Section 2 **Strategic direction**

As we strive to fulfil our purpose to the community, our overarching strategies highlight key priorities and how decisions have been influenced.

Community wellbeing	<u>26</u>
Climate change	<u>28</u>
Strategic assumptions	<u>31</u>
Financial Strategy	<u>44</u>
Infrastructure Strategy	<u>56</u>



Community wellbeing

Local government's purpose

We're committed to fulfilling our purpose under the Local Government Act to promote the social, economic, environmental and cultural wellbeing of our community, both now and for the future.

In 2023, to inform our thinking on wellbeing, we worked in collaboration with Hapū of the Whanganui district and the community and ran 16 community events, met with a range of community leaders and organisations, and conducted a wellbeing survey to better understand:

- What does wellbeing mean to our communities?
- What do people love about Whanganui?
- What are our communities' priorities for both present and future generations?

The survey attracted 661 responses, predominantly from local residents.

From the survey we heard from our community that:

Environmental wellbeing was ranked as the most important of the four wellbeings for the community and was underscored by the importance of Te Awa Tupua Whanganui, parks, open spaces, fresh air, fresh water and the coast. 82% of respondents said that parks and open spaces have a positive impact on their wellbeing. This reflects a community that values the natural environment and is committed to its stewardship.

Social wellbeing was as an area where respondents felt there were challenges, especially with social cohesion and inequity. This is reflected not just in Whanganui but across the country. The most important elements of peoples' social wellbeing were friendships, whānau, housing, recreation time and the quality of local neighbourhoods.

Cultural wellbeing was tied to health and wellness activities, events, music, arts, heritage and sports, with more than 60% citing events, arts and music as crucial to their wellbeing. This suggests a community that values cultural expression and activities in many different forms. The importance of accessibility and providing opportunities and events for different ages and abilities is also key.

Economic wellbeing was centred on housing, the strength of the local economy, income, and education and training opportunities, with 68% highlighting housing as a major concern. This indicates the need to focus on ensuring that residents have access to affordable housing and a stable but growing local economy supported by high-quality infrastructure.

The full survey results can be viewed on the council's website: www.whanganui.govt.nz/Vision-for-Whanganui

Wellbeing definitions - what do we mean by wellbeing?

Our survey showed us that wellbeing means different things to different people. Generally, it means a sense of health, safety, meaning and belonging – a connection to others and to place.

The wellbeings work together and are interconnected. For this plan, we have approached the four wellbeings as follows*:

Environmental wellbeing:

Environmental wellbeing refers to the protection of the environment and ecosystems and the sustainable management of natural resources for both current and future generations. It includes air and water, climate change mitigation and adaptation, waste management, and increasing natural habitats and biodiversity. We have a special focus and obligation to Te Awa Tupua Whanganui and its catchment.

Social wellbeing:

Social wellbeing refers to quality of life and the connections between people and communities. It includes connection to place and whenua. We should create opportunities to ensure our communities have access to services and initiatives that can improve their health and wellbeing.

Cultural wellbeing:

Cultural wellbeing involves preserving and promoting our cultural identities, heritage, events and traditions. It includes supporting the arts, celebrating our cultural diversity, and ensuring that cultural practices and knowledge are passed down and shared through generations.

Economic wellbeing:

Economic wellbeing involves the financial stability and sustainability of our district. It means we have the right infrastructure for our community, access to a range of jobs and fair wages, and the ability to sustain a decent standard of living, while moving toward a more circular economy. It includes employment opportunities, business growth, affordable housing and building activity, educational attainment, and leveraging what is unique about Whanganui (our competitive advantage).

Where to from here?

The four wellbeings provide the basis of this Long-Term Plan. However, we realise we can't deliver on wellbeing alone. Our success requires more than plans and policies – it requires a joint effort and working together with our whole community. We have committed to working in collaborative leadership with Hapū and the wider community to draft a long-term vision out to 2050. This will reflect what wellbeing means for the district and provide a promise to future generations of a prosperous and sustainable future for Whanganui.

*Our longer-term vision out to 2050 is still in development at the time of writing this plan, and the four wellbeings are placeholders at this time. We will be returning to the community for feedback on this later.

Climate change

With a large rural area, coastline and Awa, climate change presents a significant challenge for the Whanganui district. This overview lays out how climate change is likely to impact our district, what we have worked on so far and what actions we will take to respond and prepare for climate change. For further details, please refer to Te Rautaki Huringa Āhuarangi / Climate Change Strategy.

The likely climate change impacts for Whanganui

The following summarises the likely climate change impacts for the Whanganui district at a high level:

Warmer weather

- Average temperature will rise 0.8 degree celsius by 2031-2050
- More hot days (over 25 degrees celsius)
- Earlier spring melt and fewer frost days.

More rainfall

- Wetter conditions winter rainfall up 6% by 2031-2050
- Increased high country erosion
- Increased flooding risks and river sedimentation.

Sea level rise

- A rise of 0.3-1.0m by 2100
- Increased coastal erosion and flooding damage.

More weather events

- An increase in the frequency and magnitude of storms and extreme weather events.
- There will also be an increase in the costs and risk associated with insurance, preparing for and responding to these events, and civil defence emergencies.

We are still understanding the consequences of climate change for the economic, environmental, social and cultural wellbeing of our district. The Regional Climate Change Risk Assessment sets out some of these potential impacts.

What have we done so far?

The council declared a climate change emergency in 2020. From there we engaged extensively with the community and developed *Te Rautaki Huringa Āhuarangi, the Climate Change Strategy,* in collaboration with Te Rūnanga o Tamaupoko and Te Rūnanga o Tūpoho and community.

The strategy plots a course of action for both mitigating and adapting to climate change. It lays out goals for the council in these areas and gives a Te Ao Māori perspective on climate change. The council has an important role to play in reducing both its own and the district's emissions, improving our resilience and supporting community climate action.

Mitigation is about reducing emissions that are causing climate change

Adaptation is about changing the way we live and do things to manage the impacts of climate change.

There is crossover between these, and some actions can fit into both categories.

What are we doing to mitigate climate change and reduce emissions?

Reducing council's emissions

Council has committed to leading by example and modelling good practice in reducing our organisational emissions.

Here are some of the steps we have taken so far:

- Measured and reported on council's own organisational emissions and scoped actions for reduction.
- Completed an audit of electricity and gas use at council facilities. We
 investigated recommendations for efficiency improvements and some of
 these are included in the Long-Term Plan.
- Reduced the size of the council's vehicle fleet and improved tracking of fuel use and efficiency.

What's next for council emissions?

- Continue with regular audits of council's own emissions so we can monitor progress.
- Develop an emissions reduction plan to reduce our emissions each year and outline how we will reach targets.

Supporting the district to reduce emissions

The council has an influential role to play in collaborating with partners to reduce our district's emissions.

Here are the steps we have taken so far:

- Collaborated with Horizons Regional Council to improve public transport in Whanganui, including launching the high-frequency bus service, Te Ngaru The Tide.
- Launched the community climate action fund and supported 16 climate action projects over two years. Some of these projects also contribute to climate adaptation.
- Invested in shared pathways and cycle lanes to support active transport options.

What's next for district emissions?

- Roll out the kerbside recycling collection in 2024 and continue supporting work for the food scraps collection service.
- Continue to explore opportunities for collaboration to reduce emissions, including with other councils through our participation in the Regional Climate Action Joint Committee.

What are we doing to adapt to climate change and improve resiliency?

We are planning for the future to manage climate change impacts. We need to think about where to build, and the impact on infrastructure. We also need to improve our ability to respond to adverse weather events. Council is responsible for a range of critical infrastructure that will be impacted by climate change, such as our water and roading networks.

Here are some of the things underway:

- Greater investment in this Long-Term Plan in waters infrastructure, such as a stormwater asset improvement programme to manage higher rainfall volumes.
- Climate change risk assessment. Stage 1 focuses on council assets.
- Emergency management improvements to prepare for, respond to and recover from adverse weather events.
- Working in partnership with Iwi and Hapū on a range of projects.

What's next for adaptation?

- The council's district plan review.
- Complete the first stage of the climate change risk assessment and expanding the scope of this work to include the whole district.
- Continue to work with Iwi and Hapū to support their own climate action goals and projects.
- Deliver the Better Off Funding available from central government until 2026/27 and future council funding from 2027/28 to support Marae as they continue to respond to civil defence emergency events and promote social wellbeing.



Strategic assumptions

Significant forecasting assumptions and risks

Schedule 10, section 17, of the Local Government Act 2002 (the Act) requires that council identifies the significant forecasting assumptions and risks underlying the financial estimates in its Long-Term Plan. Where there is a high level of uncertainty surrounding the assumptions, council is required to state the reason for that level of uncertainty and provide an estimate of the potential effects of the uncertainty on the financial estimates provided.

Council has made a number of assumptions in preparing this Long-Term Plan. These assumptions are necessary as the planning term covers 10 years and the assumptions ensure that all estimates and forecasts are made on the same basis.

The prospective financial information contained in this Long-Term Plan is underpinned by the assumptions that the council is reasonably expected to occur as of 30 June 2024. The assumptions are made on the basis that there is an average of 21,686 ratepayers in the district.

Actual results are likely to vary from the information presented and these variations may be material. This financial information should not be used for any other purpose.



Forecasting assumptions	Risk	Level of uncertainty	Financial materiality	Reasons and financial effect of uncertainty
Population growth - The population of the district is expected to grow to 53,000 by 2034 and 56,500 by 2054.	That population growth is lower than projected.	Medium	Low	Population growth can be affected by a number of factors, including net migration, births, deaths and the trent for people to live in different-
The number of households is expected to grow by 100–30 per year over the next decade.				sized family groupings. Revenue from rates growth and development
During the 30-year planning timeframe for the Infrastructure Strategy household sizes are predicted to increase from 2.4 to 2.5.				contributions may not be accurately forecast and costs of new infrastructure could fall onto existing ratepayers.
Our population growth assumptions are based on Infometrics modelling undertaken in 2023. We have used Infometrics high-growth forecast for years 1-10, and Infometrics medium-growth forecast thereafter.				A decline in population could result in a reduction in the number of rateable properties and affect our ability to set rates at a level that is affordable to the community.
	That population growth is higher than projected.		Low	Significantly higher population growth could require the extension of infrastructure into increasingly difficult and costly subdivisions, with cost increases being funded out of debt.
				Planned infrastructure works and associated costs may need to be brought forward.
Resource consents - Conditions of resource consents held by council will not be altered significantly.	Work is not performed in accordance with the conditions of the consent.	Medium	Medium	Breaches of resource consent conditions may result in increased costs and/or legal action taken against council. However, the specific extent of any breaches or legal actions cannot be accurately quantified prior to their occurrence.
	Conditions of council-held Low resource consents are reviewed and altered.	Low	Medium	Council's ocean outfall wastewater discharge consents expire in 2026. Renewing the consents may result in changes in consent conditions which could affect the treatment process and require further capital investment.

Forecasting a	assumptions	Risk	Level of uncertainty	Financial materiality	Reasons and financial effect of uncertainty
the following has used the changes to ca inflation rate	re financial information is based on adjustments for inflation. Council BERL forecasts of price level alculate a weighted average for each year of the plan. Where s subject to inflation, the following ten applied:	That actual inflation will be significantly different from the assumed inflation.	Low (Years 1-3) Medium (Years 4-10)	Low (Years 1-3) Medium (Years 4-10)	Inflation is affected by external economic factors. Council's costs and the income required to fund those costs will increase by council's average rate of inflation. While individual cost indices will at times vary
2024/25 2025/26 2026/27	0% 2.0% 2.2%				from what has been included in this plan, the council has relied on the Reserve Bank use of monetary controls to keep inflation within the 1% to 3% range.
2027/28 2028/29 2029/30 2030/31 2031/32 2032/33 2033/34	2.2% 2.1% 2.1% 2.0% 2.0% 1.9%				Where the actual inflation differs from the assumed inflation the cost of the activity will differ. Lower inflation may result in council reducing its funding requirement. Higher inflation may increase council's funding requirement.
Interest - Interest - Interest and 5.0% per exception of debt (opening	erest paid on term debt is an average rate of 5.4% for year 1 annum thereafter, with the the wastewater treatment plant g balance of \$23M) which has an of 4.5% per annum.	That interest rates will change from those used in the calculations over the period of the Long-Term Plan.	Medium	Medium	Interest rates on borrowed funds are largely influenced by factors external to the New Zealand economy. Council mitigates interest rate uncertainty through the use of interest rate swaps and other derivatives. Based on council's projected debt levels, interest costs will increase or decrease annually by \$2.0M-\$2.6M per year for every 1% movement in interest rates. A significant change in interest rates could affect the amount of funds available to provide council services or increase rates rises.

Forecasting assumptions	Risk	Level of uncertainty	Financial materiality	Reasons and financial effect of uncertainty
Interest rate risk management - Council continues to manage interest rate risk with a neutral effect by effectively fixing a large portion of its debt portfolio.	Interest rates move in a downward direction with council unable to take full advantage of this movement.	Medium	Low	As council's policy is to effectively fix its interest rate on a large portion of its debt portfolio, a movement in interest rates would have a minimal impact in interest costs or savings.
Raising debt - Council can raise debt at any time.	That council cannot raise debt as and when required.	Medium	Medium	Council funds debt from bank credit lines and from issuing local authority stock, either through private placement or through the New Zealand Local Government Funding Agency. Market conditions may impact on lenders' ability to continue to fund council debt.
				The New Zealand local authority stock market is dominated by a small number of significant purchasers. Overseas markets are prone to fluctuations in demand for investment in a given country's securities. Market conditions may result in purchasers of local authority stock withdrawing from the market for a period. This means that in the short term council may have to use cash reserves or investments in place of debt. In the medium term, council may have to delay/suspend current projects. In the long term, additional funding sources would have to be found or the council budget would have to be reduced to what could be funded from current revenues.
				The effect on projects would depend on the value involved and the extent to which council could not fund them from internal sources.
NZTA Waka Kotahi requirements and specifications for the granting of subsidised work will not alter, and that all subsidised roading works in the Long-Term Plan will be approved.	Changes in subsidy rate and in criteria for inclusion in subsidised works programme. Not all work in the programme submitted to	Medium	Medium	Timing of Waka Kotahi's confirmation of the National Land Transport Programme is problematic as council does not receive confirmation of its approved (subsidised) programme until after the LTP is consulted upon, and sometimes even after it has been adopted.
Council's Waka Kotahi funding assistance rate is 62% and this rate has been assumed to continue throughout the Long-Term Plan period.	Waka Kotahi will be approved, resulting in that work not proceeding.			Waka Kotahi funding priorities may change as a result of the Land Transport Management Act 2003 and its focus on delivering the key

Forecasting assumptions	Risk	Level of uncertainty	Financial materiality	Reasons and financial effect of uncertainty
				outcomes of integration, safety, sustainability and value for money.
				Variations in subsidy are possible through implementation of the New Zealand Transport Strategy and Government Policy Statement on NZTA funding.
				A 1% change in subsidy rate in the future would impact council's costs by \$170k on average over 10 years. Alternatively, there may be a change in levels of service.
Dublin Street Bridge replacement - We have assumed that the replacement of the Dublin Street Bridge will cost \$66.4M, with consenting and design costing an additional \$2.6M. This gives a total cost of \$69M. We have assumed that this cost will be 62% externally funded by Waka Kotahi and/or other external non-council funding sources.	That the cost of the project exceeds the \$69M budgeted. That we cannot secure 62%	High High	Medium Medium	The cost of the Dublin Street Bridge replacement has been estimated as we do not yet know the design or location of the replacement bridge. The bridge's location over the Whanganui River also adds complexity to the design and consenting process with the unique legislation relating to Te Awa Tupua (Whanganui River Claims Settlement) Act 2017.
randing sources.	Waka Kotahi or other external non-council funding to replace the Dublin Street Bridge.			Waka Kotahi funding priorities and the level of oversubscription of available Waka Kotahi funding may affect the likelihood of securing our standard 62% Waka Kotahi funding assistance rate for this project.
				Other central government funding support and external funding, e.g. grants, may be available.
				Every \$1M extra that council has to borrow for the project will add \$4 per year to average rates for the next 25 years.
Dividends from council's CCO investments – Council is forecasting to receive \$500k in dividends in years 1-3 and \$1M for each year thereafter.	That council will not achieve the forecast rates of return.	High	Medium	We have forecast lower investment income in years 1-3 of the plan to enable CCOs to invest in their infrastructure.
Funding sources - Council has assumed it will receive certain levels of user charges and grants in addition to loan funding as sources of funds for significant assets.	Projected revenue from user charges and external financial assistance is not achieved.	Medium	Medium	A significant impact from changes in funding or funding sources may result in a revised capital work programme, or changes in the level of user

Forecasting assumptions	Risk	Level of uncertainty	Financial materiality	Reasons and financial effect of uncertainty
	Levels and sources of funding differ from those forecast.	Low	Low	fees and charges, borrowing or rating requirements.
				Council has secured loan facilities in addition to a strong credit rating from an international credit rating agency. It is likely that it will be able to source loan funding for future replacement of significant assets.
				User charges and grants have generally been increased by the assumed rate of inflation over the 10-year period of the plan. Some price increases may affect the demand for services and adversely impact on council's forecast user charge income.
Asset life - Assets do not necessarily fail at the end of their design life. An asset is considered to have failed if its performance does not meet expected serviceability requirements.	Earlier than planned asset failure.	Low	Medium/High	Assets are assessed on their criticality and likelihood of failure. Risk ratings are established to prioritise and optimise investment programmes.
				Capital replacements may need to be brought forward in the event of asset failure affecting interest costs and levels of debt.
Asset data knowledge - Council has an accurate record of assets to enable good decision-making.	Incorrect asset data resulting in incorrect expenditure and loss of service potential.	Low/Medium	Medium/High	Over the past few years council has been undertaking extensive modelling of its infrastructure networks to improve data information on the condition of its assets.
				A project is now underway to improve asset management data and practices, and data for our property assets.
				Where data information remains incomplete, or is inaccurate, there is potential for overinvestment or underinvestment in assets.
Timing of capital projects and accuracy of cost estimates - That capital projects will be completed within the projected timeframes and	Capital projects are delayed or take longer to complete than estimated.	Medium	Medium	Delay in completing projects could result in an escalation of costs in addition to council not being able to deliver required levels of services.
budget cost estimates.	Actual capital project costs are significantly under or over budget.	Medium	Medium	Significant variances of actual capital costs to budgeted capital costs may result in either:

Forecasting assun	nptions	Risk	Level of uncertainty	Financial materiality	Reasons and financial effect of uncertainty
					 Over-collecting revenue from various sources, such as development contributions, fees and rates Funding shortfall, placing additional pressure on council resources, such as borrowings and rates.
to time we revalue how much they are planning, we make much we think the they are revalued. forecasts of price each year of the p	on-current assets - From time e our assets to understand re worth. Through our e assumptions about how e assets will be worth when Council has used the BERL level change adjustors for olan. The following rates have ne appropriate asset types:	Price level changes may not be in line with BERL forecasts, resulting in a big difference between how much we thought the asset would be worth and how much it is actually worth.	Medium	Low	Revaluations are impacted by information available on asset conditions. As better information on asset condition is obtained, revaluations may differ from those calculated in this plan.
Year applied	Water				
2024/25	14.8%				
2027/28	8.0%				
2030/31	7.3%				
2033/34	6.5%				
Year applied	Buildings				
2026/27	7.1%				
2029/30	6.5%				
2032/33	6.0%				
Year applied	Roading				
2025/26	8.9%				
2028/29	7.0%				
2031/32	6.2%				

Forecasting assun	nptions	Risk	Level of uncertainty	Financial materiality	Reasons and financial effect of uncertainty
Year applied	Investment properties				
2024/25	2.7%				
2025/26	2.0%				
2026/27	2.2%				
2027/28	2.2%				
2028/29	2.1%				
2029/30	2.1%				
2030/31	2.0%				
2031/32	2.0%				
2032/33	1.9%				
2033/34	1.9%				
council's detailed	esset condition is as per asset register. Refer to the full cunting policy for specific s and useful lives.	Actual wear and tear of assets will not mirror current depreciation rates.	Low	Low	Council has an asset management planning and improvement programme in place. Asset capacity and condition is monitored, with replacement works being planned in accordance with standard asset management and professional practices. Depreciation is calculated in accordance with normal accounting and asset management practices.
 demographic prof Infometrics this pl An ageing po An increase ir lower rate that An increase ir The district's 		The expected demographic changes do not transpire in the predicted areas, impacting on the provision of services for the area and the district as a whole.	Low	Low	The district's projected demographic profile was taken into account in preparing the asset management plans, service plans and activity plans. A significant change in the projected profile could impact on the provision of agespecific service delivery and infrastructure, which may become obsolete or underutilised sooner than anticipated.

