



L O N G

T E R M

P L A N

2021-31





WHAT YOU'LL FIND INSIDE NGĀ MEA KEI ROTO VOLUME TWO



FINDING YOUR WAY AROUND THIS LTP

VOLUME ONE introduces our 10-year plan. You'll also find Council activities, prospective financial statements for 2021-31, rates information, and the report from the Auditor General.

VOLUME TWO shares the supporting information, which includes key Council strategies and policies.

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STRATEGIC OVERVIEW

TRANSLATION

Whangārei District has seen high levels of population growth and development over the past 3 years, and this is projected to continue into the future. The Finance Strategy and Infrastructure Strategy are framed around making sure our District is ready for larger population and economy.

This approach builds on the direction set in the LTP 2018-28 and the Infrastructure Strategy 2018-48 and Financial Strategy 2018-28. They are also shaped by the key strategic directions from Council's vision:

“An inclusive, resilient and sustainable District”

To guide the development of the LTP, Council has identified five key strategic priority areas. These have framed decision-making through the LTP process, including the prioritisation of projects and funding:



Transport



Northport



City centre revitalisation



Housing



Sustainability
(including waste minimisation)

There are common strategic issues across both the Infrastructure Strategy and the Finance Strategy which are outlined in the following section.



DISTRICT GROWTH AND DEVELOPMENT

Our District is growing and we expect it to continue to grow by an estimated 1.6% per annum over the next 10 years, reaching about 115,000 people by 2031.

This represents an average annual increase of just over 1,000 people per year. This will also mean that we need more houses. Our housing stock is projected to increase from 41,500 homes today to over 48,000 homes by 2031.

Some areas of our District will grow at a larger and faster rate than others. Ruakākā/ Marsden, Tikipunga, Waipū and Kamo are all areas that we anticipate more development and population growth. This expected growth in our population requires considerable investment in infrastructure, services and community facilities at substantial cost to Council, the business sector and the community, in general.

Population increase will continue to put pressure on our core infrastructure and community facilities in the medium and long term. Our transportation network, water and wastewater services and parks and recreational facilities need to carry enough capacity to provide for predicted growth, with the anticipation of what must happen and when it is needed being a significant challenge for Council.

To ensure we properly plan for growth our growth strategy has been fully reviewed to inform the LTP process. Sustainable Futures: Whangārei District Growth Strategy sets out where new development will occur and what investments are needed to ensure existing and future communities are successful.

Sustainable Futures: Whangārei District Growth Strategy determines existing and potential land use patterns. This allows us to manage the impact of growth and assess and plan for infrastructure requirements for our District over a 30 to 50-year time frame.

Because land use patterns affect both the timing and costing of core infrastructure, the Infrastructure Strategy 2021-51 builds on the direction set in the Growth Strategy to provide more detailed planning of our network infrastructure needs. Our Activity and Asset Management plans have also been developed to encourage growth where it has been considered desirable and where infrastructure is capable of meeting increased demand.



A CHANGING CLIMATE

Our climate is changing and the future impacts are likely to be significant and wide-ranging. In Whangārei, our communities are already experiencing climate related impacts, from flooding to prolonged periods of drought. For our communities to endure we must gear up for change.

The Infrastructure Strategy and the Financial Strategy response to the impacts of a changing climate is informed by both Council's strategic direction as well as central government legislation and sector guidance. Council has established a strategic approach to both adapting to changing climate and mitigating our environmental impact:



We are still at the beginning of our response to Climate Change. This LTP provides funding for Council to work with our local communities to share the information we have, understand how the communities perceives risks and opportunities and to agree on pathways moving forward to reduce emissions and adapt to the changes we expect to see in the future. This engagement will be our Council's climate change adaptation work programme.

As a result of climate change, parts of Whangārei that are currently habitable, will become uninhabitable in the way that we currently know and expect. By working to understand the changes we may see and plan our responses, the better able we will be to avoid creating new risk to our communities, reduce the scale of the risks and impacts we might experience and adapt in a just and equitable manner.



COVID-19 RESPONSE

COVID-19 has had a profound global impact. Early into the COVID-19 pandemic lockdown, our Council endorsed a COVID-19 Response Strategy. This Strategy aims to set a path for the recovery and reset of our economy in response to economic crisis associated with COVID-19. The 2020-21 Annual Plan introduced immediate measures to help our community. However, the Infrastructure Strategy and Financial Strategy need to support the longer term recovery and reset:



Key to our response to COVID-19 is to be agile and resilient enough to respond appropriately to future COVID-19 related events, such as lockdowns. This will also make us better placed to respond to other events which are difficult to predict, such as natural hazards.

