and grow into the future.
- Our environment is a taonga and we need to make sure that the way we do business doesn't have adverse effects where that can be prevented. Thinking about how we deliver infrastructure and using more natural solutions is also important.
- Underpinning all of our infrastructure projects and activities is making sure what we do is the best "bang for buck" and is affordable for our community now and into the future.

We will enable effective regulatory functions for this strategy means that at a minimum we are making sure our infrastructure networks comply with the rules that protect our environment. It also means thinking about how we do business to be more sustainable and considerate of our environment, as effective regulation in this context means reduced adverse effects for our environment.

The significant infrastructure issues for Council and the principal options we intend to focus on to address these challenges are discussed in this section.

2.1. Our significant infrastructure issues

Key Infrastructure issue 1: Recovery

Cyclone Gabrielle resulted in a State of National Emergency being declared on 14 February 2023. The National declaration was extended three times and then lifted for Tairāwhiti on the 14 March 2023. The damage and impact of this event compounded the cumulative adverse impacts of Ex-Cyclone Hale (10 January 2023) and previous severe weather events since March 2022. As a result of eight previous weather events in the last 18 months Tairāwhiti has been in an ongoing state of recovery.

The torrential rain of Cyclone Gabrielle triggered widespread river flooding, storm surge, high tides, and high waves across the coastal areas of the region, with the recorded rainfall accumulation exceeding levels documented during Cyclone Bola.

Tairāwhiti experienced substantial widespread damage to infrastructure, resulting in power, telecommunication and mobile networks being completely lost for several days. The roading network suffered extensive damage, bridges were completely swept away by floodwaters, landslides and roads collapsed, causing the district to be isolated for several days and some communities being isolated for several weeks. The damaging effects of Cyclone Gabrielle can be compared to the devastation caused by Cyclone Bola, which struck the region 36 years ago on 7 March 1988.

The priorities for recovery are to address the immediate needs of affected communities, repair and explore resilience options for damaged infrastructure and implement mitigation measures to reduce risks from future weather events. A key focus is to progress recovery efforts without exacerbating further environmental degradation or compromising public health.

For the most up to date information on recovery developments please visit this link: [Tairāwhiti regional recovery | Gisborne District Council \(gdc.govt.nz\)](#)

Since Cyclone Gabrielle we have also had additional weather events that have impacted an already fragile infrastructure network, particularly the July 2023 event. Our region's infrastructure is more vulnerable to damage when it still not fixed from previous damage.

For more information about responding to emergency events please visit our Civil Defence page: <https://www.gdc.govt.nz/services/civil-defence>

You can find our Civil Defence plans and reports at this link: <https://www.gdc.govt.nz/services/civil-defence/plans-and-reports>

Our response over the next three years

Our investment over the next three years will be around \$275m. This is not the entire recovery budget, it just reflects the specific projects listed below. Some of these projects extend into further years, the budget in the table below is only what is anticipated to be spent during the 3YP period.

Table 2: How we plan to recover from the impacts of Cyclone Gabrielle and other recent severe weather events – the most likely scenario

Response	3YP Capital expenditure (\$)	Impact
Land, Rivers and Coastal		
Waipaoa River Flood Control resilience improvements, and additions and upgrades to the scheme for category 2 FOSAL properties	\$29,672,173	<p>This project is a continuation of the 2021 strategy programme of upgrades to provide increased flood protection to the Poverty Bay Flats that takes into account the impacts of climate change. Post Cyclone Gabrielle, the programme will need to incorporate additional works to account for work needed for Category 2 properties. The Waipaoa flood protection scheme currently protects over \$1 billion of assets. This project focuses on continuing to upgrade the existing infrastructure and flood protection related to the risk assessment of properties post Cyclone Gabrielle that are included under category 2 in the FOSAL framework.</p> <p>Flood protection reduces the risk of loss of life and valuable assets in the event of a severe flood event.</p>
Flood resilience works for identified FOSAL areas	\$20,644,286	<p>Modelling and progressing rural and city projects as part of our FOSAL programme of works for category 2 properties.</p> <p>Flood protection reduces the risk of loss of life and valuable assets in the event of a severe flood event.</p>
Te Karaka Flood Control Scheme-Cat 2	\$14,199,211	<p>Modelling and progressing upgrades to the scheme. Flood protection reduces the risk of loss of life and valuable assets in the event of a severe flood event.</p>

Response	3YP Capital expenditure (\$)	Impact
Community Facilities		
Land Remediation	\$675,000	This project will address asbestos contamination on Reserve Land at two specific sites caused by the reopening of historic landfills. The remediation makes it safe for the public to access these areas again.
Land Stability Projects	\$1,000,000	<p>This series of projects remediates parks and reserves, tracks and trails affected by 2023 severe weather events.</p> <p>Progressing this mahi will mean that we can reopen and future proof Titirangi, Makorori headland, and the Whataupoko reserve.</p>
Urban cemetery planning	\$1,231,453	<p>This includes planning for cemetery capacity going forward, and gravesite levelling due to slumping during the 2023 severe weather events.</p> <p>Land has been set aside for cemetery purposes, we are investigating the groundwater table issues at the site to assess whether it is still an appropriate site – more specific next steps post the assessment will included in 2027 strategy.</p> <p>Ensuring we have appropriate land available for cemetery purposes is a key social and cultural outcome for our community. Growth and resilience are the key drivers for the work needed.</p>

Response	3YP Capital expenditure (\$)	Impact
Roading and footpaths		
Emergency Works	\$105,000,000	This is the non-Crown infrastructure budget mahi that is needed to repair and build our network. Rebuilding our network means our community can get around safely and get to where they need to go. The transport network also has an impact on our region's economic growth and ability to get our goods to where they need to go.
Black Bridges – benefits and economic evaluation, design, and investigation on each destroyed bridge. Dependent on the outcome of the previous mahi then it will proceed to procurement and construction.	\$21,000,000	<p>This programme of work will restore unrestricted access to communities where 8 bridges have been destroyed.</p> <ul style="list-style-type: none"> • Burgess Bridge • Hangaroa Bridge • Hollywood Bridge • Grays Bridge • Mangatai Bridge • Mata Bridge (Huiarua) • Pauariki Bridge • St Ledgers Bridge <p>This work has been 100% funded by Crown Infrastructure Partners.</p>
Red and Orange Bridges repairs	\$16,000,000	<p>5 red bridges with outstanding major structural issues that require repairs, due to the risk we could lose them completely in a further flood event.</p> <p>43 Orange bridges with major scouring where work is needed before they become bigger structural issues.</p> <p>This work has been 100% funded by Crown Infrastructure Partners.</p>
Cyclone Gabrielle slips and dropouts – there were over 250 major drop outs or sections of roads impacted by river erosion across the entire network. Access for communities is still available, however temporary traffic restrictions are in place to ensure safety.	\$5,000,000	<p>Some work has been completed. Some sites are more complex than others. The programme of work has been prioritised.</p> <p>This programme of work will restore two-lane, unrestricted access for communities.</p> <p>This work has been 100% funded by Crown Infrastructure Partners.</p>

Response	3YP Capital expenditure (\$)	Impact
Tiniroto Road - suffered significant damage during Gabrielle, this worsened after the July 2023 weather event. Residents currently have a 4WD vehicles only detour available to them. Light or 2WD vehicles need to drive to Wairoa and then on to the state highway back to Gisborne.	\$20,000,000	<p>After the July 2023 severe weather event, the bluffs between the 35 - 37km mark were found to present imminent and extreme risk to road users. Extreme injury or death is a probable consequence should road users be impacted by falling material.</p> <p>This project restores access to the community and other transport users.</p> <p>It is also the alternative to State Highway 2 southbound to Wairoa in the event of a closure.</p> <p>This work has been 100% funded by Crown Infrastructure Partners and is expected to cost \$45m in total.</p>
Community-led recovery projects	\$21,000,000	<p>This programme is for community and iwi-led recovery projects. Council coordinates and distributes funds across affected areas.</p> <p>This work has been 100% funded by Crown Infrastructure Partners.</p>

Response	3YP Capital expenditure (\$)	Impact
Solid Waste		
Heritage Landfill Remediation	\$2,437,380	The closed landfill management work will include a risk assessment of known sites and then address key risks from erosion and leachates. This is particularly important for landfills near waterways in an effort to minimise the risk of an issue such as Fox River.
Processing and disposal of waste facility	\$3,500,000	<p>This project is connected to the development of a resource recovery project. It is focused on having land available for storage, sorting and disposal of waste both during BAU and for recovery and resilience purposes. The ability to process and look after our own waste has been a significant barrier for the response and recovery post the recent severe weather events.</p> <p>The project is comprised of investigation, design and planning, land purchase, consent, and initial construction for a new landfill site in region. It is estimated it will cost \$10m in total.</p>
Tokomaru Bay Site remediation	\$4,550,000 Funded by Ministry for Environment	This project is to complete investigations and plan for remediation of this heritage landfill site. A suitably qualified expert practitioner will complete a series of reports and options for remediation of the site in partnership with iwi, hapū and the community. Potential remedial options and implementation to follow recommendations.

Response	3YP Capital expenditure (\$)	Impact
Three waters		
Urban stormwater resilience	\$ 2,050,000	Resilience projects for stormwater to improve network performance to reduce localised flooding, improve stormwater quality to receiving waterways.
Sang Dam Slump Remedial Works	\$310,338	Assessment of Sang Dam to determine if any work is required due to cumulative impacts over time to ensure dam resilience (links to Dam Resilience project).
Raw Water Pipeline and Treatment Resilience	\$3,000,000	<p>Pipeline resilience projects along the pipeline from the water source through to the city. These have been seriously compromised by the impact of Cyclone Gabrielle and land instability post forest harvest. Investigations and subsequent projects will focus on the high-risk areas for the pipeline/water supply.</p> <p>This project includes having critical spare parts to hand to expedite repairs and minimise the "down time" after an emergency event and reduce the interruption of water supply to the city.</p>
Waipaoa Treatment Plan Infiltration Gallery	\$1,250,000	Project to add an infiltration gallery supply line, in addition to the existing system, to ensure continuity of water supply to the Waipaoa treatment plant during times of flooding/high river levels. Currently the ability to pump water from the river is stopped in high flows, this ensures we can continue to supply water to the city.
Dams Resilience	\$1,300,000	Waingake dams are critical infrastructure and hold up to 100% of Tairāwhiti's drinking water requirements through summer - ensuring the integrity of these dams is critical as part of 'building back better'.
Water Source Resilience	\$1,500,000	Projects to ensure water source resilience to minimise the potential for climatic impacts to interrupt supply.
Total investment	\$275,319,841	

Key Infrastructure issue 2: Te Taiao: meeting regulatory requirements and our community's expectations

Infrastructure activities have the potential to have an adverse effect on environmental and cultural values. Mana whenua, community and central government have clearly stated expectations regarding improved management of wastewater and stormwater discharges, solid waste, and freshwater allocation. In many cases there are new or tougher regulatory requirements. This means we may have to increase the current levels of service for some of our infrastructure activities.

We hold many resource consents that allow us to carry out current and future activities. Most consents need to be replaced before they expire to ensure ongoing compliance with the relevant regulatory requirements (particularly the freshwater provisions of the Tairāwhiti Resource Management Plan). We expect new consents will have more stringent requirements to reflect Government, mana whenua and community expectations.

Estimated costs associated with replacing resource consents have been included in the forecast expenditure where this is possible. In the case of solid waste management, stormwater, water supply and wastewater discharge consents we expect additional work will be needed to ensure we comply with new environmental standards.

The way we provide infrastructure can also contribute to the protection and enhancement of our environment and biodiversity. For example, through use of green or blue infrastructure. The terms "blue" and "green" infrastructure are often used in contrast to "grey" infrastructure, which includes traditional man-made structures like roads, bridges, pipes, and buildings.

Green infrastructure is a natural or semi-natural area, feature or process, including engineered systems that mimic natural processes and:

- provide for aspects of ecosystem health or resilience, such as maintaining or improving the quality of water, air or soil, and habitats to promote biodiversity; and
- provide services to people and communities, such as stormwater or flood management or climate change adaptation.

Green infrastructure can have many forms, such as:

- A widened and replanted stream bank that helps to manage floodwater.
- A permeable paved path that reduces the amount of stormwater entering the piped system.
- A row of street trees or a whole urban forest.
- A green roof or vertical wall.
- A rain garden.

Blue infrastructure refers to the network of natural and human-made aquatic systems that manage and protect water resources, including rivers, lakes, wetlands, coasts, and oceans. This concept is often used in environmental and urban planning contexts to describe the infrastructure and systems that deal with water-related issues, such as water supply, flood control, and environmental conservation. Blue infrastructure emphasizes the importance of maintaining and enhancing natural water systems to promote sustainability, resilience, and ecosystem health in the face of climate change and increasing urbanization. It is part of the broader effort to incorporate nature-based solutions and sustainable practices into infrastructure planning and development.

Blue infrastructure encompasses a wide range of features and practices, including:

- **Water Bodies:** Natural water bodies like rivers, lakes, and oceans, as well as constructed ones like reservoirs.
- **Wetlands:** These areas serve as natural water filters, flood control, and wildlife habitats.
- **Coastal Ecosystems:** Mangroves, dunes, and reefs that provide protection from storms and support biodiversity.
- **Stormwater Management:** Systems that handle rainfall and stormwater, including green infrastructure like permeable pavement and rain gardens.
- **Flood Control:** Levees, dams, and other structures designed to manage and mitigate flooding.
- **Water Treatment Facilities:** Facilities for treating and distributing clean water, as well as systems for managing wastewater.
- **Coastal Infrastructure:** Ports, jetties, and seawalls for shipping, fishing, and coastal protection.
- **Recreational Areas:** Parks, marinas, and other facilities for public enjoyment and access to water bodies.

As part of investigating infrastructure issues and possible solutions, green and blue infrastructure options will be identified (where possible) for consideration as the response to an issue. Taking this approach improves the quality of the environment, the condition and connectivity of natural areas, as well as improving our people’s health and quality of life.

Our response over the next three years

Our total investment over the next three years will be \$25.5m. The listed projects will be delivered in a way that protects and enhances our environment and biodiversity. Some of these projects extend into further years, the budget in the table below is only what is anticipated to be spent during the 3YP period.

Table 3: How we will manage our infrastructure to meet te taiao expectations – the most likely scenario

Response	3YP Capital expenditure	Impact
Community Facilities		
Dune Care	\$55,250	Natural defences protect people and places and also contribute to other values (such as biodiversity, amenity and cultural values). Looking after these natural assets will enhance the level of protection from natural hazards.
Street Trees planting programme	\$315,000	This project progresses the Community Facilities Strategy's Street tree plan. Street trees are an important factor for the urban heat island effect. Increasing the canopy cover for our urban areas supports cooling as well as biodiversity.
Solid Waste		
Paokahu closed landfill management	\$106,431	Paokahu Landfill has an environmental impact on the Awapuni lagoon waterways. There will be a focus to minimise impacts and support tangata whenua aspirations for restoring the area for future generations.
Waiapu landfill – future management	\$443,325	Community engagement on the future of the Waiapu landfill will ensure the best option is selected. Money has been budgeted to provide for future works needed to deliver the chosen option.