Forecasting assumptions	Risk	Level of uncertainty	Financial materiality	Reasons and financial effect of uncertainty
 Potential climate change impacts - In line with our Climate Change Strategy, Whanganui expects: Average temperatures to rise by 0.8 C between 1986-2005 and 2031-2050 with some seasonal variations; and by 1.8 C between 1986-2005 and 2081-2100. Wetter conditions with annual precipitation up 1% between 1986-2005 and 2031-2050 and winter rainfall up 6%; and by 4% between 1986-2005 and 2081-2100 and winter rainfall up 11%. Sea level rise of 0.2m-0.5m by 2060 and 0.3m-1.0m rise by 2100. This will increase the frequency and magnitude of storm-related coastal flooding 	Planning has not adequately accounted for climate change impacts and the associated cost.	High	High	Accretion, sedimentation of the river, greater flooding, impacts on coastal environment and settlements, increased stormwater flooding, higher river levels, increased groundwater levels and hillside erosion and impact on resources to manage events. Infrastructure damage may affect the levels of maintenance in any one year or replacement timeframes may be varied as a result. These climate change projections are based on an RCP6 scenario. Updated climate change projections for New Zealand are expected to be released by NIWA in 2024. Council will need to review the impacts of these in future planning.
and erosion. Shared services – Council partners with other agencies to deliver services in a cost-effective	Partnerships do not deliver the desired outcomes.	Low	Low	External factors may impact on provider's ability to deliver services at the expected level.
manner.	The desired outcomes are delivered at an increased cost.	Low	Medium	There are existing agreements between council and other agencies for the delivery of services. Non-delivery could result in an increased cost to council or an unexpected drop in service levels.
Central government - Council is unable to confidently predict any government statutory or policy changes. Therefore, this plan assumes council is operating under the current regime of	There are unexpected changes that alter the services provided by council.	Medium/High	Medium/High	Could have significant financial impact on resources to meet legislative requirements and require changes to service delivery/organisational form.
statutory and policy provision.	Changes in central government policy occur and place additional compliance requirements on councils and communities to comply.			Council's response to legislative changes would be consulted upon during future annual and long-term planning.
Three Waters reform - This plan assumes council continues to provide three water services to the community for the full period of the plan.	Uncertainty about the future model of delivery remains until there is clarity on the	High	High	Levels of uncertainty exist in the medium and longer term due to uncertainty about the detail of the government's future policy requirements for delivery and the financial sustainability of

Forecasting assumptions	Risk	Level of uncertainty	Financial materiality	Reasons and financial effect of uncertainty
The introduction of the Local Government (Water Services Preliminary Arrangements) Bill	government's replacement policy and its requirements.			funding water services through rates. Until there is clarity on this it is challenging to determine
has given further indications of the new rules and regulations that the government plans to introduce, but there will not be full clarity regarding the new requirements until after the second bill is introduced at the end of 2024.	Rising costs for delivery and the expected introduction of new quality standards and a new economic regulator mean there is a long-term risk to financial sustainability if the delivery model of water services remains unchanged.			the scale of change and level of impact.
	Any future shift to regionalised water service provision arrangements has the potential to be significant in scale, impact core role and functions of the council and our finances.			
Water services regulator - Taumata Arowai was created by the Water Services Act 2021 and became the water services regulator from 15 November 2021, taking over from the Ministry of	There is a greater level of service expected to be provided by council than is provided for in the plan.	High	Medium	Any changes to legislation and/or standards will require council response, and potential investment, during future annual and long-term planning.
Health. Taumata Arowai is currently focusing on drinking water. We are seeing additional requirements to increase levels of service.				Levels of uncertainty remain until implementation at central government has progressed further.
As of late 2023 Taumata Arowai is now also responsible for wastewater and stormwater regulation, and we expect to see increasing levels of service in these areas over time too.				
This plan accounts for known water supply requirements under the Drinking Water Quality Assurance Rules issued by Taumata Arowai, as known at February 2024. We expect that an increasing level of service will be required for all three water services over time. Scale and timing of service level changes are yet to be determined.				

Forecasting assumptions	Risk	Level of uncertainty	Financial materiality	Reasons and financial effect of uncertainty
Insurance Council's total insurance costs in year 1 of the plan are \$3.75 million. Premiums have been budgeted to increase in line with local government inflation. It is assumed that Council's assets can be adequately covered for loss at this level of premium into the future.	That the insurance market continues to suffer as a result of recent natural disaster events and that the cost of insurance continues to rise.	Medium	Low	Insurance premiums have been significantly impacted through recent natural disaster events, leading to substantial cost increases over and above the rate of inflation. Council has adopted an insurance strategy with the purpose of ensuring that any risk transfer, through the purchase of insurance, is carried out in a cost-effective and prudent manner.
COVID-19 pandemic - We do not anticipate any further disruption due to COVID-19 moving forward. It is likely that small spikes of the virus may resurge intermittently, though this is unlikely to have any major impact on our district. Due to Whanganui's limited reliance on tourism there is no foreseen ongoing impacts from COVID-19.	That the ongoing impacts on Whanganui community economy and unemployment are greater than anticipated and that impacts are longer term than expected.	Low	Low	An event of this nature has not been experienced in recent history and further implications may be difficult to predict. Although the economic impact in Whanganui may not be as great as in other parts of the country, there is likely to be a contracting of the economy and higher unemployment.
Natural hazard events - There will be natural hazard events, e.g. flooding, landslides, severe winds, that cause localised damage about every three to five years. Dealing with these will be funded from a combination of debt, rates and insurance.	There are natural hazard events more often than expected risk assessments.	Medium	High	Although council has faced natural disaster events in the past, and coped adequately, climate change predictions are that some events could become more frequent and more intense. The potential effect of a natural disaster on council's financial position is dependent upon the scale, duration and location of the event. Central government assistance and insurance contracts would reduce some of the council's financial risk. Emergency management plans and legislation allow for government assistance where communities are unable to cope with emergency relief and recovery works.
Earthquakes - The risk of a significant earthquake in the period of this Long-Term Plan that causes damage to council assets is considered low. However, the risk within the next 20 years is considered moderate to high.	A significant earthquake strikes that causes major damage to council and community assets.	Low	High	Although the likelihood of Whanganui experiencing a significant earthquake that causes major damage is low, recent earthquakes in Christchurch and Kaikōura have highlighted the extent of damage that can occur. As with all natural hazard events, emergency management plans and legislation allow for government assistance where communities are unable to cope with emergency relief and recovery works.

Forecasting assumptions	Risk	Level of uncertainty	Financial materiality	Reasons and financial effect of uncertainty
				Emerging research is focusing on the increased risk of a very large regional earthquake off the coast of the lower North Island, as well as the overdue Alpine Fault event.
Development contributions - Growth will occur at the projected rate and in the projected order.	Development contributions are not recovered to match expenditure of network	Medium	Medium	Council has undertaken careful planning of growth demand projects so that expenditure and recovery match predicted market demand.
	upgrades.			However, if growth projections are inaccurate, budgets may be insufficient or inappropriate for the level of actual growth, or expected development contributions revenue may not be gathered.
				Growth-related capital projects are funded initially via debt, and any development contributions received are used to repay debt. This mitigates any rates impact of growth differing from projections.
Waste levy income - The plan assumes \$680k per annum of central government waste levy income to council as a result of increased landfill levies. It is assumed that \$560k per annum of this levy income is used to offset the cost of the kerbside recycling and food waste services, with the remainder used to fund other waste minimisation activities.	That waste levy income to council is not received as forecast.	Low	Medium	The amount of waste levy income that council receives depends on the amount of waste sent to landfill. Waste levies have increased progressively from \$20 per tonne from July 2021 up to \$60 per tonne from July 2024. It is possible that the increased levies achieve the objective of reducing waste to landfill over time and that this consequently reduces the levy income we receive.
				Every \$100k difference in waste levy income available to council will alter the targeted rate for the kerbside recycling and food waste services by around \$7.
Resource Management Act 1991 (RMA) reform - The plan assumes that council will need to undertake a review of the district plan under the current planning framework.	Council is not yet aware of the timing or full nature of the RMA reforms.	High	Low	The government has stated that it intends to undertake reforms to the RMA.
				Until the content of the reform becomes clear council will need to fund the review of the current district plan or future planning document framework.

Forecasting assumptions	Risk	Level of uncertainty	Financial materiality	Reasons and financial effect of uncertainty
External funding for capital projects - We have assumed significant external funding contributions from central government, corporate and philanthropic organisations and individuals for the following projects:	The financial targets for fundraising from external sources may not be met.	High	Medium	Council looks to maximise external funding opportunities for community projects. However, the risk remains that the financial targets for fundraising cannot be met which could result in either a redesign of the project, additional costs to council or the projects not proceeding.
 Royal Whanganui Opera House upgrade (\$8.9M) Davis Library extension (\$950k) North Mole redevelopment (\$925k). 				If the project proceeds, every additional \$1M that council has to fund will add \$4 on average per property per annum to rates for the next 25 years.
Investment projects - We have provided for a number of investment projects in our Long- Term Plan as part of our plan to make Whanganui more liveable. These projects will be subject to detailed business cases, providing	That the costs of construction and the net income projections of the investment projects differ from those forecast once the detailed business cases are developed.	High	Medium	Further planning and development of the detailed business cases and financials for the investment projects will provide greater certainty around the costs and potential returns of the projects.
greater certainty around the costs and potential returns of the projects. Some or all of these projects may not proceed if the detailed business case does not demonstrate their financial viability.				Some or all of the projects may not proceed if the detailed business case does not demonstrate their financial viability.
GasNet business development				
We have assumed that council will invest \$580k in 2031/32 to undertake a business case for the future of GasNet and its development. We have provided for \$11.9M of investment in 2032/33.				
Operational efficiencies - We have assumed \$1M per annum of operational efficiencies. Taking into account the cumulative effect, this equates to \$51M of operational efficiencies over the 10 years of the plan.	That we do not achieve \$1M of operational efficiencies each year.	High	High	Efficiencies may not be able to be realised to the degree forecast.
				Every \$100k reduction in efficiency savings will add \$5 per annum per property on average to rates.
We have also allowed \$250k per annum in years 1-4 and \$100k per annum thereafter for investment to save projects where a small upfront investment is able to provide efficiencies or ongoing savings to operational costs.				rates.

Financial Strategy

Where we've been

Our Financial Strategy over the last 10 years has balanced the services the community desires with what the community is prepared to pay for those services through tightly controlled expenditure, relatively low rate rises and moderate debt increases due to the funding of large capital projects, particularly the building of a new wastewater treatment plant.

Council has been fortunate to have a number of saleable investment assets that it has utilised to part-fund some of our large infrastructure projects which has meant that debt is lower than it could have otherwise been.

As we embark on this Long-Term Plan 2024-2034, we are in a stable financial position. We manage \$1.5 billion of assets and have \$206 million of liabilities, including \$171 million of external net debt (\$33 million under our self-imposed debt limit). We have an AA credit rating from Standard & Poors – this is a strong rating, only one notch below the Government and higher than the major banks.

What's on our mind

Over the past three years since our last Financial Strategy was developed, the environment we are operating in has changed a lot. The local government sector is in a time of significant change, and reforms will fundamentally alter how local government operates into the future. COVID-19 has had deep economic and social impacts on our community.

These are the things that are front of mind for us now and as we move forward:

Business as usual cost increases: We are facing significantly increased costs just to deliver our standard suite of services due to inflation and price escalation. This is impacting on every aspect of our operations. Our insurance costs have doubled (up \$1.9M per year) since our last Long-Term Plan. Interest rates have increased from 3.8 percent in the first year of the last Long-Term Plan to 5.4 percent in this Long-Term Plan, driving up our interest costs by \$1.6M per year. Cost increases are affecting all of our services. As an example, the cost per kilometre to reseal roads has more than doubled over the past six years.

Increasing service levels due to new standards and legislative changes: Increasing standards and legislative changes are impacting on the level of service we provide and our costs of doing business. An example of this is the introduction of the Water Services Act 2021 which has resulted in a step change in what is required to operate a water supply safely. This has led to additional operating costs, more resourcing demands and the requirement for new assets.

Looking after our assets: We have a significant and ever increasing asset base to maintain. Our roading assets are facing increased pressure with demands increasing beyond what the assets were designed for. The costs involved in maintaining and renewing our assets are increasing at a rate substantially higher than the Consumer Price Index (CPI).

Climate change: Climate change is a critical issue for the Whanganui community moving into the future. In 2020 the Whanganui District Council declared a climate emergency. The Climate Change Strategy, Te Rautaki Huringa Āhuarangi plots a course for action to both mitigate and adapt to climate change and to provide a framework for collaboration. We are facing increased costs in a number of activities like stormwater, wastewater and roading due to the impacts of climate change on our infrastructure.

Local government reforms: There is a substantial degree of uncertainty over what local government might look like in the future. Reforms for three waters and the Resource Management Act were signalled by the previous government, along with consideration of the Future for Local Government report. These pieces of work are all now being reconsidered by the new government. Three waters assets will now remain with councils in the short term, with regional three waters solutions becoming an option over time.

Significant capital projects: We have some significant capital projects underway. We have provided substantial investment into the port redevelopment project in order to leverage central government funding and maximise the economic opportunities the project presents for the community. The Sarjeant Gallery redevelopment project is nearing completion with significant assistance from external funding sources. In this plan some of the significant capital projects proposed are replacing the Dublin Street Bridge, upgrading the stagehouse and flying system at the Royal Whanganui Opera House and extending the Davis Library.

Changes to our services: During the course of this plan we have some new services coming online that will affect our operating costs, like the opening of the redeveloped and extended Sarjeant Gallery in late 2024, the introduction of the new kerbside recycling service in July 2024 and the kerbside food scraps service in July 2025. We have also made some service level cuts in this plan in order to keep rates at an affordable level for our community, such as closing the bird aviary at Rotokawau Virginia Lake.

Rates affordability: With a cost of living crisis affecting our community as a result of household cost inflation, and with our community having lower than average incomes, we are mindful that ratepayers have limited capacity to absorb significant rates increases in the current environment. We consistently need to strike a balance between our work programme and the services we deliver, our rates increases and affordability, and our debt levels. Keeping rates affordable and debt sustainable while managing our assets and achieving our vision of a vibrant, liveable district requires a delicate balancing act.

Growth: Following population decline through to 2014 Whanganui's population has been growing steadily and we now in the position where we are short of housing. Our industrial sector is also thriving. We need to invest in infrastructure to support new housing and industrial growth areas. We will also encourage infill housing in existing residential areas while looking at other ways we can support housing availability.

Our community 2024-34

Population growth

The Whanganui district had an estimated population of 48,700 as of 2022. Whanganui's tide turned in 2014 when the population began to grow after declining in all but two years since 1996.

Annual population growth during the five years to 2022 averaged 1.1 percent or around 500 people per annum. One of the factors that facilitated this growth was available housing stock, with Whanganui having only relatively recently (2018) surpassed its 1996 population level of 46,000. However this capacity is now fully utilised and we find ourselves in a housing shortage, like many areas around the country.

Infometrics forecasting predicts our population to grow by around 370 people per annum over the next decade. This will see our population at around 53,000 by the end of the Long-Term Plan planning period in 2034. Population growth is expected to slow down beyond 2034 to around 180 people per annum over the following 20 years.

Household and dwelling growth

Our projected population growth over the next ten years, along with a slight increase in the average occupancy per household, means we are projecting a lower increase in the number of households over this 10-year planning period.