The Financial Strategy also sets out a pathway for how Council can catch-up from the 2020-21 Annual Plan and the associated Rating decisions. Our ability to be able to fund operational programmes will be key in responding to COVID-19 as well as making sure we are well placed to face the challenges of a changing climate and continued growth of the District.



FINANCIAL STRATEGY

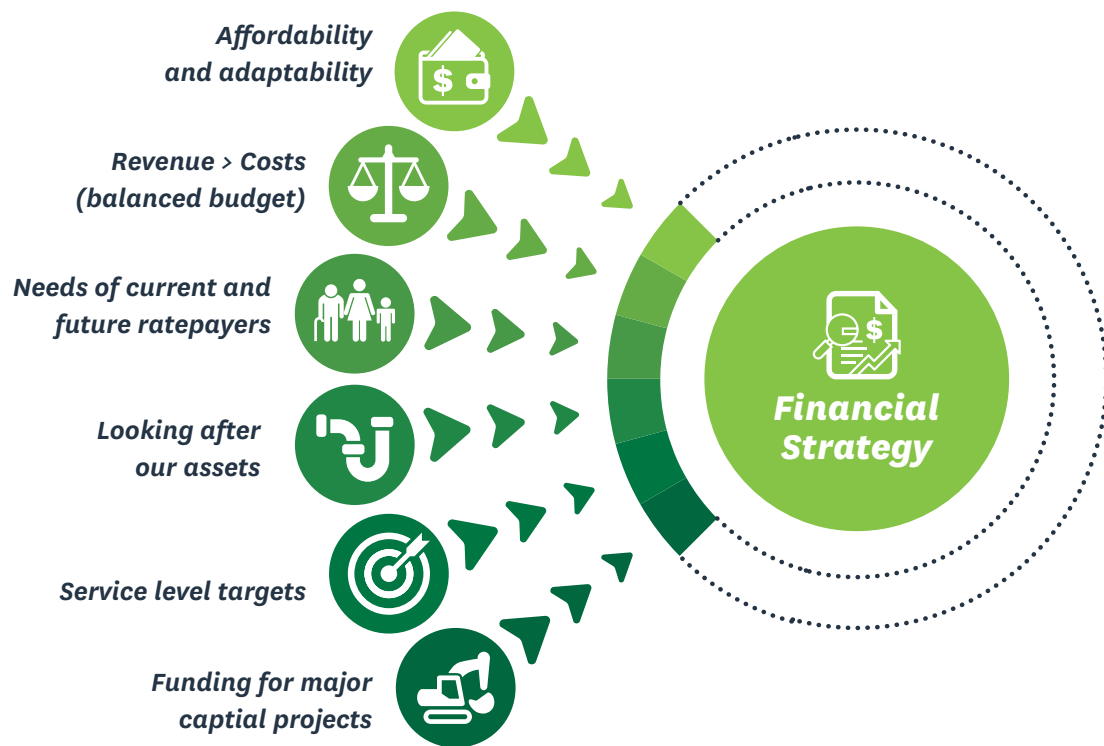
2021 TO 2031

TE RAUTAKI AHUMONI

Overview

The Financial Strategy 2021-31 for the Long Term Plan 2021-31 sets the financial parameters within which Council will operate and fund its operations and capital programme (spending on capital projects) for the next 10 years. It is based on fulfilling the core purpose of local government, which is to “enable democratic local decision-making and action by, and on behalf of, communities; and to promote the social, economic, environmental and cultural well-being of communities in the present and for the future.”

We continue to examine the state of our assets, the Levels of Service our community expects and the funding required to achieve this. This, combined with our financial position and parameters, provides the foundation for decisions about the funding required to deliver our services. This strategy, together with the Infrastructure Strategy 2021-51, addresses these issues and describes our funding model, or the way in which we intend to fund future projects, taking into consideration our growing population.



While it would be ideal to satisfy the needs and wants of everyone in our community, Council can only fund so much. It needs to work within its financial constraints to deliver the facilities, services and infrastructure that bring the most benefit to the most people for the greatest length of time.

This is a sustainable financial strategy. By the end of the 10-year planning period, Council will have an income base that allows it to provide the services that our community expects, without leaving a large backlog of asset maintenance and renewal for later generations to deal with. While that does mean rates rises beyond the level of inflation, we believe they are necessary to provide the range and quality of services our community demands.

Although we have been through uncertain times, Council wants to continue a consistent funding approach flowing from what has been achieved in the first three years of the 2015-25 and 2018-28 Long Term Plans. Feedback from the community directs us to keep improving our District's infrastructure and amenities to cope with growth, without ignoring upkeep of the things in which we have already invested.

Whangārei District has grown rapidly over the last 3 years. This growth is expected to continue into the future, with our population reaching 115,000 by 2031. A cornerstone of the Financial Strategy 2021-31 must therefore be to provide adequate funding to meet future requirements for the increased demand on infrastructure, services and extra amenity across our District while balancing this against the capacity to deliver on our commitments.