Response	3YP Capital expenditure	Impact
Transfer stations	\$139,550	Existing renewals and any improvements to assets and systems e.g. drainage. This will reduce environmental impacts on the surrounding environment.
Resource recovery centre	\$7,000,000	An overall reduction in waste sent to landfill will have increased benefits to the environment. Reduced costs of waste disposal to land by increasing the diversion of waste to recycling. Also contributing to local economic development, and providing much needed employment and training opportunities for youth and those that are currently unemployed. Investigation work has already been undertaken and the focus in the next two years is to develop the centre and get it up and running. Government funding may be available via the Waste Minimisation Fund to support this response.
Tokomaru Bay Transfer Station Relocation	\$730,000	<p>This project was not completed in the 2023-2024 Annual Plan period and has been carried over into the first year of the 3YP.</p> <p>This project will relocate the current transfer station site to another suitable site in the community. The current site sits on top of the Tokomaru Bay heritage landfill site. The relocation of this transfer station to another site will enable it to operate during weather events and enable the site remediation project to go ahead.</p>
Waste resilience (Better off Funding project)	\$2,488,500	<p>This project was not completed in the 2023-2024 Annual Plan period and has been carried over into the first year of the 3YP.</p> <p>The intent of this project is to help grow the region's circular economy by establishing systems to collect compostable waste for future conversion to energy source and reducing greenhouse gas emissions caused by waste. A key outcome is to establish systems and infrastructure for households to separate waste for kerbside collection through a multiple wheelie bin collection system, and develop and deliver an education programme to facilitate uptake of the circular economy options available.</p> <p>The project also includes the investigation of options for a Waste to Energy initiative in region.</p>
Three waters		
Te Karaka Wastewater Land Disposal	\$900,000	<p>This would change the treatment process to using disposal to land rather than treatment in an oxidation pond then being disposed into the river.</p> <p>Currently during heavy rain events the pond overflows into river. The pond was renewed post Cyclone Gabrielle. However, through discussions with tangata whenua a project to change the way we process wastewater towards land disposal was preferred as a permanent solution for the future.</p>
Waingake transformation programme	\$5,789,000	Restoration of land that has cultural value and contributes to resilience of the water supply network (Waingake). Supports mana whenua in the exercise of their kaitiaki responsibilities and also creates training and job opportunities for rangatahi.
Residential Backflow Prevention	\$1,305,000	Residential backflow preventors being progressively installed (7 year project) to replace existing tobies with connection point for future water meters. This is a Taumata Arowai compliance requirement.

Response	3YP Capital expenditure	Impact
Develop and implement Integrated Catchment Management Plans (ICMP)	\$194,125 budgeted to complete initial works to comply with consent	<p>The first ICMPs will be completed by 2025. This will provide us with a better understanding of the impact of stormwater on water quality and we can start to prioritise and implement actions to improve water quality. There will implications for both capital and operating expenses in the 2027 strategy. An initial budget of has been provided to progress improvements.</p> <p>Other stormwater projects will also contribute to implementing the requirements under the plan for the consent.</p>
Drainwise - an ongoing programme of stormwater upgrades on public and private land	\$5,109,400	Continued implementation of the Drainwise programme will reduce inflow and infiltration of stormwater into the wastewater network. This includes pipeline renewals, pump station upgrades, watercourse assessments, wastewater sensor network, and network upgrades to reduce or remove constraints. Some work required is on private property.
Tolaga Bay Septage Site	\$775,000	This project includes the development of a new site, currently proposed at a location between Tolaga Bay and Tokomaru Bay. This is to replace the ageing Te Puia site.
Mortuary Waste Drain Field	\$150,000	This project was not completed in the 2023-2024 Annual Plan period and has been carried over into the first year of the 3YP. The project enables mortuary waste to be treated and disposed of separately to wastewater.
Total investment	\$25,500,581	

Projects in the pipeline after 2027

Although this strategy does not go into detail after 2027, here are some of the anticipated projects that respond to this significant infrastructure issue about Te taiao. The list is not exhaustive and is predominantly made up of projects that were previously highlighted in the 2021 strategy. More details and costings on these projects will be included in the 2027 review of this strategy.

- Reviewing and updating the Engineering Code of Practice to incorporate new regulatory requirements, updated climate change implications, te ao Māori, and promote use of green infrastructure and low impact design principles.
- Stage 3 of WWTP upgrade: Design (and subsequently implement) land-based disposal for Gisborne city wastewater – including investigating wetland treatment.
- Continuation of implementing and/or complying with the ICMP through capital programmes in stormwater and wastewater
- Roadmap and progressing next steps for how we deal with waste in the regions (national study currently in progress)
- Investigating additional monitoring and enforcement options for illegal dumping e.g. cameras

Key infrastructure issue 3: Future-ready infrastructure

Although we have several challenges in the present to recovering from severe weather events, we need to also ensure that we are considering future generations and their needs. Key focus areas for ensuring our infrastructure is “future-ready” includes climate change, resilience, residential growth, and enabling economic development in new and current industries. Some of the projects listed under this infrastructure issue heavily align to recovery mahi planned or underway.

Climate change

Climate change will continue to impact how we plan and manage all our infrastructure activities. Regional hazard assessments indicate that over the next century Tairāwhiti can expect sea levels to rise, more droughts, more intense storms, less rainfall and increased wind. Some infrastructure will need upgrading to cope with more extreme weather events, and require repairs or replacement following more intense storms and further investment may be required in stopbanks to protect communities and productive land. This will have ongoing cost implications for both capital and operational expenditure and in some situations, the viability of infrastructure may be threatened.

How we design, build and operate our infrastructure can support climate change mitigation and adaptation. For example, some construction methods have a larger carbon footprint than others and where we locate new infrastructure can affect how vulnerable it is to climate change impacts. One of our priorities is to invest in infrastructure that is able to adapt to change.

Since the 2021 Strategy, a National Emissions Reduction Plan and Adaptation Plan have been adopted by Government. The overall impacts of these plans include increased responsibility on Council, increased funding requirements to deliver additional work, and planning and policy alignment. Appendix 5 provides an overview of the actions in these plans that fall under Council activities and infrastructure.

Resilience

Resilience is the ability to cope with and recover from adverse events, for example, if a road slip takes out a critical water main to a township. We can make our assets more resilient by having in place a programme of proactive renewals and maintenance works, which means assets, are in good condition. Building resilience also means we are more able to adapt to the impacts of climate change.

Resilience is not just about hard infrastructure, but also social resilience, staff retention, resourcing, and succession planning to ensure Council has the skills and resources to respond to an event. This is a significant issue for Council as it is difficult to attract and retain skilled staff to ensure business continuity of core infrastructure.

Council is planning for improvements to infrastructure resilience in the event of natural hazards and during times of maintenance or repair to ensure business continuity for Council and its residents and businesses. The road network is vulnerable to closure during adverse events and a lack of alternative routes results in economic and social disruption. Similarly, Gisborne has limited water storage, and if impacted by an event, this could have significant consequences.

Our options for managing infrastructure resilience revolve around the level of risk that the community is willing to accept. High-risk options, such as doing nothing, do not represent good asset management practice. Although ‘doing nothing’ would not increase our costs in the short term it will result in a decline in the condition of our assets and the level of service provided and would increase the risk of failure of, or damage to, our assets. Doing nothing will almost certainly result in increasing costs, possibly significantly, in the longer term.

Improving the resilience of all our assets is a lower risk approach as it will limit the impact of shock and stresses when adverse events do hit, but this can be expensive in the short-term due to upfront costs.

The failure or under-performance of critical infrastructure (such as a wastewater treatment plant) is more likely to have a significant financial, environment, cultural and social costs than failure of a small pipe. However, the likelihood of critical assets failing is usually low provided they are maintained.

In Tairāwhiti, our critical assets are:

- Arterial roads, primary collectors, inter-regional routes and access roads to critical community infrastructure (such as water treatment plants).
- Stormwater: large-diameter pipelines and major pump stations.
- Wastewater: wastewater treatment plants, major pump stations, and large-diameter pipelines.
- Water supply: Mangapoike dams, water treatment plants, major water pumping stations, water reservoirs, Waingake bulk water main and large-diameter pipelines.
- Waipaoa and Te Karaka stopbanks.

We are moving from an age-based renewal strategy to one based on condition and risk (asset criticality and probability of failure). Our renewals programme prioritises high risk assets. We plan to renew critical assets with a short remaining useful life over the next 10 years and undertake condition assessments on critical assets with a longer estimated remaining life. Renewal programmes can be brought forward (or pushed out) depending on the result of the condition assessments.

Residential growth¹

Gisborne city has experienced population growth since 2018, and growth exceeded the forecasts prepared for the 2021-2031 LTP. Population growth will not be evenly spread around the region. 82 – 85% of all new dwellings in our region over the last five years have been in the main Gisborne Urban Area. More information about population projections is available in Appendix 3.

Our draft Future Development Strategy provides an overview of the key infrastructure needs to enable growth in the areas identified that Council is responsible for providing, as well as other agencies. Going forward it is expected growth will be a more compact urban form via a mix of infill development and building up rather than spreading out. This growth is likely to require investment in reticulated network services and forms of design that can reduce the strain on the network.

Increased population will mean higher peak stormwater and wastewater flows and contaminants to manage and increased demand for drinking water. We also need to make sure that people can get around the city and to schools, work and other destinations safely and in a way that supports our commitment to reducing our emissions.

Development goes in cycles and demand can vary according to a range of factors, many of which are out of Council's control. One factor we can control is the timing of new infrastructure. Having 'shovel-ready' land, where land is zoned, and network infrastructure is available can be a strong incentive for new development. This requires us to put infrastructure in place in advance of development, which comes at a cost.

While that cost is ultimately recovered at a later date (via rates or development contributions), there is a risk that we provide the infrastructure too early and face increased holding costs, or too late and discourage new development. Matching the capacity of new infrastructure with the likely activities that will occur in greenfield areas, particularly for new industrial development, can also be challenging. Oversizing infrastructure is inefficient, while undersizing means the city could miss development opportunities.

Tairāwhiti 2050 signals the community desire for more brownfield development; however, the capacity of network infrastructure (particularly wastewater) is already constraining the ability to provide more housing in some residential areas. This limits the ability to provide for affordable housing in close proximity to existing amenities and services and may also limit the development of business land. The assumption is that over the next three-years, most new houses will be infill or brownfield developments in the existing urban area, Taruheru block development will continue, and the balance will rural-lifestyle development.

Enabling economic development in new and current industries

Our economy is currently heavily structured around primary industry, which is sensitive to external factors such as the capability of the roading network, flooding and droughts and the availability of water resource. Land use change associated with economic development can impact our infrastructure and reduce the levels of service our residents and ratepayers expect.

Ongoing investment in core infrastructure (such as transport, water and wastewater) is needed to support any anticipated economic growth and development, for example a significant increase in high-value tourism, domestic wood processing at Matawhero, honey processing or medicinal cannabis production.

Forestry is the largest industry in Tairāwhiti and harvest volumes continue to grow. A 2019 review of regional log availability (Forme Forest Industry Consultants, 2019) estimates that the total harvest will average about 3.50 – 3.90 million cubic metres per year between 2019 and 2028, providing infrastructure meets demands and there is a competitive market. Volumes are not expected to decrease until 2039-2043. Although the industry has been heavily impacted by Cyclone Gabrielle, projected volumes of forestry harvest are still expected to increase, and the number of heavy vehicle movements on the local road network will continue to increase.

¹ The statistical information presented in this section has been taken from the Environmental Scan 2023 and Thomas Consulting. May 2023. Growth forecast update – Gisborne District and Gisborne Urban Area.

We face challenges around managing the impacts of forestry and logging, including the impact of heavy vehicles on local. They are often unsealed roads and there are conflicts between vulnerable road users and heavy vehicles when freight routes pass through town centres. Implementing a heavy vehicle route through the city in partnership with NZTA remains a priority for this 3YP.

The availability and quality of water constrains our economic development. This is a particular issue for whenua Māori. Across the Tūranga (Poverty Bay) flats, most water resources are over or fully allocated with little capacity for additional irrigation available. Demand for water for crop irrigation on the flats remains strong and is expected to increase. With climate change and increased demand, more frequent water restrictions are likely, which has implications for social well-being, industry and economy.

Transitioning our economy as part of responding to climate change is a challenge to face as a region in the coming years.

Our response over the next three years

Our total investment over the next three years will be \$29.3m. Some of these projects extend into further years, the budget in the table below is only what is anticipated to be spent during the 3YP period.

Table 4: How we will manage our infrastructure to meet future needs – the most likely scenario

Response	LTP Capital Expenditure	Impact
<p>Climate change regional risk assessment and adaptation planning</p> <p>This includes continuing:</p> <ul style="list-style-type: none"> • A Climate Change Risk Assessment for the region. • Development of a regional adaptation plan for climate change. • Participating in national climate change programmes. • Incorporating Climate Change impacts into infrastructure planning and design. • Progressing climate change adaptation projects. 	<p>Mainly operational expenditure initially. Any current specific projects are included under this infrastructure issue and the recovery infrastructure issue.</p>	<p>More robust climate change planning will help us identify where and what infrastructure is most vulnerable to cumulative climate change impacts and enable investment to be targeted to highest risk infrastructure. This will reduce the risk of maladaptation to climate change and increase the resilience of infrastructure.</p> <p>Robust planning ensures investment decisions are evidence based and future proofed as far as possible. Investment in research and development of a policy response to climate change also supports collaboration with mana whanau and significant stakeholders and development of an integrated climate response for our rohe.</p> <p>Through recovery projects and BAU projects climate change is considered in planning and design to ensure our infrastructure can be responsive to our changing climate.</p> <p>Participating in national programmes will ensure we are able to compare nationally the extent and value of local government owned infrastructure exposed to sea level rise.</p>
<p>Climate change mitigation planning</p> <p>This includes working on mitigation plan actions such as:</p> <ul style="list-style-type: none"> • Urban form and transport planning supports alternatives to car-use • Incorporating climate change mitigation into infrastructure planning and design. 	<p>Mainly operational expenditure initially. Specific transport projects are included under this infrastructure issue.</p>	<p>Urban form and transport planning supports reductions in private vehicle travel and average trip length, which in turn reduces carbon emissions.</p> <p>Development of a climate change mitigation plan, and associated guidance, will enable asset managers to consider the carbon footprint of activities such as construction and reduce emissions associated with infrastructure construction and operation.</p>

Response	LTP Capital Expenditure	Impact
Tairāwhiti Resource Management Plan review²	Operational expenditure.	<p>Updated resource management regulatory framework for the region to enable development whilst ensuring we protect our environment.</p> <p>Current RMA planning for growth is largely limited to the Taruheru Block. Proceeding with infrastructure projects in this area will provide additional development ready land; however, this will not be sufficient to meet medium-long term demand or the current demand for community housing.</p>
Township upgrades	<p>\$2,504,200</p> <p>This includes \$492,000 of external funding.</p>	Upgrades are focused on two townships per year. Council engages with communities about what they want to see in their community.
Land, Rivers and Coastal		
Investigation and modelling of flood protection	Operational expenditure	Investigation and modelling of flood protection across our region will inform where we will build future flood protection and map any unintended consequences of flooding from where there are not any protections in place.
Community Facilities		
Implement the 30-year Communities Facilities Strategy via a two-phase programme, and in partnership with Trust Tairāwhiti and Sport Gisborne Tairāwhiti.	\$2,500,000	<p>Focus for the next three years is on feasibility and planning for an indoor stadium there is \$2.5m budgeted to contribute to the funding of this facility.</p> <p>Progressively work to implement the aspirations and needs of our communities in the Strategy.</p> <p>A Tairāwhiti Sports Facilities Business Case has been developed with input from the Tairāwhiti Sports Collective. This will be used to support requests for external funding.</p> <p>The network of sporting facilities is enhanced over time to meet community expectations and improve public indoor sports court facility availability.</p> <p>Investment supported by stakeholders and central Government.</p>
Waihirere Domain development	\$249,335	This budget is to complete the remaining work on the development of the domain with mana whenua under a co-management plan. This will progress mana whenua aspirations, and improve community facilities at the domain.