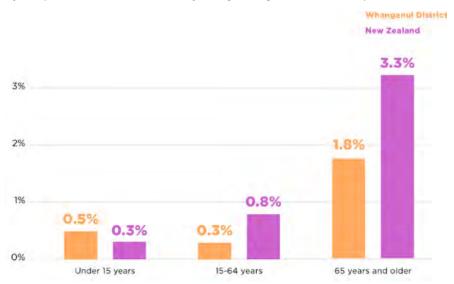
During the 30-year planning timeframe household sizes are predicted to increase from 2.4 people per household to 2.5 people per household.

We expect an increase of around 100-130 households per annum for the upcoming 10-year period.

Managing growth is a challenge and also an opportunity. Growth adds vibrancy and attracts businesses, investment and events to the district.

Population demographics

Whanganui's population is ageing, with the 65 and over age group expected to grow by 1.8 percent in the next ten years compared to under 15's growing by 0.5 percent and those 15 - 64 years growing the least at 0.3 percent.

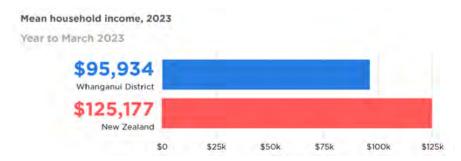


Whanganui has a lower percentage of its population in the working age group than the national average. The dependency ratio (the number of under 15 year olds and over 65 year olds as a proportion of the rest of the population) was 70.3 percent in the Whanganui district at June 2022, significantly higher than New Zealand's dependency ratio of 54.4 percent.

The community's ability to pay for services is affected by its current and future wealth and income and the number of people who can share the cost of council-provided services.

Household income is a fundamental measure of living standards and reflects the economic health of an area. Household income is derived from multiple sources including earnings from employment (wages and salaries), earnings from self-employment, allowances, benefits and superannuation.

The 2023 average household income for the Whanganui district is \$95,934 compared to the national mean household income of \$125,177. Of 66 territorial authorities, Whanganui ranks 45th for household income.



Compared to national averages, Whanganui's population is less ethnically diverse, less well educated and less wealthy.

How we're moving forward

We have come up with a six-point plan to help us move forward:

1. Encouraging population growth over the next 10 years

We have committed to stimulating population growth within our district by ensuring we can meet the needs of a growing community. If more families, individuals and businesses move to Whanganui, we'll be able to spread the rating costs across more people helping to keep rates lower.

2. Increasing non-rates revenue

Although rates are our main source of income, we can also lean on other methods. We are increasing many of our user fees in line with cost increases from 1 July 2024, for example building and resource consent fees and trade waste and tankered waste disposal fees.

3. Finding alternative funding sources

We will always seek external funding such as central government or grant funding where possible. We've set a target to ensure that some projects will only go ahead if a good portion of the project cost is funded from elsewhere, taking the strain off our ratepayers.

4. Finding efficiency savings

We're focused on working smarter and finding efficiencies where possible. To name a few examples, we have undergone a management restructure, postponed technology software projects and reduced the number of council vehicles.

5. Reducing levels of service

The council has carefully identified services that could be cut or closed to keep costs down. Through this Long-Term Plan 2024-2034 the community had the opportunity to provide feedback on these proposals.

6. Selling assets to repay debt

The council owns many assets which could be sold to repay debt and reduce costs considerably, which would then offset rates. Following public consultation we have removed the set target for asset sales, however we will still consider asset sales and the appropriate process for selling them on a case by case basis.

Our financial position 2024-34

Our capital expenditure programme

A key part of our Financial Strategy involves balancing the requirements of our Infrastructure Strategy with our financial limits.

Council manages a portfolio of \$1.5 billion of assets. The majority of these assets relate to our core infrastructure – roading and footpaths, stormwater, wastewater and water supply.

In this plan we plan to spend \$285 million replacing our existing assets, \$159 million on purchasing new assets and an additional \$31 million on infrastructure assets relating to growth. The following is a summary of infrastructure capital expenditure for years 2024/25-2033/34:

	Replace existing assets	New assets	Growth
	Maintain levels of service	Increase levels of service	Meet additional demand
Roading & footpaths	\$189.8M	\$32.6M	\$5.0M
Stormwater	\$8.4M	\$27.0M	\$17.0M
Wastewater	\$17.6M	\$45.5M	\$7.7M
Water supply	\$19.5M	\$14.8M	\$1.1M
Other	\$49.7M	\$39.0M	\$0.1M
Total	\$285.0M	\$158.9M	\$30.9M

Funding for this capital expenditure will come from a number of sources, including new loans, government subsidies (e.g. NZTA funding for roads), grants, development contributions (for growth related capital expenditure) and rates.

Replacing existing assets

To ensure best value in our infrastructure spend and maintain our levels of service, we take a strategic approach to assessment of asset condition, criticality and performance, and adopt a risk-based approach. This approach ensures that assets are adequately funded, risks are minimised, planned preventative maintenance occurs, there is a high degree of confidence in the asset data available and capital investment can be optimised. Further information on this approach can be found in our Infrastructure Strategy.

Replacing the Dublin Street bridge at an estimated cost of \$68.6 million (design and construction) is a significant contributor to our \$285 million budget for replacing existing assets over the 10-year period. We have assumed NZTA will subsidise 62 percent of this project, leaving council to fund the remaining \$26.1 million.

New assets

We have a number of significant capital projects planned over the 10-year period of this plan, including upgrading the Royal Whanganui Opera House stagehouse and flying system, completing the port redevelopment, and extending the Davis Library. Some of our community asset projects assume a substantial level of external funding from grants, donations and sponsorship. We are reliant on external funding to deliver these community projects in order to keep rates affordable for our community, to meet our limits on rates increases set out in this Financial Strategy, and to manage our debt levels.

We plan to add a UV disinfection system to our water supply to meet new drinking water standards. We are continuing to invest in upgrading our stormwater system to better cope with increasing wet weather events as a result of climate change. We are also proposing to begin a significant investment programme in our wastewater network to improve the network's ability to handle wet weather events.

For further information, see our detailed Capital Expenditure Schedules and the Infrastructure Strategy.

Growth

With growth comes the need for council to invest in new infrastructure. We have budgeted \$30.9 million for specific growth projects over the period of this plan. We have considered who benefits from this infrastructure and have revised our Development Contributions Policy to ensure that developers and new ratepayers pay an appropriate share of the cost. Around 20 percent of our infrastructure investment for growth is anticipated to be repaid by development contribution income over the period 2024-34.

Our operations

We plan to spend \$105 million per annum on average over the 10-years of this plan on operating our services. This contrasts with \$77 million on average per annum in our last Long-Term Plan.

During the course of this plan we have some changes to our services that affect our operating costs, like the opening of the redeveloped Sarjeant Gallery, the start of the new kerbside recycling service in 2024/25 (year 1) and the introduction of the new kerbside food scraps service in 2025/26 (year 2).

Even those parts of our operation that are continuing with business as usual are finding that costs have grown substantially because prices for contracts and items such as labour and materials have increased substantially. We are facing greatly increased costs to maintain our three waters systems and look after our roads. The cost per kilometre to reseal our roads has more than doubled in the last six years.

Insurance costs in particular have increased significantly due to recent natural disasters. On top of this, interest rates have also increased substantially.

The three 'i's" - Inflation, interest rates and insurance - have had a significant impact on our operational costs and this has led us to reconsider everything we do and how we do it, culminating in our six-point plan to reduce rates.

To offset some of the cost increases, we have made some service level cuts. We have also committed to finding efficiencies in how we operate. We have provided for a small annual budget to invest in spend-to-save opportunities, for example replacing a heating system with a more efficient system to reduce ongoing power costs.

Our debt

We begin this Long-Term Plan with an opening net debt balance of \$171 million following our significant infrastructure investments of the past 40 years.

Our plan in our last Financial Strategy was to keep debt at sustainable levels over the period of the plan so as not to burden future generations. A substantial part of achieving this plan was our loan repayment programme, along with the support of external funding to deliver many of our large capital projects.

A number of things have changed in the intervening three years since our last Financial Strategy - for example, additional investment in the port redevelopment, additional population growth requiring infrastructure investment, and a substantial increase in costs affecting everything we operate and build. We also now have the replacement of the Dublin Street bridge coming into the middle of this 10-year plan period in years 5 and 6.

We are required to have a limit on debt to help facilitate prudent financial management. We have set our debt limit at:

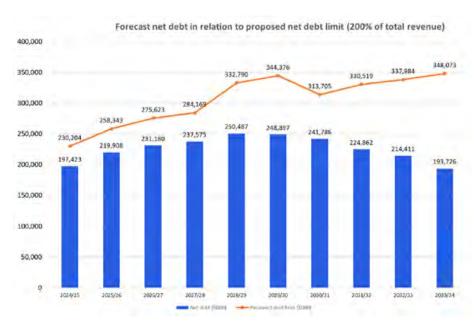
• Net debt* less than 200 percent of total revenue**

*Net debt is defined as total debt less cash or near cash financial investments

**Total revenue excludes development contributions and non-cash items

This is the same as the limit in our last Financial Strategy. It is well within the requirements of our credit rating agency Standard & Poor's and the Local Government Funding Agency (LGFA). The LGFA's current debt limit for local authorities is net debt less than 300 percent of total revenue, reducing to 280 percent by 30 June 2026.

As an example of compliance of this limit, our debt level in year 1 of the plan is 172 percent of our total revenue. That's the equivalent of a household earning \$100,000 per year and having a mortgage of \$172,000.



Our net debt will continue to move higher than we had previously expected and is now expected to peak at \$250 million in 2028/29 (151 percent of our debt limit) following the replacement of the Dublin Street Bridge. We still have capacity to borrow within our limits should an unexpected event like a natural disaster occur.

We will loan fund \$183 million of capital projects over the 10-year period, but we have planned to repay \$158 million of debt over the same period. With these mechanisms in place we expect our net debt balance to be \$194 million by 30 June 2034. This is 111 percent of our total revenue. That's the equivalent of a household earning \$100,000 per year and having a mortgage of around \$111,000.

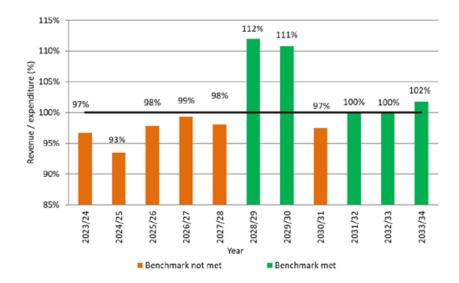
Balancing our books

We are forecasting an unbalanced budget for five of the ten years of the Long-Term Plan 2024-2034 as shown below.

Due to substantial inflation, forecast depreciation for our infrastructure assets has increased by \$5.6 million in the three years since our last Long-Term Plan 2021-2031. We believe running an unbalanced budget in these years is prudent because we are stepping up funding for our core infrastructure in a staged fashion over the period of this plan due to affordability concerns for our ratepayers. Feedback from the community during consultation of the Long-Term Plan 2024-2034 showed strong support to this approach.

In addition to our core infrastructure, the completion of the Sarjeant Gallery redevelopment will add a further \$2.3 million of depreciation per annum from the first year of the LTP. We do not believe it is prudent to increase rates to fund this level of depreciation for an asset which will not require any significant capital replacement for some time.

Similar in cost to the Sarjeant Gallery redevelopment, we have budgeted \$69 million for the Dublin Street bridge replacement, the majority of which is forecast in years 2028/29 and 2029/30. The substantial forecast NZTA subsidies for the Dublin Street bridge replacement budgeted to be received during these years has a significant positive impact on the balanced budget in 2028/29 and 2029/30. However the corresponding increase in depreciation for the bridge, once completed, also is a key reason for our unbalanced budget in 2030/31. Similar to above, we do not believe it is prudent to increase rates to fund this level of depreciation on an asset which will not require any significant capital replacement for some time.



Your rates

Council has historically kept rates increases low due to affordability concerns for its ratepayers. Our average rates increase over the last 10 years is 4.3 percent. In the current cost of living crisis, keeping rates increases to a minimum is even more of a concern; however we are facing many headwinds with costs escalating, standards increasing and climate change requiring us to adapt.

We are required to set a limit on rates increases in our Financial Strategy.

Our previous rates increase limit was Local Government Cost Index (LGCI) plus 2 percent, after accounting for growth. In the current environment this rates limit is too low for us to be able to deliver our services to the standards that are required in the short to medium term, even after implementing our six-point plan to reduce rates.

After looking at our budgets, considering rates affordability, and while continuing to provide services to our community and repay debt, we have set our limit on rates increases at:

- Rates increases (excluding water by meter, trade waste targeted rates and penalties) no more than the following, after accounting for growth:
 - 11.5 percent for 2024/25
 - 8 percent for 2025/26 and 2026/27
 - 6 percent for 2027/28
 - LGCI plus 2 percent for 2028/29 and beyond

These new rates increase limits will allow us to navigate this time of substantial legislative change, increasing standards and high inflation as well as the start of the new kerbside recycling and food scraps services, but retains our long-term aspiration for rates increases no higher than the LGCI plus 2 percent.

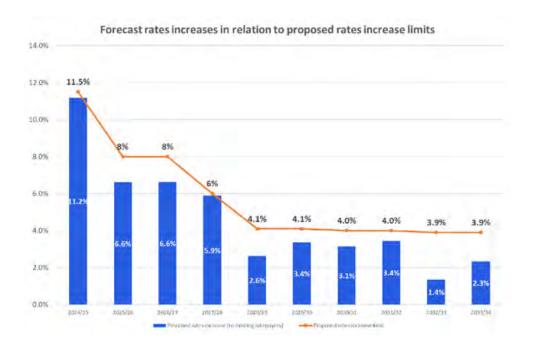
The average rate increase to existing ratepayers for 2024/25 is proposed to be set at 11.2 percent, which is within our Financial Strategy limit. On average, we are proposing rates increases of 4.7 percent on average over the course of this plan.

This level of rate funding will allow us to maintain the levels of service set out in this plan, provide for expected growth, and deliver the projects outlined when combined with our other sources of income like development contributions, fees and charges, subsidies and grants.

The forecast rates increase for the duration of this Long-Term Plan 2024-2034 are:

	Proposed rates increase*	Rates increase limit
2024/25	11.2%	11.5%
2025/26	6.7%	8.0%
2026/27	6.6%	8.0%
2027/28	5.7%	6.0%
2028/29	2.7%	4.1%
2029/30	3.4%	4.1%
2030/31	3.2%	4.0%
2031/32	3.4%	4.0%
2032/33	1.4%	3.9%
2033/34	2.4%	3.9%

^{*}Assuming \$600,000 per annum of additional rates revenue achieved through rating database growth



Increasing user fees and other non-rate income

User fees and other non-rate income such as government subsidies, grants and investment income, make up approximately 20 to 30 percent of council's funding requirements.

Our major external funding source is NZTA subsidies for our roads. Our subsidy rate currently sits at 62 percent, up from 61 percent last year.

We have forecast investment dividends from GasNet of \$1.3 million per year in years 1 to 3 of our plan, and \$1.8 million per year thereafter. Dividends of \$2 million per annum have been forecast from New Zealand International Commercial Pilot Academy Limited (NZICPA) from year 8 onwards.

Fees and charges are set for some activities where this is a private benefit that the user of the service receives. We have reviewed our fees and charges and most will be increasing by inflation annually to ensure we don't inadvertently pass cost increases onto the ratepayer by letting fees fall behind on keeping up with cost increases. There are a number of activities where we do not charge fees or keep fees low in order to increase usage to achieve our community outcomes - for example swimming pools, libraries, and the Sarjeant Gallery.

Demand for land is high and developers are opening up new land developments which we need to provide infrastructure for. We have forecast \$6 million of development contribution income over the 10-year period of this plan. We have considered who benefits from the infrastructure and have revised our Development Contributions Policy to ensure that developers and new ratepayers pay an appropriate share of the cost (the draft policy will be consulted upon alongside this Long-Term Plan 2024-2034). Around 20 percent of our infrastructure investment for growth is anticipated to be repaid by development contribution income over the period 2024-34.

We have forecast a substantial level of external funding for some of the community asset projects in our plan, like the Royal Whanganui Opera House stagehouse and flying system upgrade, the Davis Library extension and the North Mole carpark and amenities. We are reliant on external funding to deliver these community projects to keep rates affordable for our community,

to meet our limits on rates increases set out in this Financial Strategy and to manage our debt levels.

Some of our non-rate income is subject to changes in market conditions and government policy. While council takes every opportunity to leverage external sources of funding, the funding is often application based, has a finite period and is subject to policy changes.

For further information on how we fund our activities, see our Revenue and Financing Policy.

Securities

In order to borrow money, council has to offer some security just like residents with their mortgages. Council offers a charge over rates and rates revenue, as security for general borrowing programmes and interest rate risk management activity. From time to time, with prior council approval and the trustee, security may be offered by providing a charge over one or more of council's assets. Council offers security under a Debenture Trust Deed.



Investments

The council holds investments in property, companies and joint ventures and bonds (see below for details).

Council holds property investments in the city endowment.

Entity	Principal reason for investing	Budgeted return
City endowment	Benefit the people of Whanganui via revenue to offset rates	\$200,000 per year to offset rates

(Refer to council's Investment Policy on our website <u>www.whanganui.govt.nz</u> for more details regarding these property investments.)

During 2020/21 council established Whanganui Port Limited Partnership. Council's harbour endowment and port assets have been transferred to the limited partnership.