As well as sustained growth, we must ensure that our financial strategy provides us with enough flexibility to react to the likely impacts of a changing climate, which will include more frequent and severe storm events, prolonged droughts and increased erosion.

Limits and parameters

Council has set the following limits and financial parameters for the LTP 2021-31. These limits will be reconsidered as part of every Annual Plan and future LTP to ensure that they remain practical, given Council's financial position and broader economic conditions at that time.

From time to time there may be extraordinary events that mean Council may have to go outside these limits. Examples of these events and how Council would respond can be found under Minimising Risk and Adapting to Change on page 22.

GENERAL



BALANCED BUDGET

Council will set a balanced budget every year (as defined in the Financial Prudence Regulations).

Based on current information Council has approved a strategy with the intention of setting a balanced budget every year of the LTP. However, external factors and unforeseen circumstances may result in Council not achieving this in some years. Refer to section Minimising risk and adapting to change for additional information.



FUNDING

Provide sufficient funding through debt and operating surpluses (the difference between income and expenses), to complete the planned capital expenditure programme without reliance on selling assets.

DEBT



DEBT LIMIT

The net debt to revenue ratio will remain below 175%.

Council also utilises internal funding which is not subject to the above limits. For further information refer to Debt, Interest, and Internal Funding on page 16.

RATES



RATES LIMIT

Rates revenue (excluding water rates) will not exceed 70% of total revenue.

While Council will continue its approach of allocating rates as a funding distribution based on who causes and benefits from its activities, it will also endeavour to limit rates (excluding water)* collected each year to a maximum of 70% of total Council revenue, with the long-term average below this limit.

RATES INCREASES

Rates (excluding water) will be increased by a maximum of 2% (plus an additional 2.5% reset for the first year) plus inflation and growth.*

As noted in the rates section below, Council intends to apply annual increases of 2% above inflation to general rates, with an additional 2.5% increase in year one of the plan. The inflation factor used is an averaged Local Government Cost Index (LGCI).

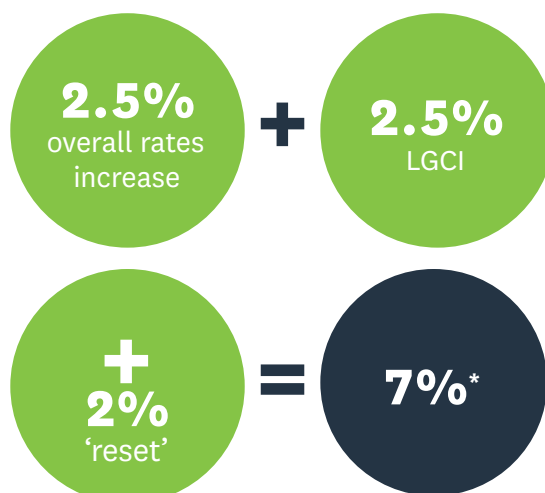
It is planned that rating revenue will increase by 1% through natural growth in the rating base, i.e. as our population grows.

For reporting purposes, the target set on the limit on rates increases will be reviewed and possibly reset in each year's Annual Plan based on the latest LGCI predictions.

For further details on rates increases, including specific increases for targeted rates, refer to Rates section on page 12.

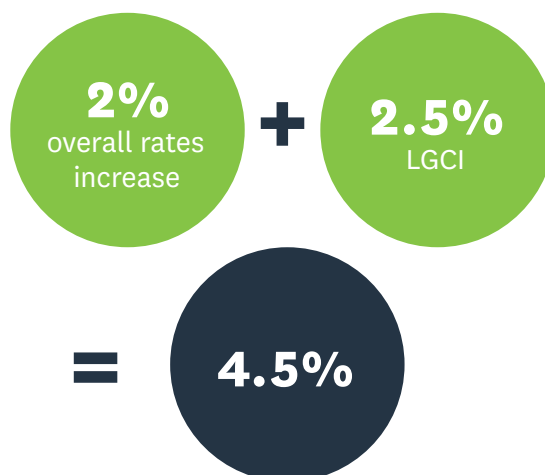
* For these limits, rates are defined as all revenue derived from general rates and targeted rates, but excluding water rates, which are effectively a consumption charge and are therefore out of Council's direct control.