² For more information please go to: <https://www.gdc.govt.nz/council/review-of-tairawhiti-resource-management-plan>

Response	LTP Capital Expenditure	Impact
Revitalisation of the CBD	\$2,500,000	<p>This project works alongside Trust Tairāwhiti on upgrading and improving our CBD. The exact work will be confirmed through community engagement on their aspirations for the CBD. However, it is likely to include streetscaping, a fresh look and feel, and planting.</p> <p>This will revitalise our CBD with a fresh look and feel, and new energy for current and future generations.</p>
Kiwa Pools – Outdoor pool	\$6,500,000	Enhanced offering at the recently opened Kiwa Pools resulting in an improved recreation experience and improved water safety.
Roading and footpaths		
Strategic review of roading network	Operational expenditure	<p>This work started in 2024 and is expected to be completed in year one of the plan.</p> <p>Our roading network strategic review will inform where we need to build resilience, what levels of service we can afford for our 1800km network and over what period of time it will take to build resilience into our network.</p>
Taruheru block road links and improvements	\$722,160	Provides key infrastructure for greenfield development area. New houses and residents will be linked into the surrounding area and safe, reliable road links.
Roading and footpath improvements in rural townships	\$1,776,261	Ensuring our townships have safe and accessible footpaths and roading is important for ensuring communities have safe options to move around their rohe.
City Centre Multi-Modal Gap Analysis	\$500,000	This project is part of the wider CBD revitalisation approach. It focuses on how we move around our city centre and potential changes that could be made to make it more attractive and easier to get around across all modes of transport.
Taruheru River Walkway and Cycling	\$3,265,809	<p>This is an ambitious plan to build a pathway along the Taruheru River from the city centre to Campion College.</p> <p>It will provide a safe and accessible active corridor through to the city. It will form part of the Walking and cycling network. This network supports and encourages our community to get outside and enjoy being able to move around the city easily and safely and therefore improve health, economic and social outcomes now and for future generations.</p>
East Cape Route Security (PGF project)	\$1,500,000	This project was not completed in the 2023-2024 Annual Plan period and has been carried over into the first year of the 3YP. The project aims to reduce road closures due to severe weather events and the impacts of climate change along this key route.

Response	LTP Capital Expenditure	Impact
Three waters		
Water supply resilience review	Operational expenditure	Water supply research and modelling will inform where future investment should be, taking into account security of water from adverse weather events but also understanding any climate change impacts of lower rainfall areas.
Taruheru block upgrades and improvements	\$6,736,432	Provides key infrastructure for greenfield development area, specifically: <ul style="list-style-type: none"> • Campion Road pumpstation and rising main upgrade • Extension of water supply reticulation (within the current reticulated services boundary)
Kaiti Area Wastewater Pumpstation & Rising Main – initial work	\$100,000	This will be the start of the process - investigation, design, and consultation with works to commence after 2027. This would enable further residential growth in Kaiti which is a key area for development under the draft Future Development Strategy.
Grey Street Wastewater Pumpstation – initial work	\$200,000	This will be the start of the process - investigation, design, and consultation with construction to commence after 2027. This project would maintain existing service, accommodate growth, and allow increased capacity.
Booster Station and Reservoir Supply Main – initial works Replacing Ormond Rd pump station. Review of options / preliminary design for new pump station location and dedicated supply mains to Knob Hill reservoir.	\$263,211	This will be the start of the process - investigation, design, and consultation with construction to commence later. This project would maintain existing service, accommodate growth, and allow increased capacity.
Total investment	\$29,317,408	

Projects in the pipeline after 2027

Although this strategy does not go into detail after 2027, here are some of the anticipated projects that respond to this significant infrastructure issue about being “future-ready”. The list is not exhaustive and is predominantly made up of projects that were previously highlighted in the 2021 strategy. More details and costings on these projects will be included in the 2027 review of this strategy.

- Continue to implement the Community Facilities Strategy
- Development of new urban cemetery
- Projects included in the 2021 Development Contributions Policy:
 - Taruheru Subdivision Bridge (Nelson to Makaraka Road)
 - Wastewater Wainui Road New Pipeline
 - Aerodrome Road Additional wastewater pump station and reticulation
- Projects included in the Future Development Strategy looking out over 30 years:
 - Water treatment plant upgrades
 - Kaiti Area wastewater Pumpstation & Rising Main construction
 - Grey Street wastewater pumpstation construction
 - Booster station and reservoir supply construction
 - Additional water storage locations
 - Bulk supply water main (Lytton Road to Ormond Road)
 - Papatu Road booster water supply pumpstation
 - Second bulk supply new water main (Makaraka Pump Station to Lytton Road)
 - Upgrades to reservoir supply and new reservoir location
 - Taumata water reservoir
 - Stafford Street wastewater pump station and rising main
 - North West interceptor and Taruheru wastewater pump station
 - New Wastewater Treatment Plant
 - Cameron Road Wetland
 - Hospital Development Wetland
 - Various upgrades to urban stormwater network infrastructure to cope with additional flow and ensure appropriate treatment before discharged
 - Blackpool Reserve flood storage area in park – flooding of park area during extreme events
 - Intersection upgrades across the city to enable higher flows of different modes of traffic safely
 - Improved active mode connectivity across the city
 - Wainui shared path
- Investigating and implementing options to improve the availability of water for irrigation and commercial use.

Key Infrastructure issue 4: Affordability

The infrastructure we own represents significant historic investment and a significant investment in the future. Providing infrastructure is our biggest area of activity. The majority of our funding is spent on planned infrastructure projects and programmes in order to meet agreed levels of service.

Managing affordability in the context of recovery, uncertainty, the infrastructural challenges Council is facing, and the region's comparatively low income levels and high social deprivation scores is incredibly complex.

We know the community wants to maintain our current levels of service and in areas enhance or improve the levels that we currently provide. We balance this with doing the things that we must (regulatory functions and statutory compliance) and looking after our assets.

Our infrastructure is ageing, and we need to make significant investment in three waters (drinking water, wastewater and stormwater), land transport and other infrastructure during the next 30 years to manage the effects of climate change and other challenges and meet the expectations and needs of our communities.

Older assets may also no longer be fit for purpose - they may no longer meet the needs of users, provide for adaptation to climate change, be legislatively compliant or they may contain technology that is no longer supported. These older assets may not be easy to adapt to the changing future needs of the community – additional capacity and increased resilience cannot be simply added to most assets.

The upgrade or addition of new assets to improve resilience or to support growth in the region and other service level demands, will add further to our costs. Deferring or reducing expenditure on assets now, will increase our cost burden in the future and increase the risk of asset failure and shortening the life of the asset.

As Gisborne city grows and ages, there is an increasing amount of infrastructure to renew. The current generation must pay for the renewal of all previously established infrastructure. Future generations will pay for the renewal of all previously established infrastructure and any new infrastructure yet to be established.

The way we develop new infrastructure to support the growth of the city will affect the amount of renewals we face in the future. For example, brownfield redevelopment and making use of existing infrastructure by changing planning rules can be more efficient than new greenfield infrastructure and expanding existing networks.

The proportion of the population aged over 65 is projected to increase more rapidly than other age groups. This has an impact on affordability, as those on fixed incomes (such as retirees) are generally more impacted by rates increases. Although employment levels had been increasing in Tairāwhiti, salaries remain lower than other regions and house prices have risen significantly, which impacts the ability of some residents to pay rates.

Ageing infrastructure - keeping up with renewals is expensive

Council's is responsible for \$2.6 billion worth of assets (30 June 2023), with majority being infrastructure assets (\$2.2 billion).

These assets have a finite period in which they will operate effectively. Once their useful life has been reached, the asset usually needs to be replaced or renewed. For the next three years, we expect to continue investing in the renewal of assets based on their expected useful life. We have been continuously investing in gaining a better understanding of the condition of our assets, making sure that critical assets are replaced based on their performance.

Over the next three years we are making up lost ground with our renewal programme, as well as reinstating significantly impaired roads that were damaged in Cyclone Gabrielle and other severe weather events.

Beyond the life of this plan, there will still be considerable investment needed, particularly for bridges, roads, pipes treatment plants and community asset renewals. We will need to plan well ahead and incorporate future proofing resilience outcomes for our infrastructure network.

As an asset nears the end of its life, there is an increased chance of asset failure resulting in reduced levels of service. Costs tend to escalate towards the end of an asset's life, as repairs and maintenance activity increases to keep the asset in service.

Renewal or replacement of ageing assets is an issue for most asset groups; however, the renewals with the most significant financial impact during the term of this strategy are roading assets. Roading rate of renewal is over 250% and our Four Waters is 122%.

Despite increased expenditure on roading in the 2018 and 2021 LTPs and additional investment from central government via the PGF, investment has still fallen short of what is needed to maintain the entirety of the roading network to expected levels of service. The recovery programme to repair the damaged parts of our network is substantial for the 3YP. Our budgets do not allow for addressing all the potholes on our roads; to do so, rates would need to increase by another 16%, and we know that is unaffordable for our ratepayers.

Some of our community facilities are ageing and no longer fit for purpose. Many older community buildings require investment to address hazards such as asbestos or seismic risk, and to ensure they are fit-for-purpose for changing community needs. This is a particular issue for sports and recreation facilities.

The key affordability pressures we face are:

- The cost of rebuilding and repairing our infrastructure impacted by Cyclone Gabrielle.
- Investment in the resilience of our asset groups and services, so that the region is better able to withstand and recover from major shocks and stresses and adapt to climate change.
- Roading network – renewing assets and supporting economic growth.
- Upgrading ageing sports and recreation facilities.
- Urban infrastructure to support residential growth.
- Upgrades to three waters infrastructure to meet current commitments, changing expectations and new requirements.

Our response over the next three years

Council's response to affordability will help it to deliver infrastructure and appropriate levels of service in a way that maximises alternative funding sources to deliver value to ratepayers. It will help Council to understand community priorities in the planning and funding of its infrastructure.

Council carefully considers affordability issues when setting rates levels. Keeping rates as low as practicable is a priority but it has to be balanced against not transferring costs to future generations and the need to maintain our assets.

Critical infrastructure and essential planning have been prioritised for delivery. Other capital projects, unless externally funded, will be delayed or deferred to prevent massive spikes in expenditure.

We have spread the majority of recovery response costs across the district opting for an approach that spreads the costs rather than applying a rate based on capital value. This acknowledges that the costs and benefits (after the benefits of impacted property owners are considered) are district wide, unable to be easily differentiated between different groups.

Council recognises that affordability is an issue for our region and the ability to pay is not universal across our district. We have parts of our community which face high deprivation and there are others who facing hardship following the impacts of the cyclones. In order to address some of these issues we have increased our provisions for rates remissions to directly address those that are facing hardship.

Table 5: How we will manage our infrastructure within our financial limits – the most likely scenario

Response	Impact
<p>Financial Strategy</p> <ul style="list-style-type: none"> • Increasing the debt limit to 175% of revenue. • Identify alternative funding sources available. • The timing and scope of projects have been optimised. 	<p>Increasing the current debt limit allows us to respond to expectations from central government and our communities by investing in renewals and upgrades to key infrastructure (such as wastewater), and progress significant recovery mahi whilst keeping our liabilities at a financially prudent level.</p> <p>Additional funding sources outside of rates and loans will help us to ease the burden on ratepayers, especially for recovery costs. We anticipate we will not receive all the external funding we are asking for and we will then need to look at either spreading out delivery or reducing the level of service reinstated.</p> <p>Optimising the timing of projects allows us to balance cost pressures, limit the rates increase, ensure key work is progressed alongside the significant recovery mahi, and maintain a healthy balance sheet.</p>
<p>Service delivery</p> <ul style="list-style-type: none"> • Review levels of service and community feedback to identify whether Council is over-delivering in any areas. • Explore different forms of service delivery. 	<p>Changing service delivery, which could include a change in levels of service, can reduce operational costs and the capital costs associated with renewing infrastructure.</p> <p>Community consultation will be required before a decision to change any existing levels of service is made. This will ensure that potential impacts on residents and businesses are understood and taken into account.</p>
<p>Partnerships</p> <ul style="list-style-type: none"> • Build stronger relationships with NZTA, Kāinga Ora and other agencies. 	<p>Enables NZTA to understand the importance of the subsidy for the delivery of services and Council can better understand the allocation of subsidy process and signal potential impacts early on.</p> <p>Advocate to government for funding support for infrastructure to service growth and alternative funding sources.</p> <p>Ensure efficient delivery and joint funding opportunities.</p>
<p>Asset management</p> <ul style="list-style-type: none"> • Continue to improve asset management planning • Limit extension of infrastructure unless we are confident future generations can afford renewals 	<p>Asset renewal and maintenance forecasts are based on the current information about the condition and the expected remaining useful life of infrastructure assets. The accuracy of asset data has a direct impact on the accuracy of renewals and maintenance forecasts and uncertainties around these costings.</p> <p>Significant work remains to capture information about some asset classes. Information on the condition of our asset base will continue to improve over the life of the 3YP, which will make our asset renewal and maintenance forecasts more robust.</p>
<p>Roading</p> <ul style="list-style-type: none"> • Renewal budgets of \$42.1m during the 3YP. Levels of service across the roading network vary based on whether repairs and recovery from severe weather events have been completed. • Reprioritise investment so more is spent on road drainage. 	<p>The aim is to slow overall pavement deterioration and target resources at building and maintaining resilience within the network. Actions will be implemented to maintain safe access across the network at the lowest cost. Assets that are starting to deteriorate will have intervention strategies to increase pavement life expectancy and reduce whole of life costs. Ongoing monitoring of the network will be important to ensure intervention (repairs and renewal) occurs before assets fail, otherwise we will incur higher costs in the future.</p> <p>In the long-term, the overall network condition will likely decrease in performance and there will be an increase in severity of pavement defects. In targeted sections, it will be increasingly viable to revert sealed section to un-sealed as the maintenance and renewal costs become increasingly unaffordable.</p>
<p>Three Waters</p> <p>Renewals budget (\$45.8m) reflects good asset management renewal practices (risk-based approach).</p>	<p>Sufficient budget is available to undertake the recommended renewals for Three Waters assets. Renewals are prioritised using a risk-based approach and we will increase our use of condition assessments. This will improve services to meet the agreed level of service and provides some resilience.</p>

3. Ngā whakatauranga hiranga o te hanganga

3. Significant Infrastructure Decisions

This section outlines major capital projects proposed or mid-implementing. Information about the principal options and the scale of the capital costs is summarised. The figures included in this table are rounded.