Companies and other entities that council invests in are:

Company/joint venture	Shareholding	Principal reason for investing	Budgeted return
Whanganui District Council Holdings Limited (WDCHL)	100%	Manage other investments	Nil
GasNet Limited	100% shareholding by WDCHL	Provide return on investment	\$1.3 million per year for years 1 - 3, and then \$1.8 million per year thereafter
New Zealand International Commercial Pilot Academy Limited (NZICPA)	100% shareholding by WDCHL	Business and economic development within Whanganui	\$2 million per year from year 8 onwards
Whanganui Port General Partner Limited (WPGPL)	100% shareholding by WDCHL	Maintenance and development of the sea port	Nil
Whanganui Port Limited Partnership	Units held by WDC; 100% shareholding by WPGPL	Maintenance and development of the sea port	Nil
Whanganui Airport Joint Venture	50%	Provide an essential service to the district	Nil

Whanganui District Council Long Term Plan 2024-2034 Section 2 - Strategic Direction

Company/joint venture	Shareholding	Principal reason for investing	Budgeted return
Manawatu Wanganui Local Authority Shared Services Ltd	14%	Efficient service delivery and reduced costs	Nil
New Zealand Local Authority Funding Agency	0.4%	Effective borrowings and Reduced interest costs	Nil
New Zealand Local Government Insurance Corporation Limited	2.6%	Risk management	Nil
Sarjeant Gallery Trust Board	100%	Support the Sarjeant Art Gallery	Nil
Wanganui River Enhancement Charitable Trust	33%	Health of the river	Nil
New Zealand Master Games Limited	49%	Sport	Nil

Note – at the Council meeting on 26 March 2024, Council passed a resolution to transfer all assets and liabilities of Whanganui District Council Holdings Limited, including the shares in its subsidiaries, to Council, and then to close the company by way of amalgamation with one of its subsidiaries. This process is expected to be completed by the end of December 2024, however at the time of adoption of this Long Term Plan 2024-34 Whanganui District Council Holdings Limited is still in operation.

Infrastructure Strategy 2024-2054

What is an Infrastructure Strategy?

Managing infrastructure is a substantial part of council's operation and a significant contributor to the wellbeing of our district. Our infrastructure ranges from district roads, bridges and footpaths, to water and wastewater reticulation systems and stormwater drainage systems. Many of these assets are used by our community on a daily basis and are critical to allow our community to function.

Councils are required to have an Infrastructure Strategy to outline how they will look after their assets and respond to challenges over the next 30 years. Our Infrastructure Strategy helps us communicate the plan for our assets to our community. We want the community to be confident that we will look after those assets so that they can function effectively now and for generations to come.

Our Infrastructure Strategy is unique to Whanganui and reflects the state of our assets, our environment, the needs of our community, our financial position, and our community's ability to afford rates increases to pay for infrastructure.

The Infrastructure Strategy:

- shows the assets that are needed to deliver on Whanganui's vision
- outlines the key issues affecting our infrastructure over the next 30 years
- identifies the options available to address these issues, including costs and risks
- outlines the preferred option for each issue and the reasons for this.

Our Infrastructure Strategy 2024-2054 covers the following assets:

- roading and footpaths
- water supply
- wastewater
- stormwater.

Council also owns numerous cultural and events facilities, parks and recreation facilities, properties and buildings, plus the sea port and airport. These assets sit outside of the scope of this Infrastructure Strategy 2024-2054. Asset management capability is in a developing phase in these areas and an improvement plan is in place. We expect to expand the Infrastructure Strategy to include these assets for the 2027-2037 Long-Term Plan.

Our assets

Roading and footpaths

Our Whanganui district roading and footpaths network includes:

- 592km of sealed roads
- 270km of unsealed roads
- 72 bridges
- 345km of footpaths and shared pathways
- 6400 street lights
- 14 sets of traffic signals.

Water supply

We manage five water supply schemes throughout the district, the largest of which is the Whanganui urban water supply. The other water schemes are Fordell, Pākaraka, Mowhanau and Westmere rural water supplies. Our water supply assets include:

- six bores
- five treatment plants, 17 pump stations, 29 reservoirs
- approximately 540 km of water supply pipelines
- 2,199 hydrants
- 860 backflow devices
- 1,051 meters.

Wastewater

Wastewater reticulation systems are provided in the Whanganui urban area, Mowhanau and Marybank. The wastewater network includes:

- two treatment plants
- 38 sewer pump stations
- approximately 289km of pipeline
- approximately 4,781 manholes
- an ocean outfall approximately 1.7 km off South Beach.

Stormwater

Stormwater reticulation infrastructure is provided in the Whanganui urban area. Rural stormwater is managed mainly through land drainage with some minor infrastructure provided at Marybank and Mowhanau to safely dispose of stormwater run-off. The stormwater network includes:

- approximately 174km of pipeline
- over 3,459 manholes
- 18km of open channel
- 11 retention and filtration basins to treat stormwater run-off and help prevent flooding.

Partnerships with iwi

The council partners with Tangata Whenua, Hapū and Iwi to build community and promote wellbeing. This approach is especially important for projects or decisions in infrastructure planning, environmental management, and community development. The council's policy direction and planning processes supports effective engagement with Hapū and Iwi entities as well as marae and whānau. Hapū have indicated to the council that they wish to be specifically engaged in relation to activities within their rohe, rather than just through engagement with the Iwi or Rūnanga body at large. This will ensure the voice of Hapū is heard at the decision-making table and the values and impacts will be considered locally. Hapū hold their own mana motuhake within their rohe and legislated Iwi and Crown entities will not impede or interfere in this Hapū sovereign right.

The enactment of the Te Awa Tupua (Whanganui River Claims Settlement) Act 2017 has provided legislative responsibilities for the council, including an appointment to the strategy group, Te Kōpuka. The council also attend regular hui of the Te Awa Tupua Technical Advisory Group (TAG) that contributes to the provision of support to Te Kōpuka. There is an ongoing commitment towards an organisational understanding of the Te Awa Tupua Act, the intrinsic values Tupua te Kawa through Te Pūwaha – Port Revitalisation Project, and the relationships being built with Iwi.

The formal partnership agreement between the council and Te Rūnanga o Tūpoho is guided by the relationship document Te Whakarauhitanga o te Tangata. This document is currently under review. Te Rūnanga o Tamaupoko relationship document framework guides the formal partnership agreement between the council and Te Rūnanga o Tamaupoko. This document is due for review in 2025. The council meets separately with both Rūnanga, with a focus on all levels – political, social, economic, environmental, and cultural – for the benefit of the whole district. Council also has a memorandum of partnership with Ngā Paerangi lwi (NPI). NPI has maintained a consistent presence in the lower reaches of the Whanganui River for over a thousand years.

Giving effect to Te Mana o te Wai requires local authorities to actively involve Tangata Whenua (to the extent they wish to be involved) in freshwater management. Whanganui District Council gives effect by working with Hapū and Iwi with a focus on water supply and is working with Te Kaahui o Rauru as they are a major stakeholder for the existing water supply for Whanganui city. This has been achieved by the following:

- collaboration with Hapū and Iwi on a number of cultural tools and mechanisms.
- opportunities to be involved in collaborative work on the source water supply and underground aquifer within the Te Kaahui o Rauru rohe.
- relationship building with Hapū and Iwi which includes planting workshops, consents and visiting sites with existing assets within their rohe.
- continue to progress the global consent for water supply and any
 projects that evolve out of this work, i.e. mapping and modelling project
 with Te Kaahui o Rauru, rainwater tank redesign, Kai Iwi restoration
 planning, hīnaki workshops and access from Kai Iwi Marae to Kai Iwi
 Stream.

Our vision - the four wellbeings

As per the Local Government Act 2002, the purpose of council is to promote the social, economic, environmental, and cultural wellbeing of communities in the present and for the future.

Work on a longer-term vision out to 2050 is still underway and we will be returning to the community for feedback on the vision later.

In the meantime, the four wellbeings are being utilised as the community outcome assessment framework for this Long-Term Plan 2024-34.

Assumptions

The full suite of assumptions for our Long-Term Plan can be found in section 2 of our Long-Term Plan 2024-2034.

Three waters reform

The recent change of government has resulted in the repeal of the Water Services Entities Act 2022 which aimed to reform three waters services (water, wastewater and stormwater). Our Long-Term Plan 2024-2034 and this Infrastructure Strategy assume council continues to provide three water services to the community for the full period of the plan.

Our key issues

We have identified five key issues that are impacting on our core infrastructure:

- 1. Changing legislative requirements and environmental standards
- 2. Sustainably looking after our assets
- 3. Managing increasing costs and affordability
- 4. Climate change and resilience
- 5. Growth, demographic and land use changes



1. Changing legislative requirements and environmental standards

Many of our infrastructure services have to meet standards that are set by external organisations, like drinking water standards set by Taumata Arowai or resource consent limits on discharges from our wastewater treatment plants set under consents issued by the regional council.

Many of the standards for our infrastructure-based services are increasing over time, generally to reduce risks to public or environmental health. Increasing standards sometimes mean that we have to sample or test more regularly (like drinking water testing), or that we have to invest in new assets to ensure compliance (like adding UV disinfection to our water supplies as an additional barrier of protection). Responding to increasing standards comes at a cost and brings affordability challenges for our community.

Three waters (water supply, wastewater and stormwater)

Taumata Arowai was created by the Water Services Act 2021 and became the water services regulator from 15 November 2021, taking over from the Ministry of Health. Taumata Arowai sets standards and makes sure that drinking water suppliers like councils are meeting their obligations to provide safe drinking water. The introduction of the Water Services Act 2021 has resulted in a step change in what is required to operate a water supply safely. The Water Services Act 2021 also has a key objective and requirement to give effect to Te Mana o Te Wai, a concept focused on restoring and preserving the balance between water (wai), the wider environment (taiao) and people (tāngata), now and into the future.

So far, Taumata Arowai has put in place new drinking water standards outlining maximum acceptable values for contaminants, new drinking water quality assurance rules and new drinking water aesthetic values regarding taste and smell.

From 4 October 2023 Taumata Arowai are also responsible for monitoring and reporting on the environmental performance of wastewater and stormwater systems. It is expected that standards for wastewater and stormwater are also likely to increase into the future, as they have for drinking water.

Council's wastewater treatment plant ocean outfall discharge consent will expire in 2026. Generally speaking, resource consent renewals tend to result in higher discharge standards over time. There is uncertainty at this time regarding the future consent limits and what investment, if any, may be required to treat the wastewater to achieve those limits.

Stormwater discharges are currently either consented or a permitted activity under Horizons Regional Council's One Plan. It is possible that we will be required to treat stormwater before discharging in the future.

Roading and footpaths

The One Network Framework (ONF) is a new national tool to classify roads and streets within the New Zealand transport network. The ONF evolves the One Network Road Classification (ONRC) to a two-dimensional classification framework focused on movement and place.

The ONF isn't designed to provide transport solutions, but it helps to establish the function of a road or street by providing a foundation for nationally consistent conversations within criteria called Street Families. When fully implemented in the 2024-27 funding block, the ONF will be used to benchmark performance and align performance measures and outcomes within available funding envelopes.



2. Sustainably looking after our assets

Managing \$1.5B of assets is a complex business. We are always striving to balance keeping our assets maintained and up to appropriate standards with affordability for our ratepayers.

Roading and footpaths

Service delivery model

Council's road corridor maintenance contract is carried out by the Whanganui Roading Alliance, a collaborative partnership between Whanganui District Council and Downer.

Rigorous monitoring of costs and regular auditing demonstrate the cost effectiveness of this delivery model. The Roading Alliance mandate is to deliver value for money, exceptional customer service and sustainable stewardship of the road network through world class asset management using the latest technology (such as high-speed survey data conducted by laser sensors to model the network).

Asset management approach

The roading assets are managed in the RAMM (road assessment and maintenance management) database in accordance with the One Network Roading Criteria (ONRC) hierarchy currently evolving into the One Network Framework (ONF). Roading asset components are detailed in the database.

We are using improved network benchmarking metrics to identify and target opportunities for improvement. Our aim is to enhance the modelling of asset condition and the maintenance and renewal works required to meet service level targets for the lowest long-term cost. The objective is to increase confidence that the current and planned work is sustainable.

It is critical that we have a clear understanding of the condition of our assets and how they are performing to support a data-driven, evidence based business case for investment. Condition data provides the basis for understanding of future spending patterns and helps us with management decisions regarding maintenance, replacement and renewals.

The development and continued use of condition assessment data will provide verifiable data to allow us to predict how particular asset types decay and allow us to predict remaining asset life.

The council undertakes robust condition surveys based on the risk of the asset (rate of change) to ensure the land transport assets are maintained, replaced or developed over the long term to meet required standards and predicted future demands.

Assets are renewed when it is more cost-effective in the long-term to replace rather than continue to maintain the asset. Longer-term asset renewal needs are identified through analysis of condition assessments.

Creating a renewals programme is a complex undertaking. Many processes are required to ensure a robust forward works programme of renewals is developed:

- data collection and preparation
- data analysis and scenario modelling
- field validation and model alignment
- economic justification
- outcome verification
- final programme formulation.

We use a set of strategy envelopes to help inform our treatment selection process. This helps create a first cut of possible treatment options based on the current and predicted condition of the asset.

Data confidence and reliability

We have a high level of confidence in our asset inventory, condition and demand data. Information is the foundation of our optimised activity management planning and advanced asset management planning and decision-making. We monitor the effectiveness of treatments and embed the practice of failure mode analysis into our daily work. Any knowledge gained is fed back into our treatment selection algorithms and asset performance modelling to inform and continuously improve future decision-making.

The recent upgrade to LED streetlighting has allowed us to update gaps in the minor asset database.

Five-yearly footpath condition ratings have also identified significant new information on their real-world condition.

Three waters (water supply, wastewater and stormwater)

Service delivery model

Management, compliance and technical supervision for the three waters networks is undertaken by a core team of in-house staff. Physical operations and maintenance of the networks are contracted out to specialist service providers, as is the construction of new assets.

Asset management approach

In 2018 we changed our asset management approach for our three waters assets, from an age-based asset renewal approach to a risk-based approach. The new approach is based on the fact that assets do not necessarily fail at the end of their design life, but instead will be considered to have failed if their performance doesn't meet requirements.

Three waters assets were assessed to establish their 'level of criticality' (i.e. what the consequence of failure would be).

Data on age and other attributes were used to estimate the 'likelihood of failure'.

The product of these two variables is combined to form an 'asset priority attribute' (a risk rating). The priority attribute provides direction to assessments of asset condition and performance.

Benefits

This approach to asset management ensures:

- much flatter expenditure forecasts
- the ability to reduce risk without the need to increase budgets or create future expenditure "bubbles"
- planned preventative maintenance and renewal/improvement of critical assets
- reactive maintenance on non-critical assets
- renewal/improvement of assets strictly based on true performance
- proactive scheduling of renewal/improvement of assets which are underperforming
- improved understanding of the true levels of service provided by the assets
- a low risk profile to critical assets
- high confidence in data available on the condition and performance of critical assets
- the ability to implement increases/decreases to levels of service through targeted capital investment
- the ability to scale expenditure to suit the desired level of service and risk
- optimised capital investment.

Risks

There is a risk that by using a risk-based approach we may inadvertently be running down our assets by not replacing them at the end of their design life. This could result in reduced asset performance.

Data confidence and reliability

The ratings for data confidence and reliability for water supply, wastewater and stormwater are as follows:

	Water Supply	Wastewater	Stormwater
Asset register	В	В	В
Asset valuations	А	А	А
Asset condition	С	С	С
Asset criticality	А	А	В
Level of service	А	А	А
Performance measures	А	А	А
Resource consents	А	А	N/A
Demand projections	В	В	В
Risk and resilience	В	В	В
Capex forecasts	В	В	В
Opex forecasts	В	В	В
Renewals forecasts	В	В	В

Grade	Label	Description	Accuracy
А	Highly reliable	Data based on sound records and recognised as the best method of assessment.	+/- 5 - 10%
В	Reliable	Large portion of data based on sound recordings but has minor shortcomings (e.g. old data, some missing documentation, reliance placed on unconfirmed reports and extrapolations).	+/- 10 - 15%
С	Uncertain	Significant data incomplete, unsupported or extrapolated from a limited sample.	+/- 15 - 25%
D	Very uncertain	Data based on unconfirmed verbal reports, cursory inspection and judgement of experienced person.	+/- 25 - 40%

The overall data confidence rating for three waters is B (data based on sound record, procedures, investigations and analysis which is properly documented, but has minor shortcomings for example data is old, some documentation is missing and reliance is placed on unconfirmed reports).

Asset register and condition confidence ratings will increase as a project to capture parent/child assets in the water supply and wastewater activities commences in 2024. This will increase the reliability and confidence in the asset data.

The wastewater interceptor pipeline will undergo CCTV inspection over the next three-year period to clarify its condition.

Stormwater condition assessments are based on CCTV inspections, and these are prioritised based on criticality and the likelihood of asset failure. Since 2013 approximately 50 of priority 1, 2, 3 and 4 pipes have been inspected.

Likelihood of Failure		Criticality							
	Very Low	Low	Medium	High	Very High				
1 (exceeds average age for material)	CCTV Non	CCTV	CCTV Priority	CCTV	CCTV				
	Priority*	Priority 3	2	Pnonty 1	Priority 1				
2 (within 10 years of average for material)	CCTV Non	CCTV	CCTV Priority	CCTV	CCTV				
	Priority	Priority 4	3	Priority 2	Priority 1				
3 (within 30 years of average for material	CCTV Non	CCTV Priority	CCTV Priority	CCTV	CCTV				
	Priority	5	4	Priority 3	Priority 2				
4 (More than 30 years from the end of average life for material	CCTV Non Priority	CCTV Non Priority	CCTV Priority 5	CCTV Priority 4	CCTV Priority 3				

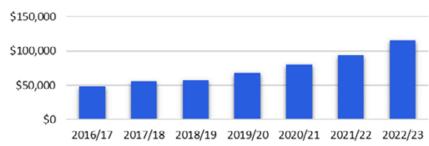
Stormwater and wastewater underground asset condition ratings will increase as further CCTV work is undertaken.

3. Managing increasing costs and affordability

In the years since the COVID-19 pandemic, inflation has increased substantially, pushing council's costs for operating our services and constructing and replacing assets up significantly. Demand for contractors, services and goods like pipes and UV disinfection systems has increased substantially due to increased standards and large infrastructure programmes around the country. This has further driven costs up. We now get much less "bang for our buck" than we did a few years ago.

As an example, the cost per kilometres for renewing road surfaces has more than doubled over the past six years:

Surfacing Renewals - cost per km



Keeping within our rates affordability limits while delivering to the required service standards is increasingly challenging across our core infrastructure activities.