For 2021-22:



*7% for Whangārei's average residential property

For every other year of this LTP:



OVER THE NEXT 10 YEARS THIS ALLOWS FOR:

\$969.9 million

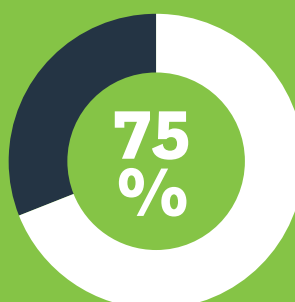
capital works programme

\$2.2 billion

operational revenues

\$1.9 billion

operational spending



of capital expenditure focused on core network infrastructure such as roads, water, wastewater, stormwater and flood protection

Maintaining Levels of Service

For this LTP we have also completed a 30-year Infrastructure Strategy 2021-51 that provides a blueprint for delivery of services through our network infrastructure for which the Financial Strategy 2021-31 has been prepared to give effect to.

The Level of Service describes what the community can expect from Council's infrastructure and services and is a combination of the:

- quality of infrastructure provided by Council
- standard to which infrastructure is maintained
- services that assets, staff and contractors provide to the community.

Council's overarching strategy is focussed on ensuring that the Levels of Service identified in the LTP are maintained.

The appropriate Level of Service in each activity area has been carefully considered by Council, along with the additional demand for infrastructure and services in our District due to predicted growth. In each activity area, Council has considered the ongoing effects of every decision and inevitably, there have been tensions, gaps or conflicts between the desired level of service and the level that can be provided within the financial parameters outlined in this strategy.

The asset and activity management plans upon which this Plan is based have therefore generally been prepared with the aim of maintaining current Levels of Service throughout the 10-year timeline of the Plan. This 'hold and maintain' strategy will be managed by looking for ways to be cost-effective across Council's planned operations, infrastructure maintenance, renewal and capital upgrades. Council will also review operational practices to find ways to be more efficient without adversely impacting service level delivery.

Rates

Like most Councils, rates are our main source of funding. Council does not have a particularly diverse income stream, with the main sources being rates, fees and charges, development contributions and government subsidies (e.g. for roading). There is limited scope to add new revenue sources without allocating funds to new investments, so the reliance on rates as a revenue source will remain relatively high.

While we try to maximise the subsidies available from Central Government and have a 'user pays' approach policy (through consumption and user charges) for many services, the bulk of our work is funded by rates. There are two types of rates: general rates and targeted rates.

In the previous two LTP's, Council has applied rates increases above the rate of inflation. This approach will be retained, as we need to continue to increase our operating revenue to reflect the cost of providing services to our community.

While we recognise that our District and economy has been impacted by COVID-19, we consider that rates increases beyond inflation are necessary to ensure we can continue to provide the service delivery our community expects. These increases also allow us to service our increased debt which is necessary to provide funding for one-off projects the community has asked for, maximising our transportation programme, and to boost our capital programme to support the construction sector and keep our local economy moving.

GENERAL RATES

Council currently uses general rates to fund a broad range of activities, where there is a benefit to the whole community (public benefit) or where there is no practical way to charge individual users.

There are two elements to general rates:

- **UNIFORM ANNUAL GENERAL CHARGE (UAGC)**, which is a fixed dollar amount that all rating units are levied. The UAGC is to be assessed by Council annually and set at a level considered to be reasonable. The UAGC is used to fund the same activities as the general rate and ensures every ratepayer contributes a base level of rates irrespective of property value or services used.
- **'VALUE BASED'** general rates, are calculated using the land value of each rateable unit, generally differentiated by land use.

Further information about general rates, including how the rates revenue requirement is determined for each rating category, is detailed in the Funding Impact Statement on page 322.

TARGETED RATES

Targeted rates are used where an activity benefits an easily identifiable group of ratepayers and it is appropriate that only this group be targeted to pay for some or all of a service. The funds collected must be used for the purpose for which they are rated.

Targeted rates are only used where Council considers it is an appropriate mechanism to fund that activity or where Council wishes to make clear the purpose for which the rate is collected. The revenue collected in any one year may result in a surplus, which is used to repay debt or to fund capital expenditure in future years. Further information about Council's targeted rates is included within the Funding Impact Statement on page 322.

INCREASES TO RATES

In the 10 years of this Plan, Council intends to increase the revenue obtained from most rates beyond the level of inflation, as shown in the table below. Overall, rates revenue will also increase as our District's population grows.

Year 1 includes a 2.5% rates increase for general rates and a 2% increase for wastewater (reset). When COVID-19 restrictions were introduced, Council was quick to set up a 10 point Economic Recovery Response. Part of this response included reviewing our planned rates increase and operational budget for the 2020-21 financial year. Council reduced its rates increase to inflation only and cut operational budgets. This, combined with reduced revenue streams, put us on the back foot heading into this LTP. An additional catchup of 2% is required to enable Council to maintain our current service delivery. In addition to this, an extra 0.5% general rates increase in year 1 has been applied to enable funding of requests that came through community submissions.