Table 6: Major capital projects proposed or mid-implementing

Key Decision	Comment	Capital cost for 3YP (rounded)	Funding breakdown
Roading and footpaths			
Key components of the roading recovery programme Bridge replacements and repairs Tiniroto Bluffs	Council received funding from Crown Infrastructure Partners for these projects. This includes bridge replacement and repairs for bridges classified as black (\$21m), red or orange (\$16m), and ensuring Tiniroto Road can be reopened again (\$20m). There will be additional expenditure on projects beyond the three year plan to complete the work.	\$57m	External
Renewals for the local roading network	Investment is prioritised based on condition and level of service rather than age. The key components of the renewals programme are road drainage (\$3.74m), bridges (\$2.9m), resurfacing (\$14.1m), rehabilitation (\$9.9m), and pavement renewals (\$10.6m). Some roading assets will be part of the emergency works reinstatement mahi and will be renewed through that programme of work.	\$41.26m Funded by GDC/NLTF	Rates Debt Depreciation External
Three waters			
Acceleration of stormwater and wastewater renewals	Bringing forward and completing key asset renewals to ensure effective asset management and maintenance, and maintain level of service.	\$4m	Rates Debt Depreciation
Resilience of our water supply network	<p>This includes work to ensure better resilience of the raw water pipeline and treatment (\$3m), water source (\$1.5m), and dams (\$1.3m).</p> <p>Whilst our water supply pipeline is vulnerable, we will have critical "spare parts" and back up infrastructure in place in the event of another severe weather event damaging the network e.g. pipes ready to go to replace to reduce delay in response.</p>	\$5.8m	Rates Debt
Waingake Restoration project	Progressive programme of reversion of land in the water supply catchment to native forest, using managed reversion. In the long term this will improve the land stability in the area where we have key water supply infrastructure e.g. pipelines.	\$5.8m	Rates Debt External

Key Decision	Comment	Capital cost for 3YP (rounded)	Funding breakdown
Drainwise programme	<p>This programme is comprised of wastewater and stormwater projects and renewals on public and private property. The key focus is on too much stormwater is still getting into our wastewater network during heavy rain causing wastewater overflows onto private property, and into our rivers and the sea.</p> <p>More information on the project is at this link: https://www.gdc.govt.nz/council/major-projects/drainwise</p>	\$14.1m	Rates Debt Depreciation
Land, Rivers and Coastal			
Waipaoa River Flood Control Scheme	This includes planned climate change resilience upgrades outlined in the 2021 strategy as well as recovery repairs and upgrades.	\$29.7m	Rates Debt External
Te Karaka Flood Scheme	This is a recovery project to implement a long-term flood protection solution for Te Karaka.	\$14.2m	Rates Debt External
Flood resilience works	This is made up of rural (\$10.7m), city (\$4.7m), and further flood resilience (\$5.2m) for properties classified under the FOSAL scheme.	\$20.6m	External
Solid waste and Community Facilities			
Regional Resource Recovery Centre	It is anticipated that funding from MfE will support the delivery of this project either in part or in full.	\$7m	Debt External
Heritage landfill remediation	After updated risk assessments are completed additional funding may be required to progress actions under the 2027 Infrastructure Strategy.	\$2.4m	Debt External
Processing and disposal of waste facility	The project is anticipated to cost about \$10m in total. It is aligned with the delivery of the Regional resource Recovery Centre to ensure we can sort and dispose of our waste in region. External funding to support the delivery of the project will be sought from MfE either in part or in full.	\$3.5m	Debt External
Kiwa Pools Outdoor area development	External funding is being sought to progress this project.	\$6.5m	Debt External
Housing development			
Growth projects at Taruheru Block	<p>The outstanding infrastructure projects that support residential development of the Taruheru Block:</p> <p>Roading links and improvements</p> <p>Campion Road wastewater pumpstation and rising main</p> <p>Water supply network extension</p>	\$7.5m	Debt External – NLTF, DCs, and IAF Grant

4. Tō Tātau Mahere Hanganga

4. Our Infrastructure Plan

This section provides an overview of Council's infrastructure assets and how, we intend to manage them over the next 3 years.

4.1. Most likely scenario for managing our infrastructure

This strategy provides an overview of the most likely scenario for the management of our infrastructure. This scenario has been developed by:

- Including the funded capital and operating budget forecasts from the Three Year Plan.
- Using the significant forecasting assumptions contained in Appendix 2 of this strategy.
- Using the assumptions for levels of service, demand and renewals outlined in Appendix 3 of this strategy.
- The preferred options for the significant capital decisions summarised in section 3 of this strategy.
- The estimates are consistent with the most likely scenarios identified for each significant infrastructure issue.

Recent experience and future forecasts indicate that costs associated with complying with required standards are sizeable and significantly more than inflation. This is particularly the case in relation to:

- Renewal of resource consents and compliance with TRMP and national resource management direction
- Drinking water standards
- Anticipated three waters requirements

There are both capital and operating impacts from increasing compliance. The budget forecasts in the 3YP and timing and scale of significant decisions in this Strategy have been, built on current legislation and known changes to standards that are expected. There has been no allowance for standards, that will change where there is currently no indication about the implications of the new standards.

Looking to 2027...

Council will have repaired most of the primary infrastructure damaged during Cyclones Hale and Gabrielle, and we will have progressed the main infrastructure requirements that are necessary for our region's future.

Our research, modelling and future proofing for our region will have completed.

- Our roading network strategic review will inform where we need to build resilience, what levels of service we can afford for our 1800km network and over what period of time it will take to build resilience into our network.
- Alternative water supply research and modelling will also be completed to inform where future investment should be, taking into account security of water from adverse weather events but also understanding any climate change impacts of lower rainfall areas.
- Investigation and modelling of Flood protection across our district will inform where we will build flood protection and map any unintended consequences of flooding from where there are not any protections in place. We will have a better understanding of where to complete more drainage maintenance and sediment removal works.

At the end of the 3YP our roading network will not be where we were before the cyclones. We will have built back most of serious damage on our roading network but we won't have finished all of it. The reconstruction of the Tiroto Bluffs is likely to take another year. Around 40-60% of the 61 bridges that were either demolished or damaged will mostly be fixed or replaced. The pace of replacement and repair will be determined by the capacity of our contractors and funding from Waka Kotahi for their share of the costs for recovery on our local roads.

We will still have pot-holes due to our soft geology, the likelihood of increasing rain events, and our limited budget. We will be vulnerable due to any incomplete repairs, worsening the condition of our roads during future adverse weather events. But the majority of the network and the community it serves will be re-connected again.

Our wastewater infrastructure will overflow much less frequently. The water in our rivers and streams will incrementally improve.

Water supply will have high quality and compliant drinking water, and we will be better to respond to the impacts of future adverse weather events on the water supply network.

We would have cleaned up most damaged paths, and erosion prone areas on our reserves, enabling public access again. We will have enhanced our natural buffers around riparian and coastal reserve areas. We will have completed rationalising our extensive network of public conveniences and play spaces, making sure we have the right asset in the right place for resilience. We will have progressed renewing and revitalising our CBD. With the help of external grant funding, we will have completed the second stage of our Kiwa Pools, outdoor area.

We would have completed 65km on Waipaoa Flood protection works, Te Karaka Flood protection works and started construction of new protection works in the city and rural areas.

We would have made significant progress on a new Regional Recovery Centre enabling more sorting and disposal of our waste streams, reducing the overall waste volumes that need to go to landfill. We will have changed our kerbside collections to collect food and garden organic waste. We would have identified options and completed future plans on how best to process waste across and within the district. This is to ensure that we are not dependent on transporting all our waste out of the district but we have a means of treating it within region.

But we will still have a number of hurdles to face going into the next 2027 Infrastructure Strategy...

4.2. Overview of forecast expenditure

For this 3YP, most activities reflect the maintaining of our commitment of the 2021-2031 Long Term Plan. Due to our constraints from both rates increases and debt, and our physical capacity to deliver our recovery plan, there is little scope for us to significantly increase levels of service targets over the next three years. We have had to focus on recovery infrastructure reinstatement, meeting existing levels of service and meeting changes arising from statutory requirements.

Capital expenditure

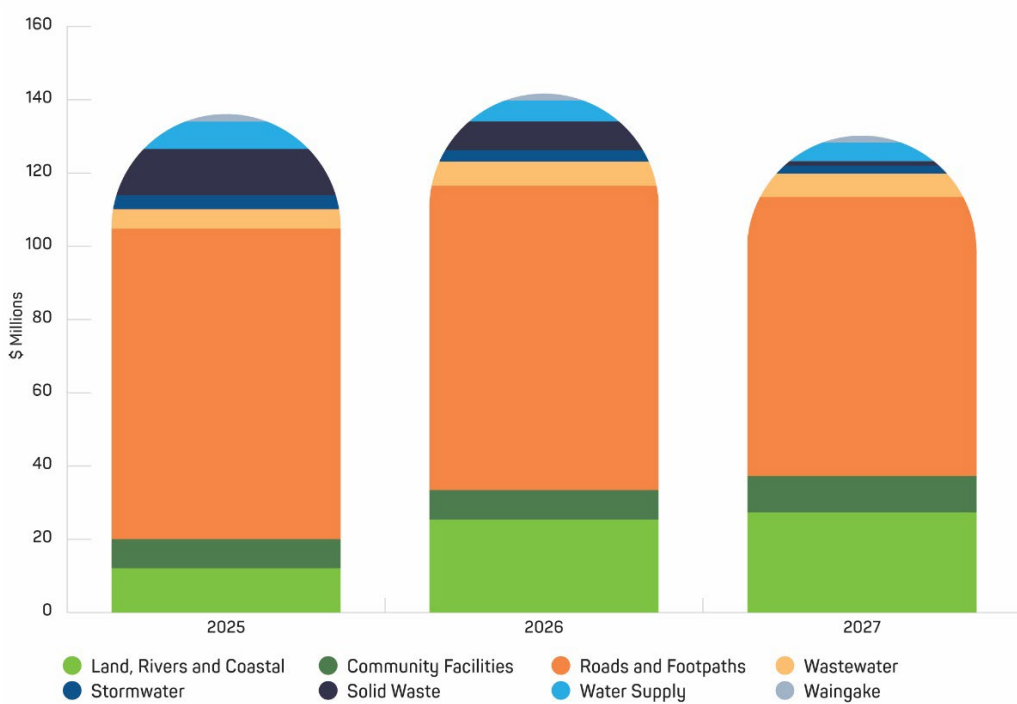
Council has three types of capital expenditure:

- **Maintaining levels of service** – this type of expenditure is usually referred to as “renewals”. This is investment in renewal of existing assets once they reach the end of life e.g. existing roads, pipes.
- **Increased level of service** – a new project/s that improves the level of service provided to our community e.g. building new flood protections where previously there were none.
- **Growth** - Capital investments for new projects that are enable or respond to growth and new needs e.g. new wastewater infrastructure in new neighbourhoods.

Historically Council spends three times more on operational costs than it does on capital investment projects. For this 3YP, capital investment exceeds our operational spend, this has been heavily influenced by significant recovery costs for rebuilding damaged or lost assets and new infrastructure. The estimated requirement for capital investment over the next 3 years is shown in the graph below.

Figure 4: The capital expenditure we have forecast for each asset group for the next 3 years

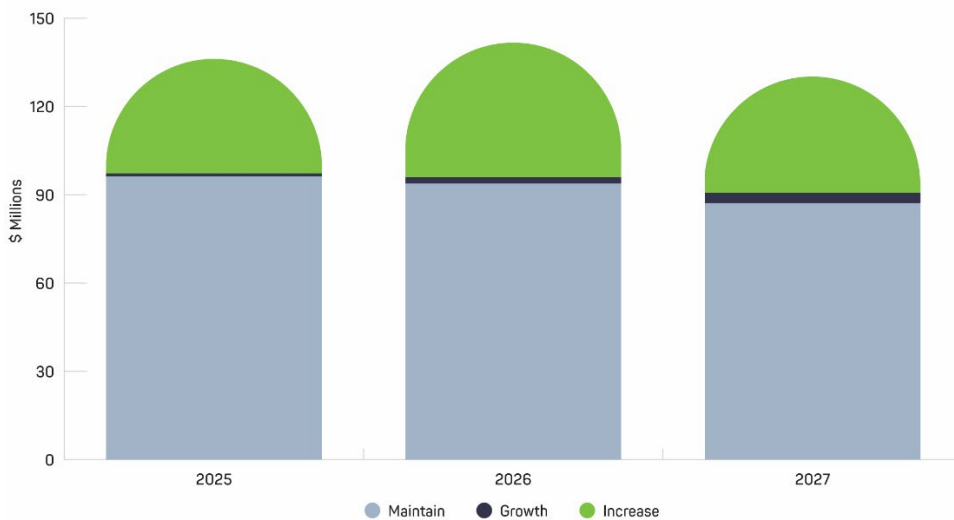
What we plan to spend on our infrastructure over the next 3 years (inflated)



The forecast expenditure is significantly higher than historical expenditure due to the recovery programme. Roading and footpaths and the flood protection projects make up a significant proportion of the anticipated spend.

Figure 5: Amount of capital expenditure forecast to be spent on maintaining or increasing the current level of service, or extending current services to new users (growth)

How what we plan to spend affects levels of service



A significant amount of the work we will progress is about maintaining what we have. This reflects the large amount of rebuilding needed to get our roading network back. The increased level of service is heavily focused around the flood protection projects.

Paying for our infrastructure

Our Financial Strategy has been updated during development of the 3YP. The Financial Strategy also has a 3-year horizon. It helps Council and the community understand the financial impacts and sustainability of our budget and plans, and the impact on debt and rates. The foundation of the strategy is six inter-linked key strategic principles:

Financial Strategy strategic principles

- Keep rates as affordable as practicable**
Keep rates as affordable as practicable while recognising the need to fund critical activities and infrastructure, and keep the region functioning well.

- Focus on critical activities and infrastructure**
Focus on critical activities and infrastructure which meet the community's needs and respond to climate change during the three year plan period and beyond.

- Manage debt prudently**
Increase maximum debt levels still within prudent levels, to smooth the cost of delivering key infrastructure projects over the period of the three year plan, in line with our financial policies.

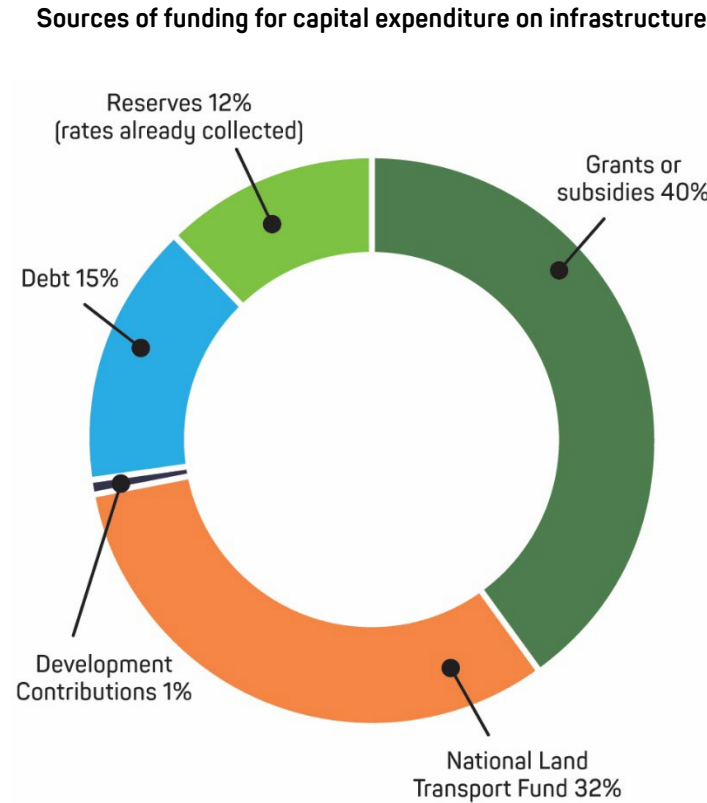
- Increase alternative revenue streams**
Increase and optimise the use of alternative revenue streams through partnerships, targets contributions and investment income.

- Ensure beneficiaries of services pay the costs**
Ensure users and those who benefit from Council activities and infrastructure pay for them. This includes mechanisms such as user levies, targeted rates and development contributions.

- Grow and enable our rating base**
Grow the rating base through economic activity without the need to trigger additional costly capital works projects or grow Council's infrastructure footprint without care.


We intend to fund our capital expenditure using a mix of debt, depreciation reserves, grants and subsidies, development contributions, and the National Land Transport Fund (roading projects only).

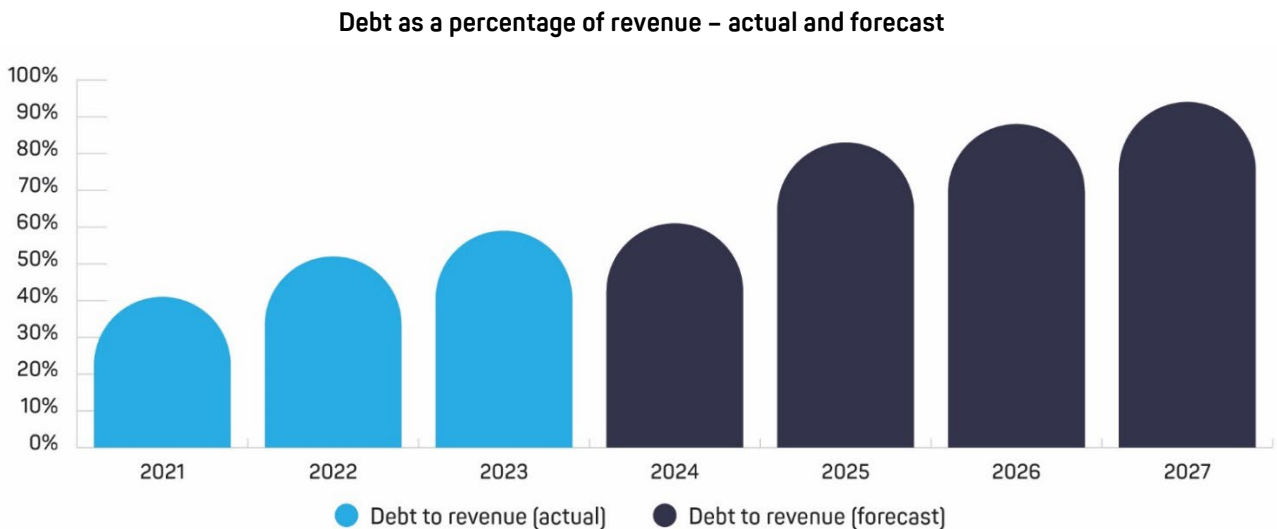
Figure 6: Three Year Plan - sources of funding for capital expenditure on infrastructure.