Some of our strategies to address this situation are:

- seeking cost efficiencies wherever we can and looking at alternative solutions
- coordinating and phasing our work programmes where possible to ensure we get the best response to our procurement packages
- pursuing environmentally sustainable and cost-effective roading initiatives that foster our community resilience, health and safety, and encourage recycling of key materials (such as aggregate)
- leveraging our Whanganui Roading Alliance collaborative business relationship
- focusing on using single coat roading reseals where appropriate, while also lowering environmental impact through use of emulsion seals in preference to cutback bitumen
- prioritising preventative maintenance, targeting the early treatment of root causes of asset deterioration and failure (for example, targeting more drainage as a primary cause of pavement failure)
- using pipe relining as a renewal method for wastewater, as the cost is significantly less in comparison to conventional open trenching methods
- standardising equipment across sites in order to reduce the amount of spares required.

4. Climate change and resilience

The increased intensity and frequency of natural disasters and weather events means that we need to improve our planning for our critical assets to ensure that we are well prepared and risks to our critical assets and services are minimised.

The Whanganui district is vulnerable to weather-related events due to the river running through the city, our coastal location, and a district and catchment comprising steep hill country underlain by soft rock.

Climate change is impacting on the ability of our stormwater and wastewater networks to perform effectively. It is also having significant effects on our roading network.

There have been seven states of emergency declared over the past 33 years, meaning we average around one event every five years.





Whanganui climate projections

Whanganui is already feeling the effects of climate change. Our climate is getting warmer and wetter, and we are facing more frequent extreme weather events and flooding. This is projected to continue and accelerate, though the worst effects can be mitigated by a rapid global reduction in greenhouse gas emissions.

Temperature



- **»** To rise by 0.8°C by 2031-2050
- **»** To rise by 1.8"C by 2081-2100



- More hot days :>25°CGreatest warming in
- > Greatest warming in summer/autumn



- » Earlier spring melt
- » Fewer frost days

Rainfall



- Wetter conditions with annual precipitation up 1% and winter rainfall up 6% by 2031-2050
- **»** Winter rainfall up 11% by 2081-2100



The frequency and magnitude of storm-related events will increase



- Increased high country erosion
- » Increased flooding risks and river sedimentation

Planning for sea level rise



Increased coastal erosion and flooding



- » A rise of 0.3-1.0m by 2100
- » 0.2-0.5m by 2060

Regionally, the areas most at risk from a 1-in-100 year storm tide event and sea level rise are in Horowhenua and Whanganui.

Where are we vulnerable?

Roading and footpaths

- Roading pavement performance is directly related to moisture content.
- Our rural papa country roading network struggles to absorb more regular and heavier inclement weather events.
- Disruptions due to flooding, landslides, fallen trees and power lines.
- Forestry harvesting causes increased impact on roads when they are wet and vulnerable.
- Our bridges are ageing and more vulnerable to weather events.

Water supply

 Reduced security of water supply as climate change and droughts impact on our water sources.

Wastewater

 Increased inflow and infiltration of stormwater into the wastewater network, leading to more frequent and higher volume overflow events.

Stormwater

- Increased rainfall and sea levels will increase the frequency and volume of system flooding.
- In the future there is a great potential for saltwater intrusion in coastal zones, changing flood plains and a great likelihood of damage to infrastructure and properties.
- Levels of service provided by the stormwater system are likely to
 deteriorate over the long term. Parts of the key industrial area (Heads
 Road/Gilberd Street) could lose their stormwater service if sea levels rise
 due to their proximity to the Whanganui estuary as stormwater would not
 drain from this area using conventional methods.

How are we improving our resilience?

The Manawatū-Whanganui councils collectively completed a climate change risk assessment in 2021, led by Horizons Regional Council. The risk assessment gives a comprehensive overview of the climate change risks facing the region within six community values: natural world, wellbeing, business, infrastructure, cultural and governance.

Climate change risk is considered in creating new or replacement assets, ensuring redundancy is built in. Some specific adaptation mechanisms for our core infrastructure are:

Roading and footpaths

 Prioritising drainage - a road with adequate drainage lasts 30 percent longer compared to the same road without adequate drainage.

Water supply

• We are proposing to investigate an alternative bore location to mitigate risk of reliance on one primary aquifer.

Wastewater

 A wet weather performance capital improvement programme is a new addition in this Long-Term Plan 2024-2034.

Stormwater

- Since 2018 we have been undertaking a stormwater capital improvement programme focussing on at-risk areas to reduce the risk of flooding and inundation during an unusually large event.
- We are planning targeted expansion of existing wetland areas to provide much needed wet-weather storage to buffer against run-off during unusually large events, and also to provide other benefits such as biodiversity, and emissions-offsetting capability.
- We are developing a community-led climate change adaptation plan with the Putiki community which has a high flood risk (in conjunction with Massey University researchers, Horizons Regional Council and NZTA).
- We have allowed for installation of new wet weather pump stations in the Castlecliff industrial area in future years, should sea-level rise become a serious issue and undermine the effectiveness of the stormwater drainage network.

5. Growth, demographic and land use changes

Population growth

The Whanganui district had an estimated population of **48,700** as of **2022**. Whanganui's tide turned in 2014 when the population began to grow after declining in all but two years since 1996. Annual population growth in the district averaged 1.1 percent or around 500 people per annum over the five years to 2022, not far behind the national average of 1.2 percent.

One of the factors that facilitated this growth was available housing stock, with Whanganui having only relatively recently (2018) surpassed its 1996 population level of 46,000. However this capacity is now fully utilised and we find ourselves in a housing shortage, like many areas around the country.

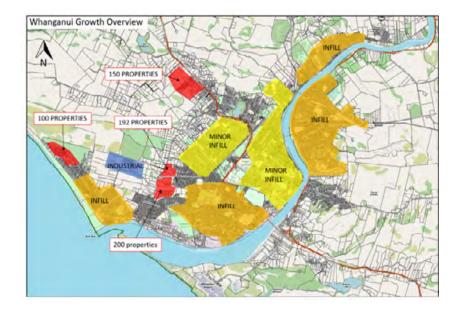
Infometrics estimates put Whanganui's forecast population growth at an average of 0.8 percent or around 370 people per year until 2034 under their high growth scenario. This would see the district grow to a population of **53,000 by 2034**. Population growth is expected to slow down beyond 2034 to around 180 people per annum over the following 20 years, based on Infometrics medium growth scenario for the 2034-54 period.

Dwelling growth

Dwelling growth is expected to range between 100–130 dwellings per annum over the 2024-33 period, reducing to around 40 dwellings per annum between 2034 and 2054.

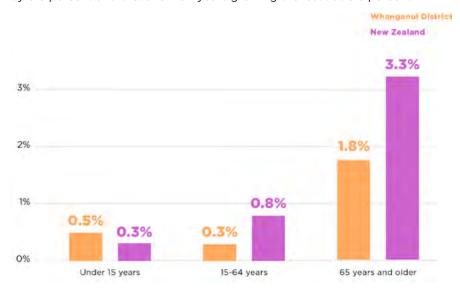
Growth is planned through the Springvale Structure Plan, the Mill Road Structure Plan and the Otamatea Structure Plan, along with infill across the city.

Managing growth is a challenge and also an opportunity. Growth adds vibrancy and attracts businesses, investment and events to the district. Investment in infrastructure is required to support growth.



Population demographics

Whanganui's population is ageing, with the 65 and over age group expected to grow by 1.8 percent in the next ten years compared to under 15's growing by 0.5 percent and those 15 - 64 years growing the least at 0.3 percent.

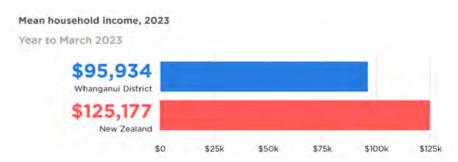


Whanganui has a lower percentage of its population in the working age group than the national average. The dependency ratio (the number of under 15 year olds and over 65 year olds as a proportion of the rest of the population) was 70.3 percent in the Whanganui district at June 2022, significantly higher than New Zealand's dependency ratio of 54.4 percent.

The community's ability to pay for services is affected by its current and future wealth and income and the number of people who can share the cost of council-provided services.

Household income is a fundamental measure of living standards and reflects the economic health of an area. Household income is derived from multiple sources including earnings from employment (wages and salaries), earnings from self-employment, allowances, benefits and superannuation.

The 2023 average household income for the Whanganui district is \$95,934 compared to the national mean household income of \$125,177. Of 66 territorial authorities, Whanganui ranks 45th for household income.



Further information on our community profile now and into the future can be found in our Whanganui District Snapshot 2023

COVID-19

The Whanganui district was relatively fortunate to be less affected by COVID-19 than many other areas around the country.

The diversity of our industrial sector, our emphasis on agriculture, food production and processing, and our lack of reliance on tourism meant that our economy was largely unaffected by COVID-19.

COVID-19 has, however, had lasting impacts on the social wellbeing of our community.

What does all of this mean?

Compared to national averages, Whanganui's population is less ethnically diverse, less well educated and less wealthy.

The non-working age proportion of our population (under 15s and over 65s) is much higher than national averages and forecast to grow at a higher rate than the working age population. This is one of the reasons that our average household incomes are significantly lower than national averages.

Rates affordability is a significant issue for our community, especially in the current cost of living crisis. This has been outlined further in our Financial Strategy in this Long-Term Plan 2024-34 which sets the limits on annual rates increases and limits on levels of debt.

As a result we have to be creative and efficient to keep our assets up to standard with the least amount of ratepayer financial input.

How we're moving forward

We have come up with a six-point plan to help us move forward:

1. Encouraging population growth over the next 10 years

We have committed to stimulating population growth within our district by ensuring we can meet the needs of a growing community. If more families, individuals and businesses move to Whanganui, we'll be able to spread the rating costs across more people helping to keep rates lower.

2. Increasing non-rates revenue

Although rates are our main source of income, we can also lean on other methods. We are increasing many of our user fees in line with cost increases from 1 July 2024, for example building and resource consent fees and trade waste and tankered waste disposal fees.

3. Finding alternative funding sources

We will always seek external funding such as central government or grant funding where possible. We've set a target to ensure that some projects will only go ahead if a good portion of the project cost is funded from elsewhere, taking the strain off our ratepayers.

4. Finding efficiency savings

We're focused on working smarter and finding efficiencies where possible. To name a few examples, we have undergone a management restructure, postponed technology software projects and reduced the number of council vehicles.

5. Reducing levels of service

The council has carefully identified services that could be cut or closed to keep costs down. Through this Long-Term Plan 2024-2034 the community had the opportunity to provide feedback on these proposals.

6. Selling assets to repay debt

The council owns many assets which could be sold to repay debt and reduce costs considerably, which would then offset rates. Following public consultation we have removed the set target for asset sales, however we will still consider asset sales and the appropriate process for selling them on a case by case basis.

Current state - Roading and footpaths

This activity ensures a safe, efficient and affordable transport network that helps with the movement of people, goods and services. This group includes roads, footpaths, cycleways, parking facilities and bridges; public transport infrastructure (such as bus shelters); and traffic control mechanisms (such as signage, lighting and road markings).

Critical assets

The critical assets for the roading and footpaths group are:

- Whanganui city bridge
- Dublin Street bridge

Asset condition

Data on road condition is collected through road roughness and condition rating surveys. Road condition is monitored throughout the year by council's maintenance contractors via the Alliance roading contract.

The average condition rating for roading and footpaths assets is fair.

Asset Group	Asset Type	Average Condition
Pavements	Roads and pavements	Fair
Structures	Bridges and large culverts	Fair
	Retaining structures	Fair
Traffic services	Traffic facilities	Good
Drainage	Drainage	Fair
Street lights	Street lighting	Good
Footpaths and cycleways	Footpaths	Fair
Other features and activities	Car parks	Fair

Pavements

Under investment in road maintenance and renewals over the past decade has resulted in a significant deterioration of our network.

The 2021-24 level of road pavement resurfacing of 4.4 percent per annum is not adequate to preserve the condition of the network. Around 70 percent of sealed surfaces have poor or very poor surface defect condition ranges.

Dublin Street bridge

Dublin Street bridge is located between the northern end of Dublin Street and Anzac Parade (State Highway 4) in Whanganui East. It spans 309m over the Whanganui River. The through truss bridge was constructed in 1914 and carries only one lane each direction for traffic, along with a separate cycleway and walkway both sides. The bridge is in poor condition. It is past its use by date as a vital asset and is extremely vulnerable, especially the piers, due to river deterioration.

The bridge forms a safe, effective and efficient link from the Whanganui East suburb via Anzac Parade, providing access to essential services, business and trade commute, and schools in the growing Whanganui city.

A structure of this type would normally have a useful material life of 100 years, meaning that it currently exceeds its expected life by 10 years and climbing.

The last detailed report on the bridge's condition and performance clearly states that it is reaching the end of its service life. It is not fit for purpose to carry modern vehicles, due to serviceable width and carrying capacity. The posted weight limit has been reduced from Class 1 (44 tonnes) to a mere 6 tonnes in response to the safety considerations. The strategic transport model developed by WSP has confirmed that the capacity of the Dublin Street bridge has been exceeded.

Logging cartage from the Kauarapaoa has a historic destination across the river to the East Town rail yard. This extensive logging, vital to New Zealand's gross domestic product, is having to cart past schools, to our central business district and out again to detour away from this bridge. This is in direct contrast to our "road to zero", "safer journeys around schools" and "climate change transport emissions reduction" mandates.

NZTA maintenance ideally requires this route as a lifelines contingency for flood recovery operations and a heavy traffic bypass lifeline detour when an emergency occurs along Anzac Parade. This is out of action currently apart from light vehicles, due to the weight restriction. Heavy commercial vehicle reliability is heavily restricted in the event of future emergencies.

Significant traffic growth in Whanganui over the last three years has exacerbated travel time delays and frustration, and the increase in users is magnifying deterioration of this bridge.

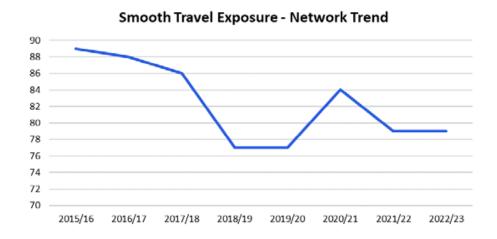
Whanganui city bridge

The Whanganui city bridge's condition rating is good. The bridge is part of the regular principal bridge inspections. The last inspection was undertaken in 2022.

Traffic modelling undertaken in 2023 has confirmed the traffic efficiency capacity of the city bridge is likely to be exceeded around 2054. Failure to replace the Dublin Street bridge would see the city bridge's capacity exceeded before 2054.

Asset performance

Smooth travel exposure is a combination of the above road roughness data and traffic loading. The graph below plots the percentage of vehicle kilometres travelled over smooth roads. Currently 79 percent of all road users (as of 2023) experience smooth travel within the Whanganui district. Whanganui has slipped in recent years and is now well below the national average of 88 percent. A full network survey is planned for March 2024.



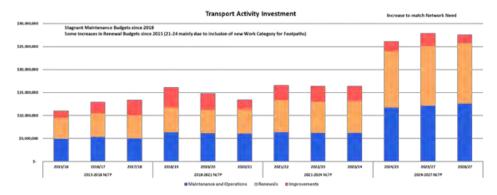
The condition of footpaths is improving due to increased investment over the past few years as a result of NZTA including a new subsidised work category for footpaths.

Looking ahead - Roading and footpaths

Key roading and footpaths issues

Requirement for a step change in the level of funding provided to operate and maintain our roading and footpath networks

Funding for our roading network has been relatively flat lined for the last 10 years. The effect of this has been an overall deterioration in network condition, observed through Smooth Travel Exposure measures and customer views surveys.



With inflation pushing costs up substantially in the post-COVID environment, maintaining the current funding levels would see much less work being done on our roading and footpath networks. This would further affect their condition and the level of service we provide to users.

Funding levels for roading and footpaths currently sit at around \$16 million per annum. In order to fully maintain our network and reinstate service levels, funding of around \$27 million per annum would be required. This level of funding is very unlikely to be accepted for subsidisation by NZTA as their funding envelope is significantly oversubscribed. We are also constrained by rates affordability. As a result, we need to make some trade-offs to balance levels of service and costs.

\$150,000 \$100,000 \$50,000

2016/17 2017/18 2018/19 2019/20 2020/21 2021/22 2022/23

See "Significant decisions" section below for further information.

Drainage, climate change and resilience to natural hazards

The roading network is impacted by challenging geology, topography and weather, resulting in increased resilience issues and high repair costs when unplanned events occur.

Steep terrain and erodible soils make the Whanganui district highly susceptible to the effects of heavy and prolonged rain events, affecting predominantly the rural transportation network. The district can expect to receive flooding to various degrees of intensity in any particular year. Climate change is increasing the vulnerability of the rural roading network.

Reinstatement works to restore road access and repair damaged infrastructure adds considerable pressure to available resources, both physically and financially. An amendment to NZTA's definition of emergency works has had the effect of making funding for emergency events harder to obtain.

Changing demands and needs

The form and function of the road network are not meeting the changing demands and needs, resulting in decreasing levels of service and increasing reactive interventions.

The increased volume and size of trucks on Whanganui's road network is putting pressure on roading infrastructure and causing concerns for council. Government legislation is promoting heavier, longer, wider and higher vehicles to increase freight efficiencies within the constraints imposed by the local transportation network.

The changing needs (e.g. mobility) and expectations (e.g. active modes) of the community require investment to meet levels of service for all transport modes.

Impacts of forestry on the roading network

Significant volumes of harvestable timber are reaching maturity in the Whanganui district, and the transport of this timber is having a significant impact on roads across the district. Many of the roads where the forests are located are not designed to accommodate modern transporters, due to their sizes, lengths and axle weights and these vehicles are substantially impacting on road surfaces. Many of the affected roads have other local residential users sharing the roads with forestry related vehicles, resulting in safety challenges.

See "Significant decisions" section below for further information.

Replacement of the Dublin Street bridge

The Dublin Street bridge is a critical asset as it provides a key transport network connection to the suburbs on the east side of the Whanganui River. The bridge was built in 1914, and at 110 years old it is approaching the end of its useful life. Planning for the bridge's replacement has begun - officers are currently working on the business case for the bridge's replacement for NZTA. A new bridge will be Class 1 rated and able to carry truck and trailer units, reducing the heavy transport travelling via the city bridge.

Funding for design and preparatory works is budgeted for 2024/25 to 2027/28 (\$2.6 million). Replacement of the bridge is planned for 2028/29 – 2029/30, at an estimated cost of \$66.0 million. The replacement of the bridge will rely on securing 62 percent investment from NZTA or other non-council funding sources.