	Year	Reset	Annual inflation	Additional increase	Allowance for growth	Comments
General rates:						
UAGC portion	Y 1	2.0%	LGCI	2.5%	1%	These increases are set at a level to provide sufficient funding for the planned expenditure programme for the bulk of Council's activities.
Land value portion	Y 1	2.5%	LGCI	2%	1%	
UAGC portion	Y 2-10	-	LGCI	2%	1%	Review of the Revenue and Financing Policy indicated the current UAGC level reflects the funding requirements of activities that are to be funded by all ratepayers equally and increases should align with the Land Value Portion.
Land value portion	Y2-10	-	LGCI	2%	1%	

	Year	Reset	Annual inflation	Additional increase	Allowance for growth	Comments
Targeted rates:						
Wastewater	Y 1	2%	LGCI	2%	0.8%	<p>This increase matches that of the Land Value portion for years one to three. From year four onwards, an inflation only increase is planned. This will allow sufficient revenue to fund operational and capital expenditure throughout the Plan, and will allow us to build a reserve to fund future capital programmes.</p> <p>The growth factor applied is slightly less than land rates as some growth will be outside the reticulated area.</p>
	Y 2-3	-	LGCI	2%	0.8%	
	Y 4-10	-	LGCI	-	0.8%	
Water rates	Y 1-10	-	LGCI	-	0.8%	<p>Water rates have not been increased for several years due to a large reserve balance. It is necessary to increase water rates for this Long Term Plan to increase funding to support the proposed expenditure for this activity over the term of the Plan. The level of Councils water rates will need to be reassessed during the next LTP when we have more certainty around the Three Waters Reform. The 0.8% growth factor reflects new properties connecting to the reticulated system. Water supply charges, backflow prevention and the water meter reading special charges will also increase by LGCI.</p>
Flood protection	Y 1-10	-	LGCI	-	-	<p>An inflation only increase will maintain the effectiveness of the scheme over the ten year period, with surpluses building a reserve balance by year ten. Significant capital expenditure is included within the 30 infrastructure strategy, which may require a larger increase to this targeted rate in subsequent Long Term Plans.</p>

Note: These increases are applied to the total revenue from each rate type, not the amount per individual ratepayer

	Year	Ratepayer contribution inc GST, per rating unit in area of benefit	Comments
Road sealing:			
Road sealing	Y 1-3	\$4,600	Ratepayer contributions are set to partially fund roading seal extensions. Refer Funding Impact Statement on page 322 for further information.
	Y 4-6	\$5,000	
	Y 7-9	\$5,500	
	Y 10	\$6,000	

The projected number of rateable properties within the District at the end of each preceding financial year is shown in the table below.

Projected rating base information



YEAR	POPULATION
2020-21	42,550
2021-22	42,943
2022-23	43,372
2023-24	43,806
2024-25	44,244
2025-26	44,686
2026-27	45,133
2027-28	45,584
2028-29	46,060
2029-30	46,500
2030-31	46,965

Debt, interest and internal funding

DEBT

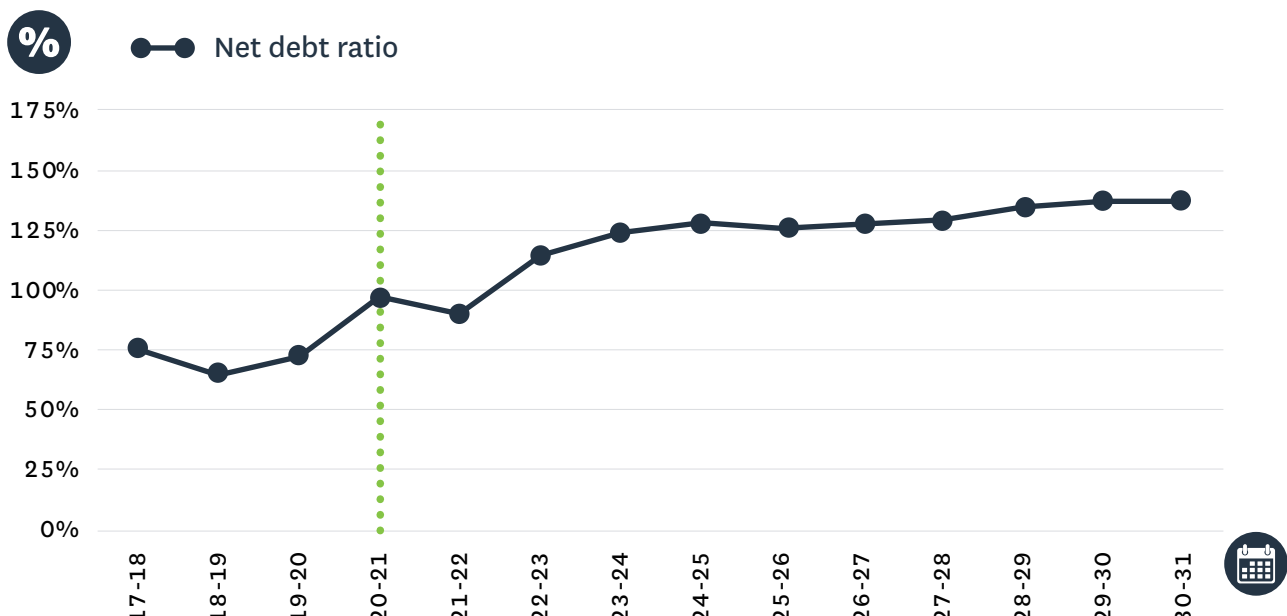
The Financial Strategy 2021-31 sees total net debt increase from an estimated \$144.7 million on 1 July 2021, growing to \$348.6 million by 30 June 2031. Details on how Council's debt is managed are set out in the Treasury and Risk Management Policy, which is available on request.