Due to the significant amount of roading work in our programme the National Land Transport Fund (NLTF) makes up around half our expected funding for delivering capital works. However, this funding will not be confirmed until about September 2024 when the National Land Transport Plan is released. If we cannot get the funding needed through the NLTF then we will need to reprioritise our roading programme accordingly and seek additional external funding.

Our current debt limit is 130% of revenue. For the next three years, we will increase our maximum net-debt to revenue limit to 175%. This increase allows us to fund our significant recovery costs on top of existing infrastructure requirements. For the 3YP, we forecast debt to revenue percentage to be its highest of 158% in 2025/26. There is still some borrowing headroom to respond to emergencies should that be required at any point in the next three years.

Figure 7: Three Year Plan - forecast debt as a percentage of forecast revenue



Under the Financial Strategy, average Rates increase to existing ratepayers will be not exceed 11.4%. The total rates increases are based on two sub-limits, the rates cap on doing everyday business (7.9%) and a new recovery rate (3.5%).

The recovery rate focuses on expenditure relating to the costs arising from Cyclone Gabrielle. The new recovery rates have been introduced for 2024/25 onwards. These new rates are to fund and aid recovery. It includes the costs for the FOSAL Category 3 Voluntary Property buyouts, Category 2 increased Flood projection across our district, increased response for sediment removal in our drains and wood debris removal in our water ways.

Rates affordability will remain a big challenge, as well as continual maintenance of our roading network and footing the bill for repairs. How we deliver our services and how we build resilience into all our infrastructure, will not only have a critical part on our future costs it will also have an impact on the enduring effectiveness and sustainability of the services that we deliver.

We have three main financial levers to balance the work Council provides to community:

- the amount we spend
- how much debt we take on
- how much revenue we receive

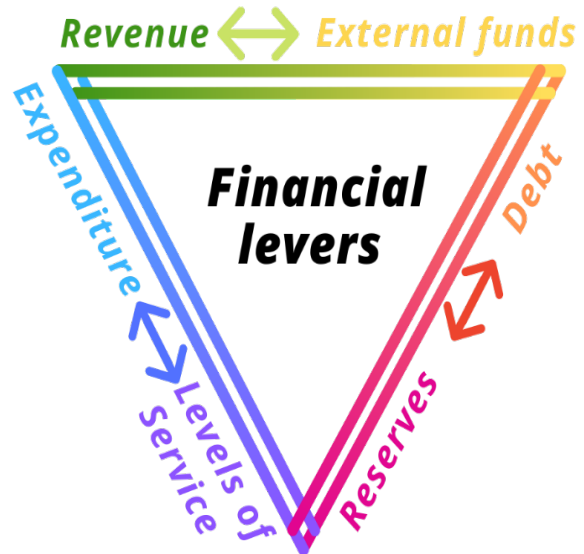
The triangle represents the relationship between the three levers.

Changing one lever, such as increasing costs (expenditure) by providing new services will mean we need to either collect more revenue or use our reserves/debt to fund it. Conversely not investing in a capital project, will either reduce the need for more revenue or reduce the need to raise more debt.

Expenditure is heavily dependent on the levels of service (how much we do) and the services and assets Council provides to the community. If Council does more – either because it must comply with new standards or because the community would like to see more – then costs will increase. Conversely, if Council reduces levels of service – either due to it no longer being needed or because it is no longer affordable or a priority to provide it to the level we did before, then costs associated with that service will decrease.

The estimated capital expenditure has been used to assess the potential effect on the Council’s net-debt to revenue ratio and the Financial Strategy debt limit. This has been prepared using the following assumptions:

- Capital and operating expenditure in Years 1-3 is as included in the 3YP.
- Net-debt is set at a limit of 175%.
- Rates increases as in the 3YP (up to 11.4% per year).

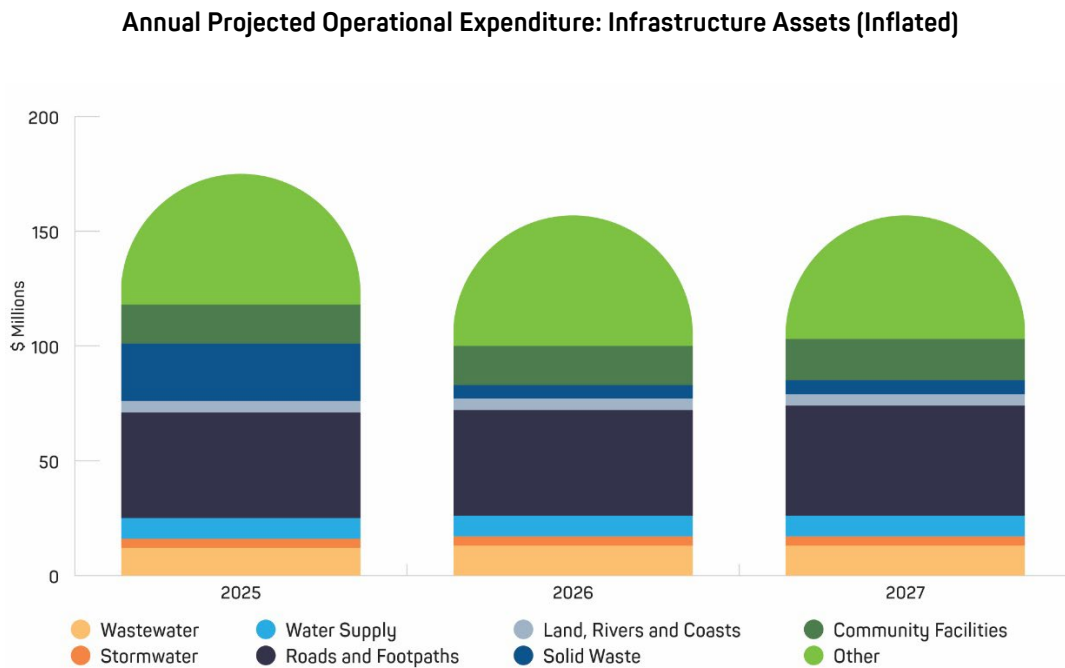


Operating expenditure

Operating expenditure is what we spend to keep our infrastructure activities and services running. This includes costs we have direct control over, such as staff costs, professional services and maintenance works³, and other costs we cannot control, such as interest, overhead charges and depreciation (wear and tear costs of our assets)⁴.

The estimated requirement for operating expenditure over the next 3 years has been prepared and is shown below. Interest costs for this 3YP have increased significantly since the 2021 strategy, this is driven by the increased capital programme but also higher interest rates.

Figure 8: Annual projected operational expenditure for all infrastructure activities (inflated)



³ Assets need to be maintained to maximise their useful lives and replaced to avoid asset failure.

⁴ As new infrastructure is built, Council starts to collect rates for depreciation. This goes towards future funding for the renewal of that infrastructure. When Council builds new infrastructure from scratch due to growth this is funded through loans and development contributions

Funding breakdown for major capital projects

The table below provides information on the impact of the likely funding options for the major capital projects under Section 3.

Project	External funding	Reserves funding	Debt funding	3YP Rates impact %
Key components of the roading recovery programme	\$57,000,000	-	-	0%
Renewals for the local roading network	\$28,055,416	\$13,202,548	-	0%
Acceleration of renewals (wastewater and stormwater)	-	\$2,793,949	\$1,230,000	0.15%
Resilience of our water supply network		\$1,300,000	\$4,500,000	0.56%
Waingake Restoration project	\$3,523,764	\$1,166,484	\$1,098,752	0.14%
Drainwise programme		\$11,281,580	\$2,872,820	0.35%
Waipaoa River Flood Control Scheme	\$17,611,356	-	\$12,060,817	1.51%
Te Karaka Flood Scheme	\$12,779,290	-	\$1,419,921	0.18%
Flood resilience works	\$18,579,857	-	\$2,064,429	0.26%
Regional Resource Recovery Centre	\$6,650,000	-	\$350,000	0.04%
Heritage landfill remediation	\$1,462,428	-	\$974,952	0.12%
Processing and disposal of waste facility	\$2,485,000	-	\$1,015,000	0.13%
Kiwa Pools Outdoor area development	\$3,510,000	-	\$2,990,000	0.37%
Growth projects at Taruheru Block	\$6,635,658	-	\$822,934	0.10%

Āpitianga 1: Tirohanga Whānui o tō tātau mōhiotanga o te hanganga

Appendix 1: Overview of our infrastructure knowledge

Good quality infrastructure planning relies on good quality asset knowledge. We need to understand how our assets perform, understand the lifecycle costs and the risks associated with failure. Uncertainty about data for an asset can impact on our financial sustainability.

Table 8 provides a summary of our asset knowledge. This is an overall picture. Over a whole network, there are always some assets needing renewal or maintenance, and performance can vary. The ratings used in Table 8 are based on the NAMS International Infrastructure Management Manual 2015. Further explanation is included in Table 9.

Table 7: Summary of asset knowledge on a network basis

Network	Value \$m DRC*	Overall Condition	Overall Performance	Data Confidence	Implications
Roads and Footpaths	\$1,687m	3-5 Maintenance, recovery repairs and rebuilds, and renewals required. Significant work programme to return all assets to BAU condition.	3 Moderate – 4 Poor	B Reliable	The asset requirements are mostly well understood, but not affordable. There are some data improvements required.
Water Supply	\$138m	2-4 Minor defects and some water main renewals are required in the short-term. There is some recovery and resilience mahi needed for some assets.	2 Good	B Reliable but less reliable for older assets	
Urban stormwater	\$80m	2-4 Minor defects and some stormwater pipe renewals are required in the short-term.	3 Moderate	B Reliable	
Wastewater	\$109m	2-4 Minor defects and some wastewater main renewals are required in the short-term.	3 Moderate	B Reliable but less reliable for older assets	
Land, Rivers and Coastal	\$92m	4 Assets require renewal/upgrade Upgrade of the Waipaoa River Protection Scheme underway.	3 Moderate	B Reliable But less reliable for older assets and coastal assets.	
Recreation and amenity – aquatic facilities, cemeteries, parks and open spaces, sports facilities	\$66m	2-4 Minor defects only, some assets require renewal/ upgrade shortcomings with sporting facilities to be addressed over the longer-term.	3-4 Moderate to poor	B Reliable / C uncertain	A significant budget increase required by 2028 if parks and open space assets are to be maintained as safe to use and meet community expectations.

Network	Value \$m DRC*	Overall Condition	Overall Performance	Data Confidence	Implications
Recreation and amenity – play spaces, public conveniences, street trees and gardens	\$6m	2-3 Minor defects and some play spaces and public conveniences require renewal.	2-3 Good to moderate	B Reliable	Renewals are planned in the 2021 LTP, but insufficient to maintain expected levels of service in the long-term. Engagement will occur with the community before levels of service are changed.
Cultural Activities - library and theatres	\$37m	2 Minor defects Only	2 Good minor shortcomings	B Reliable	Most major assets have been recently upgraded except the Soundshell theatre.
Cultural Activities - Museum buildings, Patutahi Hall	\$2m	4 Assets require renewal/ upgrade	3-4 Moderate to poor	B Reliable / C uncertain	Community buildings are ageing, renewals planned for museum buildings in the 2021 LTP.
Solid waste	\$2m	3-4 Maintenance, renewals and upgrades required Historic landfills need a lot of work	3 Moderate	B Reliable / C uncertain	Programme in place to improve knowledge of historic landfills and actions needed.

*Depreciated Replacement Cost as of 30 June 2023

Table 8: Descriptors of asset knowledge adapted from the NAMS International Infrastructure Management Manual 2015

Condition	Performance	Data confidence
1 Very Good	1 Very Good	A Highly reliable Systematic and fully optimised data programme. Dataset accurate ± 2%.
2 Minor defects only Only minor maintenance works needed	2 Good	B Reliable Reliable data in information system with analysis and reporting. Dataset accurate ± 10%.
3 Maintenance required Maintenance needed to return the expected level of service	3 Moderate	C Uncertain Sufficient information to support basic analysis Dataset accurate ± 25%.
4 Assets require renewal/ upgrade	4 Poor	D Very uncertain Basic /incomplete information based on assumptions Dataset accurate ± 40%.
5 Very Poor Approaching unserviceable	5 Very poor	E Unknown No asset register

How good is our infrastructure information?

We have undertaken substantial work to improve the reliability of data that underpins our asset management plans. We have reviewed our asset reliability grading system and adjusted the gradings we use to align with international standards and best practice. Most assets are now included in a consolidated asset management system. We are also developing a data improvement programme, including reviewing data research and resourcing requirements. This work will continue over the next few years.

We are committed to improving data collection and analysis for assets where the current data confidence rating is less reliable.

Levels of uncertainty and implications

Good quality asset management relies on good quality asset knowledge. We have reliable information about the condition of our critical infrastructure, which means we are able to confidently plan for the maintenance and renewal of these assets.

The rest of our asset data reliability is generally grade B or C, although information on some older assets is less reliable. This means that the data used to forecast maintenance requirements and when renewals are needed has an uncertainty of about 10% to 25%, and that renewal and maintenance in any year could vary to this extent.

Some assets will fail before reaching the end of their expected useful life, and some will last longer. For this reason, we are moving to a risk and condition-based approach to planning renewals rather than an age-based approach. We have assumed we will be able to manage this variance within the budgets we have set by prioritising renewals each year based on risk of failure.

Āpitihanganga 2: Ngā whakaaro mō te whakahaere hanganga

Appendix 2: Assumptions about infrastructure management

This section sets out the assumptions we have used to develop the most likely scenario for management of our infrastructure assets over the next thirty years.

More detail on these assumptions is provided in the significant forecasting assumptions that accompany the 3YP. More information on growth can be found in Appendix 3.