See "Significant decisions" section below for further information.

Level of service changes

The plan increases investment in roading and footpaths to improve the quality of our roading pavements incrementally over a 10-year period. The plan also includes replacement of the Dublin Street bridge which will improve levels of service by allowing heavy traffic to cross the Dublin Street bridge rather than having to travel via the City bridge.



Significant decisions - Roading and footpaths

The key roading and footpaths decisions required are:

Requirement for a step change in the level of funding provided to operate and maintain our roading and footpaths networks

Drivers: Sustainably looking after our assets

Managing increasing costs and affordability

Decision required: 2024 as part of the Long-Term Plan

Funding for our roads and footpaths networks has been relatively flat lined for the last 10 years, and the condition of our pavements is deteriorating. With inflation pushing costs up substantially in the post-COVID environment, maintaining the current funding levels would see much less work being done on our roading and footpaths networks, which would further affect their condition and the level of service we provide to users.

A decision on funding levels for roading and footpaths was considered as part of this Long-Term Plan 2024-2034. The decision in part was dependent on how much NZTA was prepared to subsidise, as our community could not afford us to undertake the required works without NZTA's financial support. We now have confirmation of NZTA funding for the maintenance, operations and renewals programme and this is consistent with the planned expenditure in Option 2, our preferred option.

Option 1:	Increase funding to the required levels in a staged approach over the next three years 2024/25 to 2026/27 (\$3.6 million per year funding increase)							
	This option would allow us to improve the condition of the roading network in a relatively short period of time. However, it would have substantial financial impact on ratepayers and mean that we would breach our financial strategy rates increase limit. It is unlikely that NZTA would support this level of increase in funding which would mean that council would have to 100 percent fund parts of the programme, pushing extra cost onto ratepayers.							
Option 2:	Increase funding to the required levels in a staged approach over the next eight years 2024/25 to 2031/32 (\$1.4 million per year funding increase)							
	This option will allow us to gradually improve the condition of the roading network while mitigating the impact on ratepayers. The budgeted increases are more likely to be acceptable to NZTA and to secure subsidisation.							
	The roading team will work on stretching available funding as much as possible by focusing on essential maintenance and renewal requirements, using single cost seal where possible, and reverting smoother but more expensive asphaltic concrete road surfaces to cheaper chip seal.							
	More road closures will be necessary to ensure planned roadworks can lessen traffic management costs. We will see small improvements over time in the Smooth Travel Exposure (roughness) measure. Levels of service around aesthetic maintenance (e.g. vegetation control, rubbish and litter clearing) will be compromised to focus on the small improvements in maintenance. Very careful management in the short to medium term, until improvements come to fruition, will be crucial to ensure safety levels are not unduly compromised to a point where excessive fatalities and serious injuries prevail.							
	This option aligns closely with NZTA's confirmed funding announced in June 2024.							
Option 3:	Do not increase funding for roading and footpaths (\$16.0 million)							
	This option would alleviate any rates increase for roading and footpaths, but the network would continue to deteriorate to an increasing degree. Pavement deterioration occurs at an exponential rate once the pavements reach a certain level of disrepair.							
	The smoothness of roads would deteriorate well below current levels (which are already substantially below New Zealand averages), with increased ruts on sealed roads and corrugations and loose gravel on unsealed roads. This would impact on vehicle maintenance costs. Road safety is likely to be impacted. Pavements would be likely to deteriorate to the point where expensive renewals would be required. Footpath condition would deteriorate, significantly impacting the health and safety of our ageing population.							
Preferred option:	Our preferred approach is option 2; to increase funding to roading and footpaths in a staged approach over the next eight years. This will allow us to reduce the current level of pavement deterioration. However, we will still need to accept a delay in getting the network back up to appropriate condition in order to mitigate the effect on rates.							

Impacts of forestry on the roading network

Drivers: Sustainably looking after our assets

Managing increasing costs and affordability

Decision required: 2024 as part of the Long-Term Plan

Significant volumes of harvestable timber are now reaching maturity in the Whanganui district and the transport of this timber is having a significant impact on roads across the district. Many of the roads where the forests are located are not designed to accommodate modern transporters due to their sizes, lengths and axle weights and these vehicles are substantially impacting on road surfaces.

The targeted rate on exotic forestry properties was put in place in 2018/19 and set to collect \$135,000 per year. The rate was set on the basis of forestry paying 60 percent of costs, with the remaining 40 percent assumed to be public good and paid by all ratepayers. The amount collected by the rate has remained unchanged since that time. We signalled an increase in the rate would be likely from 2024/25 due to the maturity profile of the forests. As forecast, with increasing impacts of forestry on roading network costs, it is now appropriate to review the level of the rate.

Following consultation on the Long Term Plan 2024-34 our preferred option, Option 2 has been confirmed.

Option 1:	Retain the forestry exotic targeted rate at the current level of \$135,000 per annum
	This would push the increase in forestry related roading costs entirely onto the general roads and footpaths rate paid by all ratepayers.
Option 2:	Increase the forestry exotic targeted rate to \$287,000 per annum (60 percent forestry, 40 percent public good)
	This option ensures that forestry exotic properties continue to pay 60 percent of forestry related roading costs, with 40 percent being funded by the general roads and footpaths rate.
Option 3:	Increase the forestry exotic targeted rate to \$480,000 per annum (100 percent forestry)
	This option would see forestry exotic properties paying for all forestry related roading costs, with no public good contribution from the general roads and footpaths rate.
Preferred option:	Our preferred approach is option 2 - we will increase the forestry exotic targeted rate from \$135,000 to \$287,000 from 2024/25 and to continue with the current 60 percent forestry, 40 percent public good approach going forward throughout the period of the plan.

Replacement of the Dublin Street bridge

Drivers: Sustainably looking after our assets

Managing increasing costs and affordability

Climate change and resilience

Decision required: By 2027

The Dublin Street bridge is a key transport network connection to the suburbs on the east side of the Whanganui River. The bridge was opened in 1914. It is now 110 years old and approaching the end of its useful life. Planning for the bridge's replacement has already begun, with officers currently preparing a business case for NZTA. Replacement of the bridge is planned for 2028/29 to 2029/30 with planning, design and engagement in the years leading up to this. The full project is expected to cost \$62.6 million. A new bridge will be Class 1 rated and able to carry truck and trailer units, reducing the heavy transport travelling via the city bridge.

The replacement of the Dublin Street bridge relies on securing 62 percent funding from NZTA or other non-council funding sources (e.g. other central government funds). Council's share of the cost of the project (38 percent or \$26.1 million) will be funded via loans.

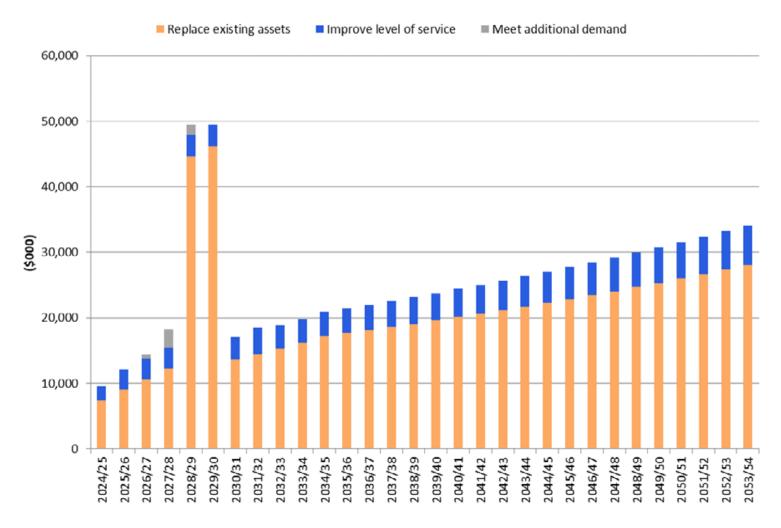
Option 1:	Replace the Dublin Street bridge at an estimated cost of \$68.6 million with 62 percent external funding (NZTA and/or other non-council funding). This leaves \$26.1 million to be funded by council via debt.
	This would retain the critical bridge connection to Whanganui East and State Highway 4. A new bridge will be Class 1 rated and able to carry truck and trailer units, reducing the heavy transport travelling via the Whanganui city bridge.
Option 2:	Replace the Dublin Street bridge with less than 62 percent external funding. This will mean council needs to contribute more than \$26.1 million to the \$68.6 million project.
	This option achieves the replacement of the critical bridge, but at a higher cost to ratepayers. Every \$1 million extra that council has to borrow will add \$3.50 per year to average rates for the next 25 years.
Option 3:	Undertake significant maintenance work to extend the life of the Dublin Street bridge by 20 years. The cost of this is expected to be \$29.2 million over the 20 year period.
	The option to extend the life of the bridge by 20 years would cost 44 percent of the cost of a new bridge. It is also likely that the bridge would need to be downgraded from a maximum weight of 6 tonnes (already reduced) to only 3.5 tonnes for the last five years. In addition, there is minimal resilience as a significant flood event could push heavy debris into the deteriorating piers, cutting short the bridge's extended life expectancy.

Option 4:	Demolish and remove the Dublin Street bridge and reconfigure the roading network to manage the loss at a cost of \$10 million (rough order cost only dependent on Te Awa Tupua consultation on differing methodology options)							
	This would remove the more direct link to the suburbs on the east side of the Whanganui River and would add pressure to the Whanganui city bridge. The city bridge would be swamped very quickly with unreasonable pressure placed on the river frontage, State Highway 4 and Taupo Quay amenities, overwhelming the Victoria Avenue traffic lights and surrounding intersections to the central business district. This would cause significant disruption and unnecessary vehicle emissions.							
Preferred option:	Our preferred option is option 1 - to replace the Dublin Street bridge with the assistance of NZTA and/or other central government funding.							

Key capital projects 2024-34 - Roading and footpaths

Capital expenditure to meet additional demand (\$000)	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
Manuka St and Mill Rd upgrade	-	-	594	2,770	816	-	-	-	-	-
Fox Road Upgrade	-	-	-	53	761	-	-	-	-	-
Total	-	-	594	2,823	1,577	-	-	-	-	-
Capital expenditure to improve level of service (\$000)	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
Shared pathway counters	80	-	-	-	-	-	-	-	-	-
Low cost/low risk projects	2,000	3,060	3,127	3,196	3,263	3,332	3,398	3,466	3,532	3,599
Rapanui Road trail	-	-	-	-	-	-	-	578	-	-
Total	2,080	3,060	3,127	3,196	3,263	3,332	3,398	4,044	3,532	3,599
Capital expenditure to replace existing assets (\$000)	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
Footpaths and berms replacements	694	825	949	1,081	1,163	1,240	1,318	1,398	1,480	1,564
Dublin Street Bridge replacement	250	510	782	1,065	32,632	33,318	-	-	-	-
Unsealed road metalling	453	539	620	706	760	810	861	913	967	1,022
Sealed road resurfacing	2,706	3,221	3,703	4,218	4,539	4,837	5,141	5,455	5,774	6,104
Drainage renewals	997	1,187	1,365	1,555	1,673	1,783	1,895	2,011	2,129	2,250
Pavement rehabilitation	1,336	1,590	1,828	2,083	2,241	2,388	2,538	2,694	2,851	3,014
Structures and components replacements	382	455	523	596	641	684	727	771	816	863
Traffic services replacements	608	723	832	948	1,020	1,087	1,155	1,225	1,297	1,371
Total	7,426	9,051	10,603	12,253	44,670	46,147	13,635	14,468	15,315	16,188

Capital expenditure profile 2024-54 - Roading and footpaths



Current state - Water supply

Whanganui District Council provides five water systems across the district. Water systems play a vital role in ensuring the health and safety of communities, including through the provision of water for residents and businesses, and for firefighting purposes in the urban area.

Critical assets

The critical assets for water supply are:

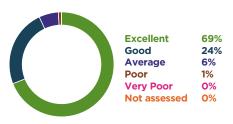
- Kai Iwi bores 1, 2 and 4
- Heloise, Pākaraka and Fordell bores
- Reservoirs No 1, 2 and 3
- Kai lwi supply main and bridge crossings (Kai lwi and Gilligan's bridges)
- Castlecliff main
- Trunk mains
- Mains servicing critical users
- Bastia Hill tower

Asset condition

Water Supply Below Ground Asset Condition



Water Supply Critical Asset Condition



The current condition of Whanganui District Council water supply assets is classified as being good to excellent, with over 80 percent of the underground and critical assets within this rating.

This overall condition rating will continue to increase with the continuation of the spiral welded pipe replacement capital project.

A project to capture and condition rate parent/child complex assets is being investigated and will commence in 2024. This will further increase the reliability and confidence in the water asset data.

Asset performance

Whanganui's water supply was 100 percent compliant with parts 4 and 5 of the Drinking water Standards 2005 (revised 2018), meeting 100 percent bacterial and protozoal compliance through to December 2022.

From 1 January 2023 reporting has begun against the Drinking Water Quality Assurance Rules (DWQAR) introduced by Taumata Arowai. Under these rules, all active bores for the Whanganui supply are currently classified as Class 1 or Interim Class 1. We are continuing the sampling regime to meet Class 1 status; however, retaining this status is precarious.

The bacterial standard for part 4 compliance under the new rules was not met for the period 1 January 2023 to 30 June 2023. There were also a small number of residual chlorine samples that did not meet minimum requirements. Where samples were non-compliant, we took prompt action and there was no risk to public health, as confirmed by Wai Comply in their independent assessment.

Kai lwi bore number 3 has been isolated because in its current state it does not meet the requirements under the DWQAR, being a shallow bore with a potential effect on the Kai lwi Stream.

Looking ahead - Water supplyKey water supply issues

Compliance and increasing regulatory standards

The introduction of the Water Services Act 2021 has resulted in a step change in what is required to operate a water supply safely. The new water regulator Taumata Arowai introduced the DWQAR on 1 January 2023 to ensure all communities have access to safe and reliable drinking water every day.

The Water Services Act 2021 calls for a multi-barrier approach to water safety. Chlorination provides an active barrier to kill or inactivate bacteria and viruses in the water and protect the water from recontamination in the reticulation. However, chlorine is not effective at killing or inactivating protozoa. For protozoa the supplies rely on preventing contamination from entering the source water (bore supplies).

All of our active bores have Class 1 or Interim Class 1 status under the new DWQAR. Retention of Class 1 or Interim Class 1 status such that no protozoa barrier is required by the DWQAR is precarious, relying on the absence of any microbiological indicators such as total coliforms or *E.coli*. The total coliform test is very sensitive and as a result four of the six active Whanganui bores currently require daily sampling representing a significant workload and expense. There is also a two-year timeline for the drinking water supplier (in this case, council) to prove that the bore water is safe in this manner. As an example, if Kai Iwi bore 4 has another positive result before August 2024, then a protozoa barrier (UV treatment) will be required according to the DWQAR.

We have also identified a small number of consumers (approximately 30 connections) who are on a non-chlorinated water supply. This does not meet our obligations to provide safe drinking water under the new rules of the Water Services Act 2021.

The Act makes it compulsory for all water supplies to take all practicable steps to comply with the new Quality Assurance Rules 2023. Improvement works to improve water supplies to comply with latest standards will result in an increase in level of service to the community.

Central government via the Ministry of Health has indicated that fluoridation of water sources will be required across the country. At this stage there is not a firm timeframe for when Whanganui's water supply will need to be fluoridated.

See "Significant decisions" section below for further information.

Source water availability

With ageing bore infrastructure approaching end of life, this is an opportune time to investigate future source water supplies and consider broadening the location of those supplies so that we can increase redundancy, reduce risk and future proof the supply.

The majority of Whanganui's water is sourced from Kai Iwi, which means we have a level of risk if there are any natural events affecting the Kai Iwi area or other issues affecting the aquifer or the bore infrastructure.

Kai Iwi bore number 3 has been isolated because in its current state it does not meet the requirements under the DWQAR, being a shallow bore with a potential effect on the Kai Iwi Stream.

There has been collaboration on a number of cultural tools and mechanisms with Hapū and Iwi to help with concerns regarding the city's reliance on one area for the majority of the districts water supply. We are working with Hapū and Iwi with all cultural concerns to encompass the principles relating to Tangata Whenua in the management of freshwater.

To add to the resilience of Whanganui's source supply we are investigating opportunities south of the river.

See "Significant decisions" section below for further information.

Back-up power supply at critical sites

Generators are required at critical water supply sites to ensure that in the event of a power outage, particularly for an extended period, safe, secure and consistent supply can be maintained. This will provide resilience to our supply.

Network resilience and adaptation

We have provided funding for network resilience and adaptation from 2027/28. This will allow us to begin to address climate change and growth pressures on our water supply network, for example by increasing redundancy in the network.

Spiral welded pipe replacement

We have a number of old spiral welded steel pipes in our water supply network that are beyond economic life and subject to leakage. They are now susceptible to damage from earthquakes and do not meet regulatory requirements. We have been progressively replacing these pipes with new PE or PVC pipes over many years and will continue to do so through the period of this Long-Term Plan. We expected to have all of the spiral welded steel pipes replaced by 2028.

Extension of the network to cater for marae

We are planning on extending our water supply network to cater for marae located on the edges of the city. This will provide a secure and safe potable water supply for residential and agricultural use.

Bastia Hill water tower

A seismic assessment of the Bastia Hill water tower identified structural risks due to loadings. We propose to decommission the tanks from the tower to reduce load weights, retaining the tower structure for its historical significance and as a landmark. The water tower's function will be replaced by a new pump station and tank in Bastia Avenue.

Level of service changes

The plan increases investment in water supply to meet the new standards set out in the Water Services Act 2021, like a multiple barrier approach to drinking water safety by adding UV disinfection to our supplies.

Extending the water supply networks to provide water to marae on the outskirts of the city will also improve levels of service.

Back-up power supplies, source water availability investigations and funding for network resilience and adaptation will mitigate risks in our supplies.

Significant decisions - Water supply

The key water supply decisions required are:

UV disinfection and chlorination

Drivers: Changing legislative requirements and environmental standards

Decision required: 2024 as part of the Long-Term Plan

The new DWQAR introduced from the regulator, Taumata Arowai, on 1 January 2023 means that a higher standard is now required to be met to provide safe drinking water. The rules apply to anyone supplying water for consumption.