The graph below compares total net debt to revenue. Council's debt level has increased in order to fund our capital projects. Using debt to fund long-term assets enables Council to allocate the costs of long-term assets equitably between current and future residents. We try to ensure that, as far as possible, today's ratepayers only pay for services they are likely to use and not for benefits that will be received by new ratepayers in the future.

We need to consider how much of the expenditure required should be funded through current ratepayers (via rates) and how much should be funded through future ratepayers by borrowing now and repaying debt later when future ratepayers become users. This concept is referred to as 'inter-generational equity'.

While our debt has increased, we have considerable capacity to raise debt to deal with abnormal events and emergencies. While there is no intention to increase debt beyond the levels shown elsewhere in this strategy, it is important to note that we have access to more funding in the unlikely event that it is needed. Refer to Minimising Risk and Adapting to Change on page 224.

Net debt as a % of revenue



Securities for borrowing

Council secures its external borrowing and financial instruments against Council's rates revenue through a registered debenture trust deed. It is intended to continue with this practice, which provides ample security cover for predicted levels of borrowing.

FINANCIAL INVESTMENTS AND EQUITY SECURITIES

Council uses any surplus cash to reduce debt, or invest in short term investments which are included as cash. Council can also hold investments in its subsidiaries.

Council does not hold equity securities in public companies except for small holdings in Civic Assurance Limited and New Zealand Local Government Funding Agency Limited, which provide insurance services and lending to participating local authorities respectively.

Finance costs

To minimise financing costs, Council is a member of the Local Government Funding Agency (LGFA). This means Council can borrow at better rates than are available through direct lending from trading banks.

Council takes a long-term view when managing our treasury risk and interest rate exposure. This is achieved by using interest rate swaps to protect against interest rate or margin increases. Debt maturities, or the dates when loan agreements must be repaid, are spread over both short and long terms, as well as a mixture of fixed and variable interest rates.

In April 2021 Council's credit rating was upgraded to AA+. Initial indications from S&P Global Rating is that this rating will be maintained once the LTP is adopted, but could be lowered to AA should Council's overall financial performance differ markedly from forecast plans. However, this would not increase interest costs, as Council would still qualify for the lowest lending margins available from our primary funding source, LGFA.

The LTP assumes an interest rate averaging 3.73% across the 10 years, after taking all factors outlined above into account.

Internal funding

As part of its financial or treasury management, Council minimises its overall interest costs by using funds held in reserve as 'internal borrowing'. i.e. rather than keeping funds on deposit while borrowing all the money needed to fund capital works, reserve funds are used in the short term and they are repaid in the future as needed. Council intends to continue this approach into the future.

Internal interest charges are allocated to each activity for their share of funds borrowed from reserves, with these costs included within the activity funding impact statement. Similarly the resulting revenue from these charges is included within the activity funding impact statement from which the funds were borrowed. No internal interest is included in the Prospective Funding Impact Statement for Council.

Reserves

PROPERTY REINVESTMENT RESERVE

Council's Property Reinvestment Reserve (PRR) was originally created in 2010 through the sale of Council's interests in leasehold land to those already leasing the properties. From 1 July 2015 Council decided the proceeds of commercial property sales would be set aside (reserved) for purchases that met Councils' property objectives, as stated in its property policy. This reserve had built to \$35 million by 30 June 2020, with all the funds used to finance infrastructure projects through internal lending. A number of strategic property purchases are planned during the year ended 30 June 2021 which will reduce this balance to approximately \$16.6 million.

Commercial property purchases have been included in Years 1-3 to allow Council to take advantage of commercial opportunities that may arise. The actual timing of commercial property purchases may vary to budget. Any unbudgeted spend will be carried forward each year with the reserve used to track the unspent balance.