Assumption	Level of Uncertainty	Implications if incorrect	Mitigation
Capital programme and infrastructure assets			
All new infrastructure assets or significant changes to existing assets are accurately identified in the Infrastructure Strategy	Low	Forecast renewal and maintenance programmes may be inaccurate, resulting in unplanned expenditure	Asset management planning practices
<p>The useful life of all significant assets is accurately recorded in Council's asset management plans.</p> <p>All significant assets are replaced at the end of their useful life unless otherwise identified in the Three Year Plan and Infrastructure Strategy.</p>	<p>Medium</p> <p>We have continued to improved our asset data over the last three years, which allows us to better forecast the life cycle of assets.</p> <p>There are information gaps in some asset classes and condition/performance data is often less certain. This affects the reliability of future renewal forecasts.</p>	<p>Occasionally an asset will fail prior to its expected end of life, when this occurs, we either:</p> <ul style="list-style-type: none"> • Carry out reactive maintenance to immediately return it to service; or • Prioritise its replacement against the planned programme and renew it accordingly. <p>Reactive rather than proactive maintenance and renewals tend to be more expensive and cause more disruption to the community and business.</p>	<p>Condition assessments of critical infrastructure prioritised.</p> <p>Council has an ongoing programme to obtain improved information on the age and condition of its assets.</p>

Assumption	Level of Uncertainty	Implications if incorrect	Mitigation
Growth and Decline in Demand			
<p>The population of the Gisborne District will continue to grow with the growth primarily focused around the Gisborne Urban Area. A medium to high growth projection is assumed⁵.</p> <p>A growth rate for rateable properties of 0.5% per year is assumed for the 3YP.</p>	Low	<p>If the rate of growth or change in population structure is different from what has been predicted, changes will need to be made to the timing of the growth programmes and type of infrastructure and services delivered.</p> <p>Increased capital and operational expenditure may be required to meet the needs of both the younger and older populations.</p>	<p>The three-year review of AMPs and the LTP minimises the risk of expenditure not matching growth or community requirements.</p> <p>Infrastructure planning considers high growth projection as a sensitivity test.</p>

⁵ Environmental Scan 2023

Assumption	Level of Uncertainty	Implications if incorrect	Mitigation
<p>The number of households is likely to increase at a slightly faster rate than population, as household size declines. This is likely to increase the demand for Council services.</p>			
<p>Non-resident demand for holiday home properties will be maintained at the current proportion of dwellings which are used as holiday homes.</p>			
<p>The region has a high population of people aged under 15 and over 65. The population forecasts reflect a general ageing of the population.</p> <p>The types of services and infrastructure an ageing population will need (such as accessibility and recreational needs), will be different to the needs of other population groups (such as the younger population).</p> <p>The increasing age of the population and the lower percentage of working age population is likely to have an impact on some residents' ability to pay for services and the types of services required.</p>			
<p>There will be no significant change to industrial/commercial demands on infrastructure (with the exception of the growth of heavy vehicles associated with forestry harvests).</p>	<p>Medium</p> <p>Infrastructure planning generally allows for some increase in industrial demand, but of a minor nature.</p>	<p>A significant change to the economy, such as a large employer choosing to locate in the region, may require Council to review and change its current activities and levels of service.</p>	<p>Demands of new industries/business will be quantified and an amendment to the Three Year Plan developed if the costs or change to levels of service are significant.</p> <p>The TRMP review project will consider impact of zoning and land use change on infrastructure requirements.</p>
<p>Any changes to transport type and volume within the Gisborne District will not exceed projections.</p>	<p>Medium</p>	<p>Higher than forecast volumes of heavy traffic (such as logging trucks) would require greater road maintenance and upgrades, resulting in significant unbudgeted costs or increased deferred maintenance.</p>	<p>Volumes of heavy traffic are reassessed every three years.</p>

Assumption	Level of Uncertainty	Implications if incorrect	Mitigation
Levels of Service			
<p>Levels of service will vary over the next 3 years as we continue to recover from recent severe weather events. Levels of service will be lower for assets than was previously in place before Cyclone Gabrielle. Expenditure on restoring the key infrastructure, maintenance and renewals will be prioritised in terms of condition of assets and their criticality.</p> <p>Some major projects will increase the level of service after the project is completed.</p>	<p>Low</p> <p>The level of service is largely established by the infrastructure already in place. In the longer-term (beyond the life of the Three Year Plan), levels of service may be impacted by climate change.</p>	<p>Costs may increase requiring an increase in rates or a reduction in levels of service in other areas. Rates affordability may require a reduction in levels of service.</p>	
<p>Conditions of resource consents held by Council for water takes, stormwater discharges, wastewater and solid waste management will have more stringent conditions.</p> <p>Conditions on other types of infrastructure consents held by Council will not be significantly altered.</p> <p>Significant consents that will be obtained/ maintained over the 3YP period are:</p> <ul style="list-style-type: none"> • Te Arai water take for municipal supply (expires 2026) • Waiapu landfill (expires 2025) • Te Araroa waste transfer station (expires 2025) • Wastewater overflows (2026) 	<p>Medium</p> <p>We know that consent conditions are likely to change, but the extent of change is unknown until resource consent processes are complete.</p>	<p>Conditions required to obtain/maintain may result in higher costs than projected, and these costs will not be covered by planned funding.</p> <p>Inability to obtain key consents may result in Council being unable to provide key services.</p>	<p>Advance warning of likely changes is anticipated.</p> <p>Early engagement with mana whenua, stakeholders and consenting team will identify areas of change early.</p>
<p>New legislative and regulatory three waters requirements (water, wastewater and stormwater) will require Council to undertake significant operational and regulatory changes to meet new mandatory standards, including exploring collaborative approaches to water service delivery.</p>	<p>High</p> <p>The Three Waters reform work has been repealed and new legislation is expected to be enacted within the period of the Three Year Plan. At the time of preparing this strategy, we are unable to determine how potential legislative change might impact its operation or quantify the potential financial impact.</p>	<p>Responding to changes in legislation and political direction is part of normal Council operations.</p> <p>Current budget and resourcing allocations may be insufficient to meet new standards.</p> <p>The more significant issue is the affordability of any required changes for ratepayers.</p>	<p>Legislative changes generally have transition periods for Councils to respond as necessary.</p> <p>It is anticipated there will be a transitional planning document required as part of new legislation. Council will work through the options and impacts in that document to inform the 2027 Long Term Plan.</p> <p>The three-year review of AMPs allows asset managers to respond to changes to legislative reform.</p>

Assumption	Level of Uncertainty	Implications if incorrect	Mitigation
Council will continue to deliver water, wastewater and stormwater services over the life of the Three Year Plan.	Medium	<p>New structures to manage particular classes of assets (such as a water CCO) would impact the way the assets are managed, particularly the synergies between the current infrastructure activities although the fundamental service delivered by the asset is likely to remain the same.</p> <p>Infrastructure challenges such as renewal, resilience, and changes in growth and demand exist regardless of the organisation that provides these services.</p>	<p>The three-year review of AMPs allows asset managers to respond to changes to legislative reform.</p> <p>The infrastructure strategy discloses the issues we expect will arise, or will be faced, in the water, stormwater and wastewater activities. This will inform future decision-making once there is more certainty on the shape of three waters into the future.</p>

Assumption	Level of Uncertainty	Implications if incorrect	Mitigation
Other significant assumptions			
Government assistance in the event of a natural disaster will remain the same as present.	<p>Low</p> <p>The national CDEM Plan was due for review in 2020. This Plan covers Government financial support to local authorities during recovery. The current plan remains in place until it is replaced.</p>	<p>Changes to Government the assistance for recovery of underground infrastructure may require Council to respond with changes in its insurance or other actions.</p> <p>No allowance has yet been made in our financial estimates.</p>	
Natural hazards, such as floods, will cause damage to Council infrastructure. It is assumed that there will be some minor natural hazard events during the Three Year Plan period, for example flooding. It is assumed that no natural hazard or disaster causes widespread or catastrophic damage to Council infrastructure during the Infrastructure Strategy period.	Medium	<p>Extreme weather events have the potential to cause significant damage to the District's infrastructure.</p> <p>In the event of a medium or larger event, Council's emergency reserves may not be adequate. Council may have to review its levels of service, its investment in facilities and infrastructure and consider exceeding limits in its Financial Strategy to support the recovery of the district.</p>	<p>The CDEM Group has response and recovery plans for such eventualities that include lifelines.</p> <p>Sufficient borrowing capacity and insurance to fund minor-moderate damage to infrastructure.</p>
<p>Climate change: Changes to weather patterns and impacts on the coastal environment as per the 2020 NIWA report.</p> <p>Climate change will have impacts on existing infrastructure assets. For some assets the level of service will reduce over time unless upgrades are made or assets are relocated or protected.</p> <p>Current climate change trends will be allowed for when planning infrastructure and services.</p>	<p>Medium</p> <p>The longer-term impacts of climate change for Council infrastructure, and level of central government support and assistance is unknown and may be insufficient.</p>	<p>The effects of Climate Change occurring more quickly than anticipated may require Council to review and change its current activities and levels of service. This could have a significant financial impact on the community.</p>	<p>Provision is being made to adapt new and existing infrastructure as it is built or replaced for climate change, based on NIWA predictions for 2090, given the long life cycle of assets. If the changes are different from what is predicted, this will be assessed as they become evident.</p>

Assumption	Level of Uncertainty	Implications if incorrect	Mitigation
Financial			
<p>All asset revaluations are a best estimate based on historical asset values, national infrastructure contract rates, forecast capital expenditure, BERL inflation indices and other indices.</p> <p>All revaluations result in an appropriate change to revaluation reserves and the depreciation expense.</p>	Medium	<p>If asset values change significantly, the costs of funding depreciation may increase. Council may need to consider increasing fees and charges and/or rates to pay for the increased costs of funding depreciation.</p> <p>If value changes significantly, depreciation funding may be insufficient to fund asset replacement and loans will need to be raised instead.</p>	<p>Revaluation occurs every three years for property, and adjustments made every year based on construction and other cost movements.</p> <p>Revaluation occurs every year for roading assets.</p> <p>Four waters – external revaluation of index rates and review of useful lives occurs every three years. In the interim years, unit rates are reviewed by use of updated indexed movements supplied from Stats NZ.</p>
<p>Asset Replacement Cost values are set based on national rates.</p>	<p>Medium</p> <p>Due to our isolated location we tend to pay more for infrastructure due to limited contractor competition and cartage costs. Increasing compliance costs associated with meeting Health & Safety requirements may also be passed on by contractors.</p>	<p>If our depreciation does not appropriately recognise the “wear and tear” cost, the costs will not be fully reflected in today’s costs on current ratepayers. They will instead be passed onto tomorrow’s ratepayer impacting on future generations affordability.</p>	<p>Council could decide not to fund depreciation. However, the funding of depreciation would need to at least match the need to pay principle repayments on loans, based on whether the assets will be replaced or on what level of external funding is likely to be received in the future for the funding of replaced assets.</p>
<p>NZTA Financial Assistance Rate (FAR) increases and remains at 68% throughout the 3YP. Council’s local share is affordable. Recovery and emergency works due to Cyclones Gabrielle and Hale will be funded at least 88%. Some response costs will be funded up to 95%.</p> <p>Requirements and specifications for the performance of subsidised work will not alter to the extent that it impacts adversely on operating costs.</p>	Low	<p>Council’s cost share is increased if FAR is reduced. If local share is not affordable, Council may need to consider reducing its programme of transport infrastructure investment and, levels of service may decrease as a result.</p> <p>Changes to the funding priorities of NZTA are outside Council control and they vary from project to project. The maximum financial impact would be the elimination of the subsidy.</p>	<p>Regular communication and engagement with NZTA through the Regional Transport Committee and Strategic Transport Advisory group.</p>

Assumption	Level of Uncertainty	Implications if incorrect	Mitigation
Council will receive the operational and capital revenue included in the bid to the National Land Transport Fund (NLTF)⁶. Any variations to this will be minor and immaterial and will not impact delivery and levels of service.	High	<p>If Council does not receive the bid amount for operational and capital expenditure:</p> <p>If less than 5% reduction against the bid amount, then the programme would be spread over full delivery across the network and there would be minimal impact on delivery and expected level of service.</p> <p>If more than 5% reduction against the bid amount, Council will need to look for alternative sources of funding, potentially reduce levels of service in some areas, and may have to reduce or delay some capital expenditure.</p>	Regular communication and engagement with Waka Kotahi through the Regional Transport Committee and Strategic Transport Advisory group.
External funding for projects, when stated, will be realised.	Low	Difficulties obtaining funding may result in reductions or delays in the capital works programme.	We will only proceed with projects to the extent of external funding received or reprioritizing projects.
Confirmed funding contracts with central Government for infrastructure projects are not withdrawn or reduced.	Medium Government priorities may change.	The likelihood of funding being removed for infrastructure projects is low as investment in infrastructure delivery is consistent with Government's priorities stated in coalition agreements. However, the impact would be high - some projects may not be able to proceed if funding is withdrawn or reduced. Council may need to review the external funding component of the project and the rates contribution.	Regular communication and engagement with key departments and Ministers.
New funding streams may become available to assist with infrastructure delivery, climate change adaptation measures and to recognise increased responsibilities placed on local authorities by central government.	High	<p>New funding may mean some projects can be fast-tracked or limit rates increases in future years if borrowing is reduced. The Revenue & Financing Policy allows such funding sources to be utilised.</p> <p>New funding streams are not available or are complex to access and require additional resourcing to manage.</p>	
<p>The cost per tonne for municipal landfills will increase from \$50 to \$60 from 1 July 2024. No further increases have been announced.</p> <p>The levy has also expanded to include additional fill types. Council's waste is disposed of at these types of fills. This will increase construction contract costs if alternative methods of disposal or reuse are not used.</p>	Low The levy is in place and there has been no indication of changes with the change in Government.	If the levy is reduced then this could reduce the future costs to Council.	

⁶ This assumption is required due to a delay in the process for this round of the NLTF process.

Assumption	Level of Uncertainty	Implications if incorrect	Mitigation
<p>Due to an increase in the waste levy there will be additional revenue available for initiatives that support waste reduction e.g. NZ-based recycling infrastructure.</p>		<p>If the levy increase is not implemented in line with the current plan then this will reduce the potential revenue available for Council.</p>	
<p>Revenue from development contributions will be at or above the levels predicted in the Development Contributions Policy.</p>	<p>Low</p>	<p>If the number of new properties paying development contributions is less than forecast over the funding life of assets, then the revenue will not be sufficient to fund the growth component of the capital programme.</p> <p>The altered timing will impact on Council's cash flows and may necessitate changes to planned borrowing. Increased debt being held by Council may impact on debt limits under the Financial Strategy. Either a rates increase or levels of service decrease may be required as a result.</p> <p>Planned projects to increase network capacity to support growth may not be needed and would not occur.</p>	

Āpitihanga 3: Ngā whakaaro mō ngā Ratonga Kōeketanga me te Whakarahinga Whakatipu

Appendix 3: Assumptions about Levels of Service and Growth in Demand

This section sets out the assumptions about the level of service our infrastructure will provide. We have used these assumptions to develop the most likely scenario for management of our infrastructure assets over the next three years.

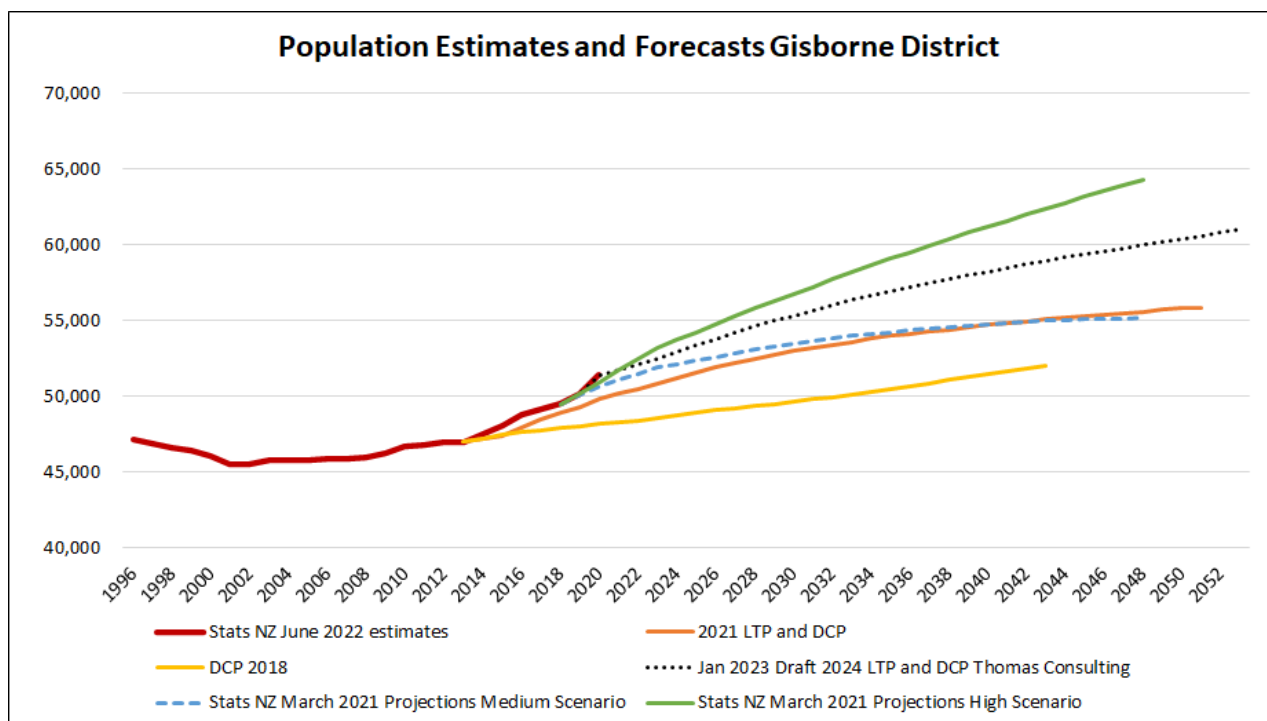
Growth in demand

We forecast the infrastructure required to provide for growth by analysing:

- Population projections.
- Hydrological network and process modelling.
- Capacity reviews at water and wastewater treatment plants.
- Strategic infrastructure requirements determined through structure planning.
- Engagement with government agencies and mana whenua on future infrastructure requirements
- Developing integrated catchment management plans (ICMPs) which will identify issues and propose best practicable solutions for growth on a catchment basis.