We have undertaken a risk assessment and identified a small number of consumers (approximately 30 connections) on an untreated water supply. This does not meet council's obligations to provide safe drinking water under the new rules of the Water Services Act 2021.

Additionally, there is increasing uncertainty around the ability to maintain the Interim Class 1 status of our bores. As a result, we may be required to install a protozoa barrier (UV disinfection). If our water testing sample results are positive at any stage, this could result in a regulatory requirement to provide a protozoa barrier. These factors, along with the ongoing resourcing and the substantial cost of Class 1 sampling and analysis indicate UV treatment is required.

Option 1:	Implement new UV disinfection and chlorination plants at a cost of \$2 million in 2024/25 - 2025/26 A UV disinfection plus chlorination process will provide safe drinking water to all consumers across our supplies and provide resilience in maintaining compliance with the DWQAR. The process meets both bacteriological and protozoal compliance criteria. It also provides a multiple barrier approach to water treatment as required by the Water Services Act 2021.
Option 2:	Do not implement a new UV and chlorination plant and continue with the intensive sampling regime for Interim Class 1 This option would have a two-year maximum timeframe, it requires intensive daily sampling, and if we have another water sample positive for bacteria or protozoa we will be required to put in place UV disinfection and chlorination across the board for all of our supplies.
Option 3:	Put in place a boiled water notice This would reduce the level of service we provide to our customers and would not meet the needs of some of our commercial customers.
Preferred option:	Our preferred option is option 1 - we will proceed to implement a new UV and chlorination plant to ensure a multiple barrier approach and provide resilience.

Source water availability

Drivers: Climate change and resilience

Sustainably looking after our assets

Decision required: By 2030

During the Long-Term Plan period (2028/29 - 2029/30) we will investigate future water source supplies to provide resilience and redundancy and to replace ageing infrastructure that is coming to the end of its life. This will allow us to future proof the supply.

The majority of the city's water supply is sourced from Kai Iwi, which means we have a level of risk if there are any natural events affecting the Kai Iwi area or other issues affecting the aquifer or the bore infrastructure. Kai Iwi bore number 3 has a limited life and does not meet the requirements of the new DWQAR, being a shallow bore and considering the potential effect on the Kai Iwi Stream.

Option 1:	Begin investigations into a new water source at the southern end of the Whanganui district
	A bore location in a different area of the district - e.g. on the southern side of the Whanganui River - would provide council with resilience and reduce risk, allowing us to future-proof the supply.
Option 2:	Utilise the council land and existing infrastructure we already have at Kai Iwi to sink another bore
	Sinking another bore at Kai Iwi would be the cheapest option as there is infrastructure already in place at that location. However, this would not address resilience and risk, nor would it address Iwi views.
Option 3:	Create no new water sources
	This would reduce our water source options with Kai Iwi bore number 3 at the end of its service life. This option does not address our risk and resilience issues, nor does it future-proof the supply.
Preferred option:	Our preferred option at this stage is option 1 - to investigate finding a new water source at the southern end of the district. We will have source water investigations complete by 2030 for future council decision-making.

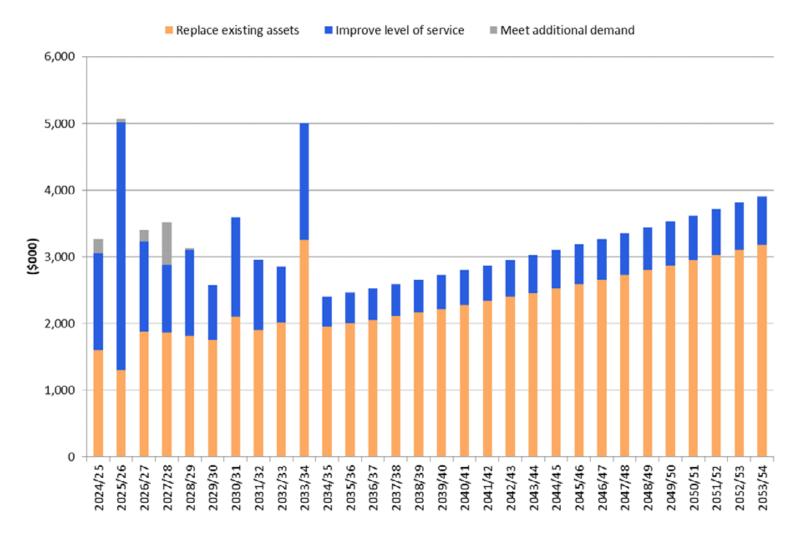
Key capital projects 2024-34 - Water supply

Capital expenditure to meet additional demand (\$000)	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
Urban reticulation (growth)	-	-	-	533	-	-	-	-	-	-
Zone metering for remote water management	54	56	_	-	_	-	-	-	_	-
Fox Road upgrade Sherwood PI to Mosston Rd	-	-	170	-	_	-	-	_	-	-
Mannington Rd pump station upgrade	-	-	-	99	26	-	-	-	-	-
Total	54	56	170	632	26	-	-	-	-	_

Capital expenditure to improve level of service (\$000)	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
Fordell booster pump and tank	250	255	-	-	-	-	-	-	-	-
Central city water mains upgrade	325	204	-	-	272	-	-	231	-	-
Extension of network to cater for marae	140	143	-	213	-	-	227	-	-	240
Mains	25	26	26	27	27	28	28	29	29	30
Meters & backflows	100	102	104	107	109	111	113	116	118	120
Connections	100	102	104	107	109	111	113	116	118	120
City water pump stations	15	15	16	16	16	17	17	17	18	18
Zone remote metering	50	51	52	53	54	56	57	58	59	60
Urban easements	10	10	10	11	11	11	11	12	12	12
Water source investigation	-	-	-	-	22	22	-	-	-	-
UV disinfection and chlorination	400	1,887	261	-	-	-	-	-	-	-
Power generation for critical sites	-	408	417	-	-	-	-	-	-	-
Source water security (city)	-	-	156	213	326	-	-	-	-	-
Source water security (rural)	-	306	-	-	-	-	453	-	-	-
Westmere Reservoir and 'Heloise' bore UV and chlorination	44	47	48	49	71	69	77	73	74	77
Alternative to Dublin Street Bridge main	-	-	-	-	-	-	-	-	-	600
Network resilience/adaptation	-	-	-	224	272	389	396	404	412	468
New treatment facilities	-	153	156	-	_	-	-	-	-	-
Total	1,459	3,709	1,351	1,018	1,289	813	1,493	1,055	839	1,744

Capital expenditure to replace existing assets (\$000)	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
Vehicle replacements	61	62	63	65	66	68	69	70	72	73
Fordell rural scheme - replacements	17	42	18	18	19	19	56	22	23	23
Fordell rural scheme - timber tank replacement and repairs	152	-	-	-	-	-	-	-	-	-
Maxwell rural scheme - replacement	4	4	4	4	4	5	5	5	5	5
Westmere rural scheme - replacements	13	11	74	12	63	19	88	53	59	65
Mains	5	5	5	5	6	6	6	6	6	6
Mains	51	52	53	54	55	56	57	59	60	61
Valves and hydrants	51	104	158	189	193	197	201	205	209	212
Mains	56	57	58	59	61	62	63	64	66	67
Meters and backflows	56	57	58	59	61	62	63	64	66	67
Valves and hydrants	56	57	58	59	61	62	63	64	66	67
Connections	203	312	423	540	662	676	688	703	716	726
City water pump stations	10	10	11	11	11	11	11	12	12	12
SCADA/communications systems	2	2	2	2	2	2	2	2	2	2
Roading coordinated projects	164	168	171	175	179	183	186	190	193	196
Spiral welded pipe replacement	164	168	171	175	179	183	186	190	193	196
Bastia Hill tower decommissioning	-	-	-	-	-	-	-	-	119	1,210
Ikitara Road pump station	-	-	63	-	-	-	-	-	-	-
Aramoho bore water treatment plant	44	34	12	220	51	-	69	47	-	123
Variable speed drive 1,2,3	51	52	106	-	-	-	-	-	-	-
Westmere reservoir pipework	-	-	158	-	-	-	-	-	-	-
Kai Iwi bores and pipework	101	104	211	216	143	147	287	141	143	145
Symes Road replacement	507	-	-	-	-	-	-	-	-	-
Total	1,767	1,303	1,878	1,865	1,815	1,758	2,101	1,898	2,009	3,256

Capital expenditure profile 2024-54 - Water supply



Current state - Wastewater

We provide and manage two wastewater systems: the Whanganui urban wastewater system and the Mowhanau rural wastewater system. The systems comprise of service lines, pipe networks, pump stations, treatment plants and outfalls. The wastewater activity involves the safe management and disposal of human wastewater and industrial trade waste.

Critical assets

The critical assets for the wastewater group are:

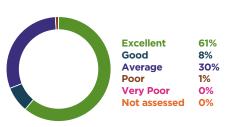
- interceptor pipeline
- Beach Road pump station
- treatment plants
- river crossing
- ocean outfall

Asset condition





Wastewater Critical Asset Condition



Over 70 percent of the underground and critical wastewater assets are rated as being in good to excellent condition. 30 percent of the critical assets are classified as being in average condition; this predominantly relates to the underground interceptor pipeline and is considered unreliable. The interceptor pipeline will undergo CCTV inspection over the next three-year period to clarify its condition.

Asset performance

The wastewater network performs according to design standards during dry weather events, and this is sufficient for our needs as a community.

The network, however, performs at an unacceptable standard during wet weather events. This has a negative impact on the environment. This strategy provides direction on how best to mitigate this impact through targeted capital investment.

Looking ahead - Wastewater

Key wastewater issues

Poor performance of the wastewater network during wet weather events

The urban wastewater network does not perform adequately during wet weather events. This occurs due to groundwater infiltrating the wastewater network, the inadequacy of the stormwater network during significant events, leakage, network configuration and lack of storage capacity in the network. Hydraulic modelling has been undertaken and we are planning to embark on a long-term improvement programme to reduce spillages from the wastewater network during significant wet weather events.

See "Significant decisions" section below for further information.

Mowhanau discharge consent renewal

The discharge consent for the Mowhanau wastewater treatment system expired in 2021 and has yet to be renewed. The system is currently operating on existing use rights. Consensus has been unable to be reached from all parties to obtain a new consent. Further, the treatment system is reaching end of life, with variable discharge results and often no improvement pretreatment to post-treatment. Through this Long-Term Plan we are planning to decommission the Mowhanau wastewater treatment system and connect Mowhanau to the city wastewater network.

See "Significant decisions" section below for further information.

Ocean outfall consent renewal

Our ocean outfall consents for discharging effluent from the city wastewater treatment plant to the Tasman Sea are due to expire in July 2026. The renewal of these types of consents involves a rigorous process with all stakeholders and significant environmental assessment. Over time, resource consent limits tend to become more stringent. We cannot foresee the outcome of the resource consent renewal process at this time, but there is a possibility that we may need to treat our wastewater to a higher standard which may require additional capital investment in the future.

Wastewater treatment plant upgrades

The aeration tanks at the Whanganui wastewater treatment plant require refurbishment and corrosion protection to maintain their structural integrity. We have also planned for an upgrade to the odour control systems related to the sludge dryer.

Sludge disposal

Dried sludge from the Whanganui wastewater treatment plant has been accumulating in the settling pond from the previous failed wastewater treatment plant since the new plant opened in 2017. The settling pond capacity is surveyed every three months and is currently expected to reach full capacity by September 2026. The pond will require capping when it is full. We also need to find a long-term solution for disposal or reuse of the dried solids. The options available are influenced by the degree of heavy metal contamination in the sludge.

See "Significant decisions" section below for further information.

Cogeneration plant

The anaerobic pond at the wastewater treatment plant generates methane gas as part of the effluent treatment process. The gas is currently flared off, wasting a valuable alternative energy source. We are considering harnessing the gas either as a supplementary energy source for the sludge drier, or to generate electricity to reduce the operating costs of the wastewater treatment plant. Investigations into the viability of this project are underway – the project depends on consistent quality of the methane gas produced by the pond.

Growth

Wastewater network extensions are planned for the Fox Road/Fitzherbert Avenue areas to support the planned residential developments, as well as an upgrade in the Mill Road/Manuka Street area to support industrial development.

A new wastewater pump station is planned to service the Mannington Road area. Tregenna Street pump station will require upgrading to provide capacity for attenuation and growth around 2030-32.

Interceptor pipeline renewal/augmentation

The main city wastewater interceptor pipeline is located in the bed of the Whanganui River and is approximately 2 kilometres long. Due to its location it is difficult to CCTV to ascertain its condition. The interceptor pipeline is constructed from concrete and as such has an estimated design life of around 50 years. It is currently 40 years old and therefore is expected to need replacement around 2034-2038 at an estimated cost of approximately \$30 million.

Level of service changes

The \$30 million plus long-term programme of wastewater network improvements will improve the performance of the wastewater network during weather events. This will improve have positive impacts on the environment, including the Whanganui River, and on public health by reducing wastewater network spillages.

The connection of Mowhanau to the Whanganui city wastewater network and treatment plant will not provide any noticeable improvements to customers but will have a beneficial environmental impact on the Mowhanau stream and surrounds and ensure that the wastewater is treated to standard.

The proposal to investigate options for sludge incineration and cogeneration will improve our environmental impact and sustainability.

Significant decisions - Wastewater

The key wastewater decisions required are:

Poor performance of the wastewater network during wet weather events

Drivers: Level of service improvements

Climate change and resilience

Sustainably looking after our assets

Managing increasing costs and affordability

Decision required: 2024 as part of the Long-Term Plan

The urban wastewater network does not perform adequately during wet weather events. This occurs due to groundwater infiltrating the wastewater network, the inadequacy of the stormwater network during significant events, leakage, network configuration and lack of storage capacity in the network. It results in spillage from the wastewater network, impacting the environment, people and property.

Through this Long-Term Plan 2024-2034 we considered options to address this issue based on hydraulic modelling we had undertaken. Following consultation, Option 1 was confirmed.

Option 1:

Embark on a \$30 million plus long-term programme of wastewater network improvements to address the wet weather performance of the wastewater system (\$200,000 in year 1, \$1 million in year 2 and then \$1.5 million per year thereafter) and upgrade the Jones Street pump station (\$13.4 million over the period 2028-2031)

This will allow us to upgrade the wastewater network over time to address high-risk areas identified via hydraulic modelling.

Wastewater from Whanganui East is currently routed across the Whanganui River via Dublin Street bridge to the western interceptor and then the Beach Road pump station before crossing the river a second time to the wastewater treatment plant on Airport Road. The Jones Street pump station upgrade will assist with wastewater wet weather performance as it will allow wastewater from the east side of the city to be pumped along Anzac Parade directly to the wastewater treatment plant. This avoids pumping the wastewater from Whanganui East across the river twice and will free up capacity on both sides of the river, improving levels of service and allowing for growth.

This long-term upgrade programme will significantly reduce the risk of diluted wastewater entering the Whanganui River achieving the objectives of the Te Awa Tupua Act 2017.

Option 2:	Do not address wet weather performance of the wastewater network
	This option does not allow for any improvement in the wet weather performance and does not reduce the risks to people and the environment.
Preferred option:	Our preferred option is option 1 - this option will allow us to address the wet weather performance of the wastewater network over time to reduce impacts on the environment and people, in a way that meets affordability requirements for ratepayers.



Mowhanau wastewater system alternative disposal

Drivers: Changing legislative requirements and environmental standards

Level of service improvements

Decision required: 2024 as part of the Long-Term Plan

The discharge consent for the Mowhanau wastewater system expired in 2021 and the plant has been operating on existing use rights since that time. The existing onsite treatment and disposal approach is objected to by Iwi because of their relationship with the site and because of the impact on surrounding land and the nearby stream. Further, the current discharge arrangement (filter beds and a land disposal system) is unlikely to be considered acceptable from a modern consenting perspective. The treatment plant is not performing to required standards. We are seeing mixed discharge results, often with little improvement in effluent quality pre-treatment to post-treatment. Any new consent is likely to bring with it more stringent discharge limits which will likely mean that the existing treatment plant is unsuitable and needs to be replaced.

Following consultation on the Long-Term Plan 2024-34, Option 1 was confirmed.

Option 1:

Install a pipeline to connect Mowhanau to the city wastewater network and decommission the Mowhanau wastewater treatment system (capital cost of \$6.1 million with lower ongoing costs, 50-year net present value of \$8.2 million)

This is likely to be the best and most cost-effective long term solution for treating Mowhanau's wastewater. It will remove the environmental impacts on the Mowhanau land and nearby stream and will avoid any potential upgrade of the existing filter bed and land disposal system to meet new consent requirements. The overall net present value for this option is lower than for replacing the plant because the ongoing operating costs of conveying the effluent to the city are lower than the operating costs for treating the wastewater at Mowhanau. This option will also alleviate the need for us to renew the discharge consent now and into the future.

Option 2:

Replace the existing Mowhanau wastewater treatment system with a new plant which would treat the effluent to a higher standard (capital cost of \$6.1 million with higher ongoing costs, 50-year net present value of \$14.0 million)

It is expected that this option may require significant investment to upgrade the current filter bed and land disposal system to a mechanical package plant. Location of the plant is uncertain and may require land acquisition. Mechanical plants require more intensive operator input, have higher energy consumption, and will increase truck movements through the village to transport chemicals and sludge. We would also need to renew the consent, now and on a regular basis into the future. This is a costly exercise and can trigger further investment if discharge limits tighten up, as they tend to do over time. Further, this option does not achieve lwi aspirations for the site.

Option 3:	Status quo - continue to treat using the existing land disposal and filter bed system and discharge under existing use rights
	Council is likely to face prosecution when existing use rights are revoked. A prompt solution to this issue is required.
Preferred option:	Our preferred option is option 1 - to construct a pipeline to convey wastewater from Mowhanau to the city wastewater network and wastewater treatment plant.