Other commercial property transactions will be considered from time to time, where there is an identified strategic benefit and/or the predicted return from a potential commercial property investment is greater than the cost of capital.. If there are insufficient PRR funds available, purchases are likely to be debt-funded and dealt with via a Council resolution or future Annual Plan / LTP process, as appropriate.

While there are no specific plans to sell any commercial property in this LTP, this will be considered from time to time if suitable opportunities (such as development partnerships or unsolicited offers) occur. If any sales were to take place, the proceeds would be added to this reserve and be available for reinvestment.

An annual dividend will be added to the amount available for reinvestment each year.

OTHER RESERVES

Other significant reserve funds include Community Development Funds and asset reserves. Council also creates reserves when targeted rates for a particular activity are accumulated before significant capital expenditure occurs. As an example, there was a balance of \$26.1m in the water reserve as at 30 June 2020, which will be used over the life of the LTP to fund water projects as they are completed.

Expenditure

OPERATIONAL ACTIVITIES

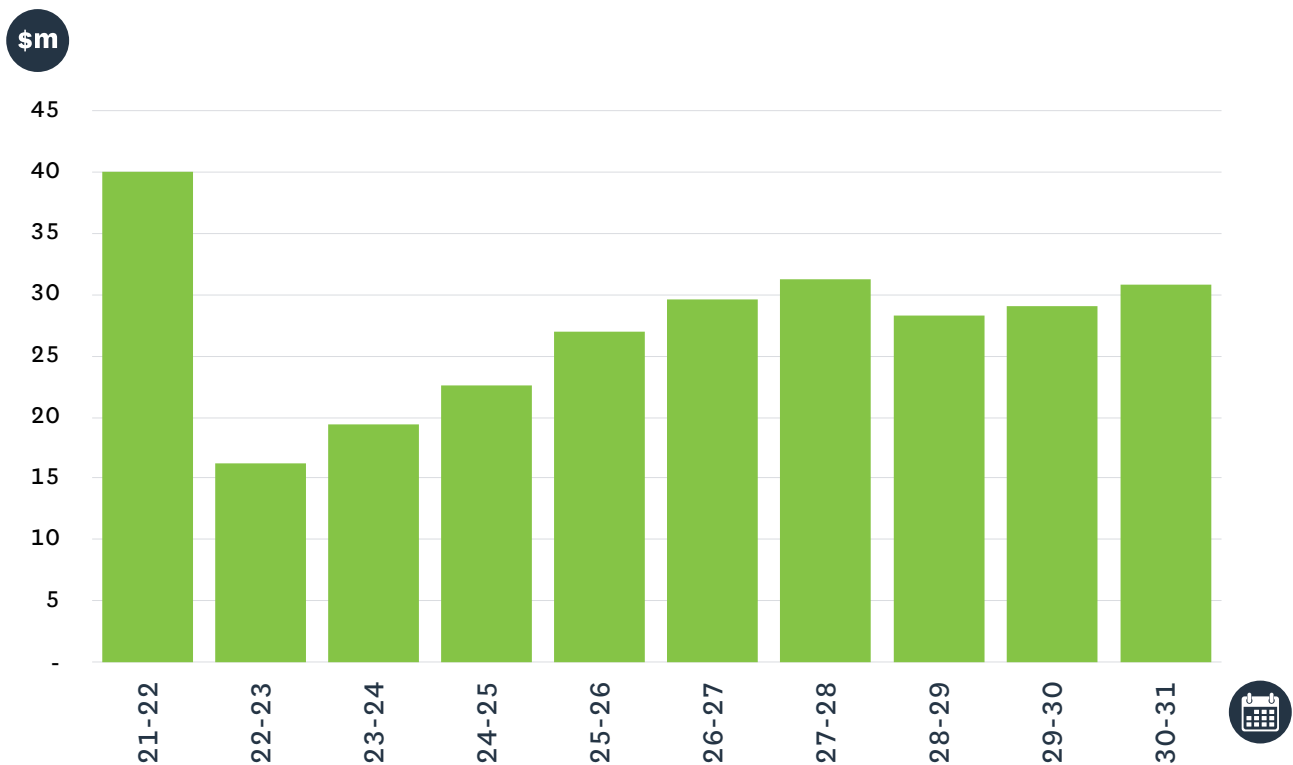
Forecasting Council's operational expenditure is a balancing act. Local government costs continue to increase meaning Council must rise to the challenge of meeting Levels of Service while at the same time looking to save costs wherever it can in order to keep rates affordable and achieve a balanced budget.

Council also needs to allow for the effects of population growth, community expectations, operating costs associated with new assets, and finance costs on additional debt in preparing its budgets.

The graph below shows Council's annual surplus over the 10 years. This means our operating revenue is higher than our operating expenses. This helps ensure we have a sustainable and prudent budget for the future.