Population projections

Gisborne is currently experiencing a period of higher than forecast population growth. This means we need to review the impact of updated growth forecasts on our infrastructure requirements and develop further options to provide for growth.



We have assumed that the population of the Gisborne District will continue to grow with the growth primarily focused around the Gisborne Urban Area.

Under this assumption, the population will grow to around 55,330 by 2030 and 60,400 by 2050 (Thomas Consulting 2023 Update). By comparison, the population forecasting used to support the 2021 LTP suggested a population of around 53,200 by 2031 and 55,800 by 2051.

Population growth and demand for more housing has implications for our infrastructure and delivery of community services affecting both capital and operational expenditure.

Updating the Tairāwhiti Resource Management Plan (TRMP) continues to be one of our priorities for the 2024 3YP. We expect effort to be placed on planning for growth via the implementation of the Future Development Strategy (once adopted), aside from those already planned in relation to development of the Taruheru greenfield site. This will ensure that infrastructure growth projects align with the strategic direction, and rules contained in the new TRMP.

Key levels of service over the next three years

The following table summarises the key levels of service for each activity area and whether it is consider BAU or recovery.

Activity	Key levels of service	Type of level of service
Water Supply	Improve Compliance with NZ's Drinking Water Standards, investing in UV Treatment	BAU
	Improve capacity and resilience around our reservoirs	Recovery
	Planning, modelling for alternative water supply sites	Recovery
	Increase back up of replacement pipes for immediate reinstatement while water source is vulnerable to debris and further rain events	Recovery
Wastewater	Reduce incidences of wastewater overflows into our waterways	Recovery
	Accelerate renewals of ageing infrastructure	BAU
Stormwater	Reduce incidences of wastewater overflows into our waterways	BAU
	Maintain the levels of service for stormwater overflows on private properties	BAU
Land, Rivers and Coastal	Increase removal of sediment build up and drainage maintenance	Recovery
	Modelling effects and impacts of drainage network to determine optimum and effective maintenance programme.	Recovery
	Accelerated implementation and extension of the Waipaoa River Flood Control Scheme	BAU and Recovery

Activity	Key levels of service	Type of level of service
	Increase Karaka Flood Control Scheme	Recovery
	Modelling, feasibility and design for optimal flood protection options across Tairāwhiti	Recovery
	Increase flood protection of residential properties within our rural communities (Category 2)	Recovery
	Increase Flood Protection of residential properties within Gisborne city (Category 2)	Recovery
Roading and footpaths	Levels of service will be lower on the roading network as we work to repair our cyclone damaged roads	BAU
	Staged reinstatement of cyclone damage network over the next 1-5 years	Recovery
	Planning and modelling to design a resilient, safe and affordable network for the next 30 years	Recovery
Solid Waste	Improving household kerbside collection for food and garden waste	BAU
	Invest in organic waste processing and resource recovery infrastructure	BAU
	Planning for alternative landfill sites, and for the disposal of organic and/or general waste within our region	BAU and Recovery
	Increase removal of woody debris from waterways, beaches	Recovery
Community facilities	Rationalising public conveniences and play spaces. Making sure the right asset is in the right place	BAU
	Cemeteries - new site away from high ground water tables, providing also for future capacity.	BAU and Recovery
	Renewals on ageing community property infrastructure	BAU
	Riparian and Coastal Reserve areas: enhancing natural buffers through native planting	BAU and Recovery
	Reinstating cyclone damage walkway connections and erosion prone reserve areas	Recovery
	Completion of outdoor pool and space at Kiwa Pools	BAU
	Renew ageing CBD community facilities	BAU

Āpitianga 4: Ngā whakature me te anga kaupapa here

Appendix 4: Legislative, Regulatory and Policy Framework

4.1 Aotearoa New Zealand Freight and Supply Chain Strategy

What is it?

The purpose of the strategy is to address the increasing challenges faced by the supply chain, stemming from factors such as climate change, geopolitical volatility, new technologies and population growth. Recognising that the current system is ill-equipped to handle these challenges, the strategy aims to create a more integrated approach over a 30-year period, with milestones at 10 and 3 years. Aligned with New Zealand's goal to create a high wage, low-emission economy, the strategy outlines plans for zero-emissions freight transport, a reliable supply chain, high productivity, safety and environmental sustainability.

How is it relevant to our infrastructure?

The strategy does not specifically refer to local government, giving effect to this strategy will require involvement and co-operation from local councils. This will impact on GDC's assets and services and rethinking the way in which they contribute to the freight supply chain.

4.2 Te Rautaki Para Waste Strategy

What is it?

This strategy outlines a comprehensive, long-term plan for New Zealand to transition to a low-emissions, low waste society by 2050, incorporating principles of a circular economy.

How is it relevant to our infrastructure?

The strategy directly impacts local government, including the GDC, through specific legislative requirements. Section 44 of the Waste Minimisation Act 2008 states that when a territorial authority is developing or revising a waste management and minimisation plan, it is obligated to consider the NZ Waste Strategy. Additionally, section 48 empowers the government to instruct a territorial authority to modify its waste management plan to align with the national waste strategy.

4.3. Arataki 30 Year Plan

What is it?

The purpose of the Arataki 30-year plan is to transform the land transport system in Aotearoa New Zealand. Arataki uses the Transport Outcomes Framework developed by Te Manatū Waka Ministry of Transport which seeks to create a system centred around the wellbeing of New Zealanders and making places great to live. Five outcomes contributing to this purpose are: inclusive access, healthy and safe people, economic prosperity, environmental sustainability and resilience and security.

How is it relevant to our infrastructure?

Council is responsible for part of our region's land transport system. The directions below were identified in the Plan as the most important issues to be resolved over the next 10 years in Tairāwhiti.

- Rebuild networks destroyed by Cyclone Gabrielle.
- Enable and support the region's transition to a low carbon economy.
- Improve resilience and efficiency of key connections to west and south.
- Improve access to social and economic opportunities, especially public transport, walking and cycling.
- Reduce vehicle kilometres travelled.
- Reduce harm caused by regions transport system, especially safety and pollutants dangerous to health.
- Encourage development in areas that already have good travel choices and shorter trip lengths.
- Accelerate delivery of walking and cycling networks, predominantly through reshaping existing streets, making these options safe and attractive.
- Explore emerging technologies to improve access to social and economic opportunities.
- Explore opportunities to move to a more multimodal freight system with greater use of rail and coastal shipping.
- Continue to implement road safety plans and programmes, with focus on iwi Māori.
- Reduce financial/ other barriers to iwi Māori getting driver's licence in areas not well served by public transport.
- Improve/maintain physical access to marae, papakāinga, wāhi tapu and wāhi taonga.

Rautaki Hanganga o Aotearoa New Zealand Infrastructure Strategy

What is it?

New Zealand has a large number of organisations responsible for the many parts of the infrastructure system and lifecycle. To get the most out of our infrastructure, for both the present and the future, we need to look across the whole system, rather than just any one part. Unlike many countries, New Zealand has not had, until the adoption of this strategy, an organisation or strategy with this system-wide perspective.

The strategy takes a more holistic view of the infrastructure system. It also has a longer-term horizon looking out 30 years (similar to councils' infrastructure strategies). A 30 year horizon requires us to think about trends such as technology advancements, our changing climate and population change, and the impacts these will have on infrastructure decision-making over the coming years and decades.

The five objectives of the strategy are:

- Enabling a net zero carbon emissions Aotearoa through rapid development of clean energy and reducing the carbon emissions from infrastructure.
- Supporting towns and regions to flourish through better physical and digital connectivity and freight and supply chains.
- Building attractive and inclusive cities that respond to population growth, unaffordable housing and traffic congestion through better long-term planning, pricing, and good public transport.
- Strengthening resilience to shocks and stresses by taking a coordinated and planned approach to risks based on good-quality information.
- Moving to a circular economy by setting a national direction for waste, managing pressure on landfills, and waste-recovery infrastructure and developing a framework for the operation of waste-to-energy infrastructure.

How is it relevant to our infrastructure?

The national strategy provides strategic direction for our part to play in the collective infrastructure provision for our region. Our regional aspirations and objectives are very similar to the national strategy, although we are focused on our place rather than the whole of Aotearoa.

The strategy included recommendations to Government on next steps. It is anticipated that for any actions the Government pursue these will have an impact on our delivery of infrastructure for the region – this may be increased regulatory requirements, or perhaps new ways of doing things. This may require immediate changes during the life of this strategy or influence infrastructure options for the 2027 Infrastructure Strategy.

National Adaptation Plan

The National Adaptation Plan sets out Aotearoa New Zealand’s long-term strategy and first national adaptation plan. It sets out the Government’s approach to adaptation including Government-led strategies, policies and proposals that will help New Zealanders adapt to the changing climate and its effects – so we can reduce the potential harm of climate change, as well as seize the opportunities that arise. It responds to the risks identified in the [National Climate Change Risk Assessment 2020](#), which was prepared under the Climate Change Response Act 2002. It also draws upon the latest science from the Intergovernmental Panel on Climate Change and builds on recommendations of the Climate Change Adaptation Technical Working Group from 2018.

Adapting to the effects of climate change is a continuous process. This plan is the first in a series of national adaptation plans that will be prepared every six years. Each plan will respond to a new national climate change risk assessment.

The following table provides a snapshot of actions in the plan that are relevant to Council infrastructure and services.

Priority Area 1: Enabling better risk-informed decisions			
Section	Actions with direct impact on local government	What this means for Council	
Chapter 3: Enabling better risk-informed decisions	3.1	Provide access to the latest climate projections data: this will give New Zealanders the regional and local data they need to assess future climate risks.	<ul style="list-style-type: none"> Likely to facilitate a localised and Tairāwhiti-focused version of climate change projections for our community.
	3.2	Design and develop risk and resilience and climate adaptation information portals: these will provide information and data about natural hazards and climate change risks. They will help communities make informed decisions and design adaptation solutions.	<ul style="list-style-type: none"> Need to create innovative and suitable climate change communication approaches for iwi/hapū and our community. Inclusion of robust climate change and natural hazard information in LIMs and our planning documents.
	3.23	Develop 3D coastal mapping: this will help councils assess the impact of sea-level rise, tsunamis and storm surges on their communities, infrastructure, and biodiversity.	<ul style="list-style-type: none"> Expensive cost of getting robust natural hazard data, including community risk acceptability. Impact on staff time or additional resourcing.
	3.6	Improve natural hazard information on Land Information Memoranda (LIM): this will give councils greater certainty about what hazard information to include on the LIM.	<ul style="list-style-type: none"> Meaningful engagement of our community in adaptation planning and management.
	3.7.5	Regularly update adaptation guidance for local government will support local government to consider adaptation in planning and decisions.	<ul style="list-style-type: none"> Participation in local government group for risk and resilience portal development

Priority Area 2: Ensuring our planning and infrastructure investment decisions drive climate-resilient development in the right locations

Section	Actions with direct impact on local government	What this means for Council	
Chapter 4: Driving climate-resilient development in the right locations.	4.1	<p>Reform the resource management system: this will include objectives to better prepare for adaptation and risks from natural hazards, and better mitigation of emissions contributing to climate change. While the reform will play an essential role in ensuring future development occurs in the right places, there are also some near-term changes that will help drive suitably placed development during the transition to the reformed system. For example, action 3.6 to improve natural hazard information on LIMS and action 3.1 providing access to projections data.</p>	<ul style="list-style-type: none"> Exercising relevant resource management powers under legislation to encourage resilience building in the region. TRMP review and the climate change risk assessment will provide data regarding the vulnerable areas to inform our planning to align with Government's policy goals. Using the consenting process to discourage the siting of assets and development in areas exposed and vulnerable to climate change risks. Cost and resourcing to deliver on the various pieces of work that need to occur. Some are already ongoing under the TRMP review and climate change work programme.
	4.2	<p>Set national direction on natural hazard risk management and climate adaptation through the proposed new National Planning Framework: this will set clear direction for local authorities on how to achieve the climate resilience outcomes in the proposed Natural and Built Environments Act.</p>	<ul style="list-style-type: none"> Localised implementation of the expected new National Planning Framework. Implementation costs.
	4.5	<p>Reform institutional arrangements for water services: this will create new water entities that will work with councils and communities to improve health and wellbeing outcomes and protect the environment for generations to come.</p>	<ul style="list-style-type: none"> Loss of direct control over 4waters management. Transition management as we shift from the current system to the new management entities for 4waters.

Priority Area 3: Adaptation options including managed retreat

Section	Actions with direct impact on local government	What this means for Council	
Chapter 5: Adaptation options including managed retreat	5.1	<p>Pass legislation to support managed retreat: this will address the complex issues around retreating from at-risk areas exposed to climate hazards.</p>	<ul style="list-style-type: none"> Likely clear direction on implementing managed retreat in the region.
	5.2	<p>The future for local government review: this is likely to include recommendations on what local government does, how it does it, and how it pays for it. This will include what should change in funding and financing to ensure viability and sustainability, fairness, and equity, and maximum wellbeing.</p>	<ul style="list-style-type: none"> Huge organisational adaptation costs. Increased social pressure to support community/regional adaptation.
	5.3	<p>Complete case study to explore co-investment for flood resilience: this will focus on addressing the challenges facing small local authorities and vulnerable communities in funding flood risk management.</p>	<ul style="list-style-type: none"> Likely to benefit Council if the outcome of the case study supports greater Government funding for local authorities.
	5.5	<p>Publish the programme of work on how Aotearoa meets the costs of climate change and invests in resilience: this will investigate additional investment from public and private sources to respond to the growing risks from climate change.</p>	<ul style="list-style-type: none"> Localised implementation of climate change adaptation work. Huge adaptation cost. Need for addition/external funding channels.

Section	Actions with direct impact on local government		What this means for Council
	5.6	Scope a resilience standard or code for infrastructure: this will encourage risk reduction and resilience planning in existing and new assets.	<ul style="list-style-type: none"> • Compliance when undertaking any new infrastructure project and retrofitting existing infrastructure for compliance to the resilience standard. • Cost implication. • Planning and streamlining to align with new Government standards.
	5.9	Prioritise nature-based solutions: this will investigate how to ensure nature-based solutions are considered in planning and regulations, where possible, for both carbon removals and climate change adaptation.	<ul style="list-style-type: none"> • Active participation in any Government programme to understand place-based nature-based solutions for Tairāwhiti. • Investment into nature-based climate change solutions in the region.
	5.11	Encourage and support the evaluation of climate risks to landfills and contaminated sites.	<ul style="list-style-type: none"> • No significant impact as would be part of Council's business-as-usual approach to landfills and contaminated sites in line with waste management, climate change, and environmental priorities.
	5.12	Explore funding options to support the investigation and remediation of contaminated sites and landfills vulnerable to the effects of climate change.	<ul style="list-style-type: none"> • Council may benefit from the potential funding options.
	5.13	Connect communities to wider response and recovery support.	<ul style="list-style-type: none"> • Localised role to play in terms of CDEM management and adaptation planning. • Leveraging additional Government support.