Long-term solution for dried sludge

Drivers: Changing legislative requirements and environmental standards

Managing increasing costs and affordability

Level of service improvements

Decision required: 2025

Dried sludge from the Whanganui wastewater treatment plant has been accumulating in the old settling pond from the previous (failed) wastewater treatment plant since the new plant became operational in 2017. The settling pond capacity is surveyed every three months and is currently expected to reach full capacity by September 2026. We need to find a long-term solution for disposal of the dried sludge from the wastewater treatment plant. The options for disposal or reuse of the solids are influenced by the degree of heavy metal content they contain. Current heavy metal concentrations mean that the only option for disposal once the settling pond is full is likely to be to transport the solids to Hampton Downs landfill in the Waikato at significant cost. We are working to reduce heavy metal concentrations in sludge going forward, and we are investigating alternative options for dried sludge reuse or disposal.

Option 1:

Modify plant to incinerate dried sludge, creating a heat source to fuel the dryer and creating a high value waste stream (\$3.5 million)

There is an opportunity to incinerate the dried sludge as a fuel to power the dryer. The dried sludge can be turned into ash through a special form of incineration, turning it into 80 percent dry matter and thereby reducing the quantity significantly. This option can deal with contaminated or uncontaminated sludge. The dried sludge has good calorific value and will burn in a similar fashion to peat. This option would reduce or eliminate the energy costs of the dryer, in conjunction with the cogeneration plant project. It would negate the need to transport the dried sludge to Hampton Downs as it could remain stored onsite. Tests are being conducted to see if the ash could be used in masonry or road pavement materials.

Uncontaminated sludge run through the dryer and incinerator is being tested and is shown to be equivalent to potash, a highly valuable agricultural fertiliser. The capacity of the plant would allow for all onsite stored sludge to be incinerated as well as uncontaminated sludge from external sources, creating two value streams.

Option 2:

Remove heavy metal contaminates from waste stream and do not modify plant

This option relies on removing heavy metal contaminates upstream of the wastewater treatment plant by identifying points of entry to the wastewater system. If the heavy metal contaminant levels were to be dropped below the levels prescribed in the Guidelines for Safe Application to Land 2003, the option is then available for the sludge to be mixed and used for beneficial purposes. This option does not allow for reduction of the operating costs of the dryer.

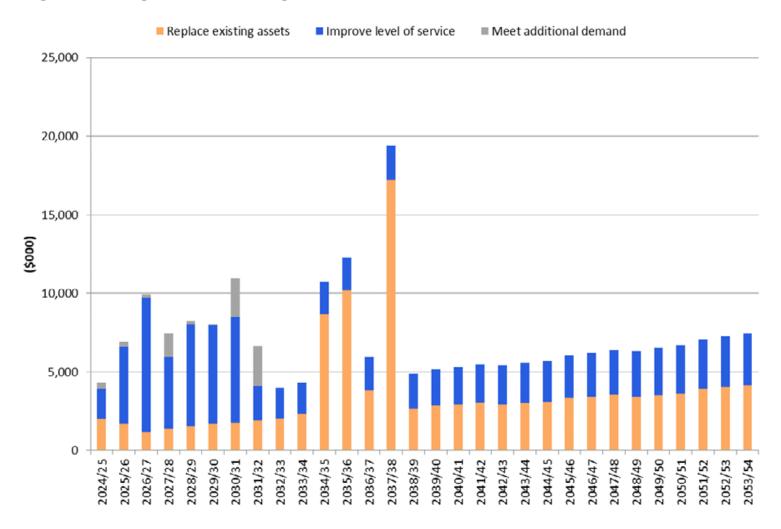
Option 3:	Begin carting sludge to a facility that will accept contaminated and uncontaminated waste in two to three years' time when the settling pond is full, (likely to be Hampton Downs landfill in the Waikato) (estimated at \$2 million per annum)
	This option has a very high annual operating cost and will be subject to significant risk of further price fluctuation into the future, with the substantial transport distance and costs of sending waste to landfill increasing exponentially over time.
Preferred option:	Our preferred option is option 1 - to add an incineration plant to the wastewater treatment plant to deal with both the historic contaminated sludge and any new uncontaminated sludge. This allows for reducing the operating cost of the dryer and avoids sending the sludge to landfill. It also provides for potential beneficial reuse of the ash when contaminates are removed.

Key capital projects 2024-34 - Wastewater

Capital expenditure to meet additional demand (\$000)	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
Urban reticulation (growth)	50	124	250	341	207	39	-	-	-	-
Fox Rd wastewater extension	-	186	-	-	-	-	-	-	-	-
Fox Rd to Fitzherbert Avenue wastewater	350	-	-	-	-	-	-	-	-	-
Upgrade Tregenna Street pump station – attenuation capacity for growth	-	-	-	-	-	-	2,492	2,507	-	-
Mannington Rd wastewater pump station and laterals	-	-	-	373	-	-	-	-	-	-
Manuka St and Mill Rd upgrade	-	-	-	826	-	-	-	-	-	-
Total	400	310	250	1,539	207	39	2,492	2,507	-	-

Capital expenditure to improve level of service (\$000)	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
CCTV of critical assets	50	102	125	160	163	167	170	173	177	180
Backfill of outstanding connections	10	10	10	11	11	11	11	12	12	12
Network improvements	200	1,020	1,564	1,598	1,632	1,666	1,699	1,733	1,766	1,800
Jones St wastewater pump station	-	-	-	-	4,351	4,442	4,531	-	-	-
Mowhanau wastewater connection to city	369	2,040	3,785	-	-	-	-	-	-	-
Ocean outfall	270	275	-	-	-	-	306	312	-	-
Cogeneration plant	50	102	208	1,438	326	-	-	-	-	-
Sludge disposal solutions	-	408	2,606	533	-	-	-	-	-	-
Sludge disposal pond capping	-	-	-	799	-	-	-	-	-	-
Ocean outfall consent renewal	500	510	-	-	-	-	-	-	-	-
Total	1,449	4,468	8,299	4,538	6,483	6,286	6,718	2,230	1,955	1,992
Capital expenditure to replace existing assets (\$000)	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
Vehicle replacements	61	62	64	65	66	68	69	70	72	73
Urban reticulation replacements	605	722	849	976	1,106	1,241	1,380	1,524	1,671	1,822
Inflow and infiltration investigations	50	52	53	54	55	56	58	59	60	61
Reactive replacement of non-critical assets	121	144	170	184	188	192	196	199	203	206
Pump station replacements	44	45	47	48	49	50	51	52	53	53
Beach Road Pump Station electrical upgrade	1,312	670								
Flyght pumps major service	-	-	-	76	88	90	-	-	-	-
Aeration tank refurbishment and corrosion protection	454	464	-	-	-	-	-	-	-	-
Dryer foul air improvement	-	-	212	-	-	-	-	-	-	-
Total	2,648	2,160	1,394	1,404	1,553	1,697	1,753	1,904	2,058	2,337

Capital expenditure profile 2024-54 - Wastewater



Current state - Stormwater

We manage and maintain an urban network of pipes, retention ponds, and basins to safely direct stormwater to the river.

The management of our stormwater assets aims to ensure healthy waterways, resilient communities, and a thriving future for generations to come.

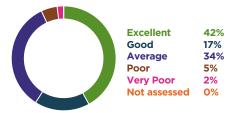
Critical assets

The critical assets for this group are:

flood valves

Asset condition

Stormwater Below Ground Asset Condition







Whanganui has undertaken a stormwater/wastewater separation project which resulted in new stormwater pipes being laid. As a result we have a high condition rating for our underground stormwater assets as they are of a relatively young age.

This also applies to the critical flood valves as they are rated as being in excellent or good condition.

Asset performance

The stormwater network has historically been designed to achieve lower levels of service than normal standards. This was to enable investment in additional infrastructure to complete the separation project over the last few decades.

The network, therefore, performs below an acceptable standard for the longterm effectiveness of the service.

The stormwater network consists of a primary system (the piped stormwater network) and a secondary system (overland flow paths). Average Recurrence Interval (ARI) is the average time period between flood events.

The primary piped network has an ARI of less than one year, meaning that flood events occur on average on a more than annual basis. New developments are designed for a 10-year ARI event.

The overland flow of the secondary system is designed for a 50-year ARI event as per the Building Act. New developments or network improvements in the urban area are designed for a 200-year ARI event as per Horizons Regional Council's One Plan.

Looking ahead - Stormwater

Key stormwater issues

Frequency and intensity of rain events as a result of climate change and impact on service levels

More frequent and higher intensity rain events reduce the available level of service delivered by the stormwater infrastructure network. The primary urban stormwater network (the piped network) currently has an ARI of less than one year.

Council committed to a long-term attenuation programme to improve the service level provided by the stormwater network in the Long-Term Plan 2018-2028. We are amending the speed at which we roll out this improvement programme due to affordability in the early years of the Long-Term Plan 2024-2034.

See "Significant decisions" section below for further information.

Growth

Expansion and intensification of the city has impacts on the stormwater network and levels of service. Growth is planned through the Springvale Structure Plan, the Mill Road Structure Plan and the Otamatea West Structure Plan, along with infill across the city. Forecast growth is provided for in the long-term stormwater attenuation programme we embarked on in 2018, as well as specific growth projects over the period of this plan.

Sea level rise due to climate change

Sea level rise is projected to be an estimated 80cm by 2090 which may present significant risk to the Heads Rd industrial area due to its proximity to the Whanganui estuary. This would compromise the ability for the area to drain stormwater by conventional methods.

See "Significant decisions" section below for further information.

Uncertain future regulatory standards and the potential requirement for treatment of stormwater in the future

The recent addition of Taumata Arowai as the water services regulator means there is a level of uncertainty around future regulations for stormwater. Taumata Arowai is currently focusing on drinking water to ensure risks to public health are mitigated, but its remit now includes wastewater and stormwater, and focus on these networks will follow. The impact of the regulator on stormwater is currently unknown and will evolve over the years ahead. It is possible that local authorities may be required to treat stormwater in the future to a regulatory standard before discharge.

Level of service changes

We will continue our long-term programme to improve the performance of our stormwater network. This work is intended to reduce the level of flooding in the service area during increasingly common wet weather events due to the effects of climate change.

We will also provide for the pumping of stormwater in the Heads Road industrial area in the future as climate change causes sea levels to rise. This will reduce flooding in this industrial area.

Significant decisions - Stormwater

The key stormwater decisions required are:

Frequency and intensity of rain events as a result of climate change and impact on service levels

Drivers: Climate change and resilience

Managing increasing costs and affordability

Decision required: 2024 as part of the Long-Term Plan

More frequent and higher intensity rain events reduce the available level of service delivered by the stormwater infrastructure network. The primary urban stormwater network (the piped network) currently has an ARI of less than one year.

Council committed to a long term stormwater network improvement programme in the Long-Term Plan 2018-2028. Through this we agreed to fund the programme at \$500,000 per year for the 10-year period through to 2027/28, increasing to \$1 million per year from 2028/29 onwards.

With a number of competing challenges and in a high inflationary environment, we will amend the speed at which we roll out this improvement programme to manage affordability in the early years of the Long-Term Plan 2024-2034. Option 2 was confirmed following consultation.

Option 1:	Proceed with the stormwater network improvement programme as agreed through the Long-Term Plan 2018-2028 (\$500,000 in 2024/25 and 2025/26) This option would allow the programme to continue as planned to deliver improved service, but would add approximately \$23.20 to average rates in 2024/25 and \$11.60 to average rates in 2025/26.
Option 2:	Pull back on the stormwater network improvement programme for the years 2024/25 and 2025/26 (\$0 in 2024/25 and \$250,000 in 2025/26) This option is provided for in the budgets for this Long-Term Plan 2024-2034. The reduced funding in 2024/25 and 2025/26 will extend the length of the programme to achieve the service level improvements.
Preferred option:	Our preferred option is option 2 - to pull back on the stormwater network improvement programme for the years 2024/25 to 2026/27 to assist with rates affordability.

Sea level rise and impacts on the Heads Road industrial area

Drivers: Climate change and resilience

Level of service improvements

Decision required: 2032

Sea level rise is projected to be an estimated 80cm by 2090 which may present significant risk to the Heads Road industrial area due to its proximity to the Whanganui estuary. This would compromise the ability for the area to drain stormwater by conventional methods.

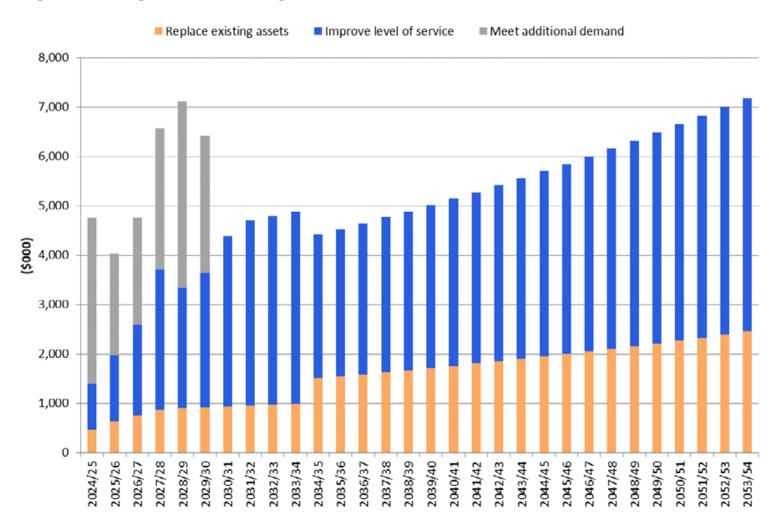
Option 1:	Provide for pumping of stormwater in the Heads Road industrial area (\$2.8 million over the period 2031/32 to 2033/34) This would reduce the risk of seasonal inundation increases driven by climate change in one of Whanganui's key economic areas.
Option 2:	Do nothing and consider organised retreat from the Heads Road industrial area in the long term This option would have a significant impact on Whanganui's economy and employment.
Preferred option:	Our preferred option is option 1 - to provide for pumping of stormwater in the Heads Road industrial area

Key capital projects 2024-34 - Stormwater

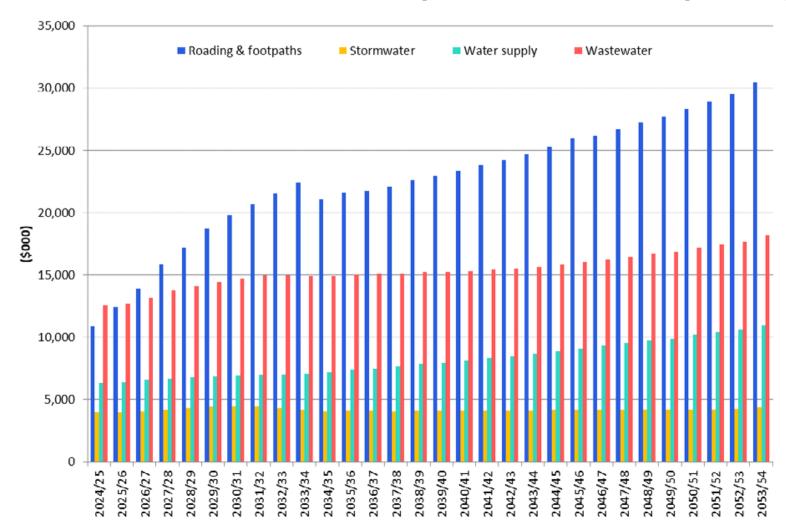
Capital expenditure to meet										
additional demand (\$000)	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
Land acquisitions (southern										
conveyance corridor, Fox to										
Fitzherbert link, Montgomery to										
Downes, Montgomery storage facility,										
Mill Rd south-eastern watercourse)	1,038	964	464	-	-	-	-	-	-	-
Southern drainage corridor - Mill Road										
industrial area	80	201	-	-	-	-	-	-	-	-
Northern drainage corridor - Mill Road										
industrial area	-	-	383	-	-	-	-	-	-	-
Watercourse upgrades north west	-	70	81	-	-	-	-	-	-	-
Swale construction	750	-	-	-	-	-	-	-	-	-
Wetland expansion	-	202	206	213	218	-	-	-	-	-
Springvale 750mm stormwater main	-	125	-	-	-	-	-	-	-	-
Fox Road to Fitzherbert Avenue										
stormwater main	1,500	-	-	-	-	-	-	-	-	-
Stormwater downstream										
improvements	-	404	412	-	-	-	-	-	-	-
North west land development	-	68	-	-	-	-	-	-	-	-
North west linking stormwater	-	25	-	-	-	-	-	-	-	-
Montgomery Road storage facility	-	-	619	-	-	-	-	-	-	-
Wetland - Mill Road	-	-	-	-	-	2,776	-	-	-	-
Wetland – Titoki	-	-	-	2,663	-	-	-	-	-	-
Wetland - Kokohuia	-	-	-	-	2,719	-	-	-	-	-
Manuka Street and Mill Road upgrade	-	-	-	-	843	-	-	-	-	-
Total	3,368	2,059	2,165	2,876	3,780	2,776	-	-	-	-

Capital expenditure to improve level										
of service (\$000)	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
Stormwater attenuation	-	255	521	1,065	1,088	1,111	1,133	1,155	1,177	1,200
Integrated catchment management										
infrastructure	150	153	156	160	163	167	170	173	177	180
Mill Road reticulation	-	-	-	-	-	-	680	-	-	-
Otamatea East pond acquisition	-	-	-	426	-	-	-	-	-	-
City-wide stormwater hotspots	100	102	104	107	109	111	113	116	118	120
Castlecliff pump stations	-	-	-	-	-	-	-	924	942	960
Separation completion	500	612	834	852	870	1,111	1,133	1,155	1,177	1,200
Inflow and infiltration investigations	100	102	104	107	109	111	113	116	118	120
Watercourse condition assessment	10	10	10	11	11	11	11	12	12	12
Watercourse erosion control and										
mitigation	60	71	83	96	98	100	102	104	106	108
Putiki climate adaptation	-	31	21	-	-	-	-	-	-	-
Total	920	1,336	1,833	2,824	2,448	2,722	3,455	3,755	3,827	3,900
Capital expenditure to replace										
existing assets (\$000)	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
Network replacements	524	637	755	878	897	915	934	952	971	989
Total	524	637	755	878	897	915	934	952	971	989

Capital expenditure profile 2024-54 - Stormwater



Overall infrastructure financial profile 2024-54 - operating costs



Overall infrastructure financial profile 2024-54 - capital costs