Priority Area 4: Embedding climate resilience in all government strategies and policies

Section	Actions with direct impact on local government		What this means for Council
Chapter 6: Natural environment	6.2	Engage with councils to implement the New Zealand Coastal Policy Statement.	<ul style="list-style-type: none"> • Policy planning and alignment with the New Zealand Coastal Policy Statement and the National Policy Statement on Indigenous Biodiversity. This is already incorporated in the TRMP review. • Implementation will be cost-intensive and resource-intensive. • Potentially additional resourcing or overstretch of staff capacity.
	6.3	Implement the proposed National Policy Statement on Indigenous Biodiversity.	
Chapter 7: Homes, building and places	7.4	Update regulatory requirements to ensure buildings are designed and constructed to withstand more extreme climate hazards.	<ul style="list-style-type: none"> • Compliance and standard management. • Implementation cost. • Additional resourcing for organisational and regional implementation and monitoring.

Section	Actions with direct impact on local government		What this means for Council
Chapter 8: Infrastructure	8.6	Invest in public transport and active transport.	<ul style="list-style-type: none"> Regional public transport review and our planned mode shift strategy need to support low-carbon future in a sustainable manner. Regional communications and advocacy for awareness. Complementary services to nudge and incentivise active transport and public transport. Close coordination with Waka Kotahi and the Ministry for Transport to invest into the necessary infrastructure to aid transport goals. Some costs dues to co-funding arrangements for investments.
	8.8	Support knowledge sharing and the implementation of adaptation actions across the Sector.	
Chapter 9: Communities	9.1	Modernise the emergency management system.	<ul style="list-style-type: none"> Need for improvements in processes. Potentially more funding for regional CDEM group. Potentially more resourcing to beef up capacity and emergency response.
Chapter 10: Economy and financial system	10.9	Identify the impacts of climate change on regional economies.	<ul style="list-style-type: none"> No significant impact as we are already on course with the Tairāwhiti Climate Change Risk Assessment project. This will, among other things, capture climate impacts on our regional economy through the economy values domain.
	10.14	Deliver the Tourism Industry Transformation Plan.	<ul style="list-style-type: none"> Need to monitor developments in this space and make necessary changes at the regional level.
	10.15	Review the settings for the International Visitor Conservation and Tourism Levy.	<ul style="list-style-type: none"> Potential complementary support to tourism business operators in addition to any Government package. Partnership with Government for regional implementation.

4.4. National Emissions Reduction Plan

This plan is Aotearoa New Zealand’s first emissions reduction plan. It contains strategies, policies and actions for achieving our first emissions budget, as required by the Climate Change Response Act 2002. In doing so, it also outlines how we intend to play our part in global efforts to limit warming to 1.5°C above pre-industrial levels.

This plan responds to the recommendations of He Pou a Rangi – Climate Change Commission (the Commission) in its report, [Ināia tonu nei: a low emissions future for Aotearoa](#).

It also builds on the Productivity Commission’s 2018 report, [Low-emissions economy](#); the cross-government response (commonly known as the Climate Action Plan 2019); and the Interim Climate Change Committee’s 2019 reports, [Accelerated electrification](#) and [Action on agricultural emissions](#).

The plan is reviewed and updated in line with new recommendations and emissions budgets from the Commission.

The following table provides a snapshot of actions in the plan that are relevant to Council infrastructure and services.

Section	Actions with direct impact on local government		What this means for Council
Chapter 2: Empowering Māori	2.3	Support development of a Māori climate strategy.	<ul style="list-style-type: none"> Alignment of our organisational Māori/iwi engagement approach for the climate change kaupapa with Government's Māori climate change strategy to suit our regional needs.
Chapter 3: Equitable transition	3.2.2	Support regions and industries to manage the transition.	<ul style="list-style-type: none"> Leadership (co-leadership) of regional transition journey
	3.2.3	Implement the Just Transition Partnerships Programme.	<ul style="list-style-type: none"> Advocacy to Government entities for support.
	3.5.3	Support localised and community-based solutions.	<ul style="list-style-type: none"> Collaborating with other regional actors to harness partnership opportunities with Government for our regional decarbonisation and equitable transition mahi. Localised resourcing needs. Funding needs for any co-funding arrangements.
Chapter 4: Working with nature	4.1	Prioritise nature-based solutions.	<ul style="list-style-type: none"> Active participation in any Government programme to understand place-based nature-based solutions for Tairāwhiti. Investment into nature-based climate change solutions in the region.
Chapter 7: Planning and infrastructure	7.1	Improve the resource management system to promote lower emissions and climate resilience.	<ul style="list-style-type: none"> Inputs and monitoring of the contributions of the local government working group into the resource management reforms. Assessment to determine any consequential reforms to align with the new resource management system. Likely additional resourcing across some teams to drive some of the changes expected.
	7.2	Support emissions reductions and climate resilience via policy, guidelines, direction, and partnerships on housing and urban development.	<ul style="list-style-type: none"> Strong policy focus on emission reduction and climate resilience organisationally and regionally. Delivery of policy measures and housing/urban development projects with an emissions reduction lens. High-cost implication. Additional resourcing needs.
	7.3	Address infrastructure funding and financing challenges.	<ul style="list-style-type: none"> Potential benefit for Council if funding challenges are addressed. Need for multiple and complementary funding channels.
	7.4	Improve the evidence base and tools for understanding and assessing urban development and infrastructure emissions.	<ul style="list-style-type: none"> Potential input of regional data (if available) to inform the central database and evidence base. Cost for improving our regional evidence base (and regular emissions inventories).

Section	Actions with direct impact on local government		What this means for Council
	7.5	Promote innovation in low- emissions, liveable neighbourhoods, through Crown-led urban regeneration projects.	<ul style="list-style-type: none"> • Cost and resourcing for any complementary urban regeneration projects in Tairāwhiti's urban areas by Council. • Land use planning and mapping.
	7.6	Identify ways to support the private sector to deliver lower emissions development.	<ul style="list-style-type: none"> • Corporate social responsibility measures to support businesses in the region to reduce emissions. • Partnership and working together with the private sector in the region.
	7.7	Integrate climate mitigation into government decisions on infrastructure.	<ul style="list-style-type: none"> • Mainstreaming emissions reduction across Council's organisational chain, including infrastructure decisions. • High-cost implication for low-carbon technologies and materials.
Chapter 9: Circular economy and bioeconomy	9.1	Commence a Circular Economy and Bioeconomy Strategy.	<ul style="list-style-type: none"> • Incorporating a strong circular economy lens into our regional climate resilience planning. • Land use need for siting any hub or circular economy projects. • Cost to complement or support bioenergy and circular economy research applicable to Tairāwhiti.
	9.3	Integrate circular practices across government, communities, and businesses.	
	9.5	Investigate a circular economy hub.	
	9.6	Accelerate sustainable and secure supply and uptake of bioenergy in Aotearoa.	
	9.7	Support research and development and accelerate investment in the bioeconomy to commercialise bioeconomy technology and products.	

Chapter 10: Transport⁷

Transport Focus Area 1: Reduce reliance on cars and support people to walk, cycle and use public transport

Transport actions for delivery		What this means for Council
1.	Integrate land use planning, urban development and transport planning and investments to reduce transport emissions.	<ul style="list-style-type: none"> No significant impact yet as there is greater focus on New Zealand's largest cities.
2.	Support people to walk, cycle and use public transport (A) Planning – Design programmes to reduce total light fleet VKT in our largest cities.	<ul style="list-style-type: none"> Resourcing for planning and driving local actions at a granular level. Complementary funding to support any needed roading/infrastructure expansion work by Waka Kotahi. Social pressure to drive action at the regional level as the government at the grass roots. Alignment of regional transport planning to Government transport programme and improved air quality drivers.
	Support people to walk, cycle and use public transport (B) Public transport – Improve the reach, frequency, and quality of public transport.	
	Support people to walk, cycle and use public transport (C) Walking and cycling – Deliver a step-change in cycling and walking rates.	
	Support people to walk, cycle and use public transport (D) Reshaping streets – Accelerate widespread street changes to support public transport, active travel and placemaking.	
	Support people to walk, cycle and use public transport (E) School travel – Make school travel greener and healthier.	
	Support people to walk, cycle and use public transport (F) Equity – Improve access and travel choice for the transport disadvantaged.	
	Support people to walk, cycle and use public transport (G) Rural areas – Investigate the potential for public transport, walking and cycling in rural and provincial areas.	
3.	Enable congestion charging and investigate other pricing and demand management tools to reduce transport emissions.	
4.	Require roadway expansion and investment in new highways to be consistent with transport targets.	
5.	Embed nature-based solutions as part of our response to reducing transport emissions and improving climate adaptation and biodiversity outcomes.	

⁷ The national Emissions Reduction Plan (ERP) sets 3 transport focus areas and four targets. The focus areas include: (1) Reducing our reliance on cars by supporting people to walk, cycle and use public transport; (2) Rapidly adopting low-emission vehicles; and (3) Beginning work to decarbonise heavy transport and freight. The transport targets to be achieved by 2035 include: (1) Reducing total vehicle kilometres travelled (VKT) by light vehicles by 20% by improving urban form and providing better travel options in our main urban areas – *Auckland, Hamilton, Tauranga, Wellington, and Christchurch*; (2) Increasing zero emission vehicles to 30% of the light vehicle fleet; (3) Reducing emissions from freight transport by 35%; and (4) Reducing the emissions intensity of transport fuel by 10%. Government expects that these 4 targets will lead to an *overall 41% reduction* in land transport emissions by 2035.

Transport Focus Area 2: Rapidly adopt low-emissions vehicles

Transport actions for delivery

What this means for Council

6.	Accelerate the uptake of low-emission vehicles.	<ul style="list-style-type: none"> No significant impact yet as there is greater focus on New Zealand's largest cities. Resourcing (additional staff or additional staff time) to support Government's transport sector targets. Increased budgetary needs for any complementary funding. Pressure to show organisational leadership at the regional level.
7.	Make low-emissions vehicles more accessible for low-income and transport-disadvantaged New Zealanders.	
8.	Support the rollout of EV charging infrastructure.	

Transport Focus Area 3: Begin work now to decarbonise heavy transport and freight

Transport actions for delivery

What this means for Council

9.	Support the decarbonisation of freight.	<ul style="list-style-type: none"> Resourcing to support Government's plans and programmes. Potentially complementary funding for projects that decarbonise heavy transport and freight.
10.	Accelerate the decarbonisation of the public transport bus fleet.	
11.	Work to decarbonise aviation.	
12.	Progress the decarbonisation of maritime transport.	
13.	Implement the Sustainable Biofuels Obligation.	
14.	Support cross-cutting and enabling measures that contribute to the delivery of a low-emissions transport system.	

Section

Actions with direct impact on local government

What this means for Council

Chapter 11: Energy and industry	11.2.1	Accelerate development of new renewable electricity generation across the economy.	<ul style="list-style-type: none"> Investigating the impact to Tairāwhiti. Supporting suitable actors to drive renewable electricity generation in the region. Provision of support and working with industries in Tairāwhiti to decarbonise.
	11.2.2	Ensure the electricity system and market can support high levels of renewables.	
	11.4.1	Decarbonise Aotearoa Industries.	

Section

Actions with direct impact on local government

What this means for Council

Chapter 12: Building and construction	12.1.1	Progress regulatory change to reduce embodied emissions of new buildings	<ul style="list-style-type: none"> Monitor developments in this space. Align organisational policy with any new Government regulation relating to embodied emissions in buildings. High-cost implication for low-emissions building due to material costs. Likely amendment to our procurement policy to align with Government direction or regulation in this space. Completing the applicable building certifications for our existing buildings.
	12.1.2	Spark and foster innovation across the sector	
	12.1.1.3	Realise cross-sector opportunities to reduce whole-of-life embodied emissions.	
	12.2.1	Shift expectations and grow the market for low-emissions buildings.	
	12.2.2	Use the Government's purchasing power to drive market change.	
	12.3.2	Encourage and enable emissions reduction from existing buildings.	

Section		Actions with direct impact on local government	What this means for Council
Chapter 13: Agriculture	13.7	Essential Freshwater planning.	<ul style="list-style-type: none"> • Additional freshwater and integrated farm planning. • Likely providing advisory support to farmers in the region.
	13.9	Integrated farm planning.	
Chapter 14: Forestry	14.1.1	Ensure regulatory settings deliver the right type and scale of forests, in the right place.	<ul style="list-style-type: none"> • Regional level forestry mapping with forestry stakeholders for a mosaic of trees – right tree at the right place. • Localised planning and advisory support to forestry businesses. • Likely increase in native revegetation programme. • Resourcing and costs to drive action.
	14.1.2	Support landowners and others to undertake afforestation.	
	14.1.3	Enhance forestry planning and advisory services.	
	14.2.3	Encourage greater levels of native afforestation over the long term.	
Chapter 15: Waste			
Waste Focus Area 1: Enable households and businesses to reduce organic waste			
Waste actions for delivery		What this means for Council	
15.1.1	Encourage behaviour to prevent waste at home.	<ul style="list-style-type: none"> • Change in waste stream levels to aid waste separation • Planning for change in waste management structure. • Transition management. • Costs and investments into kerbside waste separation, collection, and any regional processing and recovery facility. • Facilitating local awareness and implementation. • Land use consideration for any waste facility (recovery and processing sites). • Regional level monitoring of implementation. • Likely additional resourcing needs. 	
15.1.2	Enable businesses to reduce food waste.		
15.1.3	Support participation in improved kerbside collections.		
Waste Focus Area 2: Increase the amount of organic waste diverted from landfill			
Waste actions for delivery		What this means for Council	
15.2.1	Improve household kerbside collection for food and garden waste.	Same as above (Waste Focus Area 1).	
15.2.2	Invest in organic waste processing and resource recovery infrastructure.		
15.2.3	Require the separation of organic waste.		

Waste Focus Area 3: Reduce and divert construction and demolition waste to beneficial uses

Waste actions for delivery

What this means for Council

15.3.2	Invest in sorting and processing infrastructure for construction and demolition waste.	<ul style="list-style-type: none"> • Costs for building the necessary facility and logistical set up.
15.3.3	Enable the separation of construction and demolition materials.	<ul style="list-style-type: none"> • Land use consideration for processing and recovery sites, and the repurposing of waste. • Implementation monitoring. • Regional awareness.

Waste Focus Area 4: Explore bans or limits to divert more organic waste from landfill

Waste actions for delivery

What this means for Council

15.4	Investigate banning organic waste from landfill by 2030.	<ul style="list-style-type: none"> • Planning to achieve 100% organic waste separation before 2030. • Set up cost. • Investigate 100% recycling of organic waste across Tairāwhiti.
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Waste Focus Area 5: Increase the capture of gas from landfills

Waste actions for delivery

What this means for Council

15.5.1	Regulations will require landfill gas capture at municipal landfills.	<ul style="list-style-type: none"> • Ensure any new landfill after the consent for the current landfill is fully fitted with landfill gas (LFG) capture.
15.5.2	Feasibility studies will determine the need for additional landfill gas capture requirements.	<ul style="list-style-type: none"> • Cost and logistics for any feasibility assessment and the actual LFG design and construction. • Planning needs.

Waste Focus Area 6: Improve waste data and prioritise a national waste licensing scheme

Waste actions for delivery

What this means for Council

15.6.1	Develop a national waste licensing scheme.	<ul style="list-style-type: none"> • Monitor and understand how the new system works and determine suitable organisational changes. • Ensure granular data on waste types and emissions from various waste types through capturing this data category in our organisational and regional emissions inventory. • Potential expectation to supply data to the applicable Government agency.
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