As indicated below, year one of our plan shows significant surpluses due to projected central government funding for capital projects. Although this results in a high surplus, this funding is not available to fund our everyday operating expenses.

Surplus by year



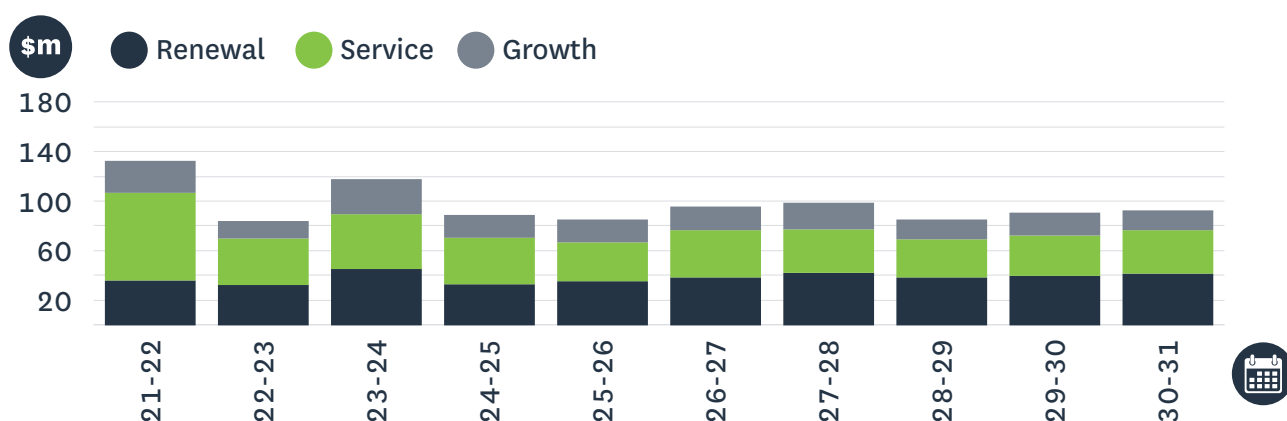
CAPITAL EXPENDITURE

Allowing for inflation over the life of the plan, Council's total annual capital expenditure ranges from \$83.8 million to \$132.6 million.

Capital expenditure is funded by a combination of operating surplus, rates, debt, development contributions and government subsidies. Council is expected to receive NZTA subsidies of 53% for subsidised roading projects over the lifetime of the plan.

The graph below illustrates planned capital expenditure over the 10 years of the plan of \$969.9 million.

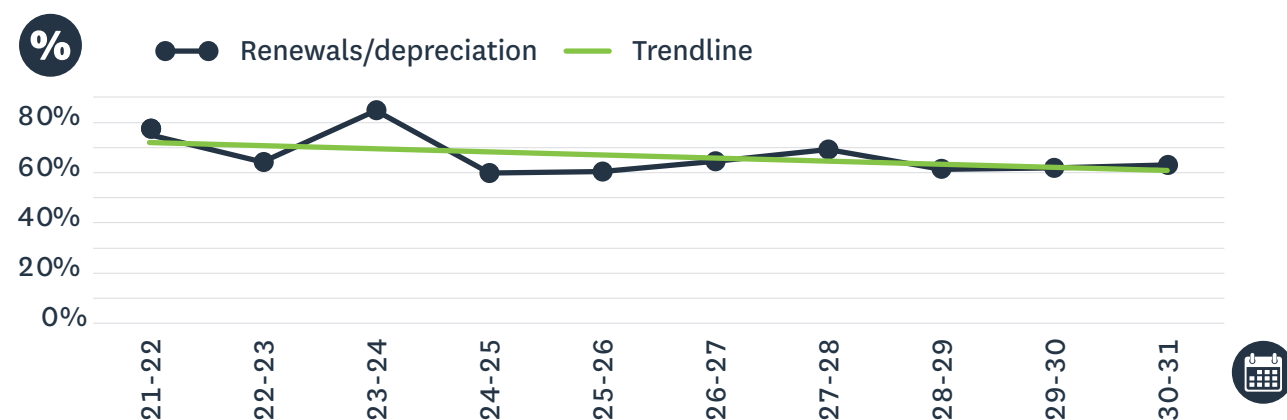
Planned capital expenditure



39% of the capital expenditure, is for the renewal of existing assets and upgrades to extend their useful life. Each year a depreciation amount is estimated. This represents the portion of an asset's useful life that has been used up through 'wear and tear' in that year by current ratepayers. Depreciation is calculated for all assets and while each year's renewal programme only affects a portion of assets, all of them will be replaced over time.

An increase in our capital programme comes with a corresponding increase in our depreciation expense. The graph below shows the relationship between depreciation and renewals over the life of the plan.

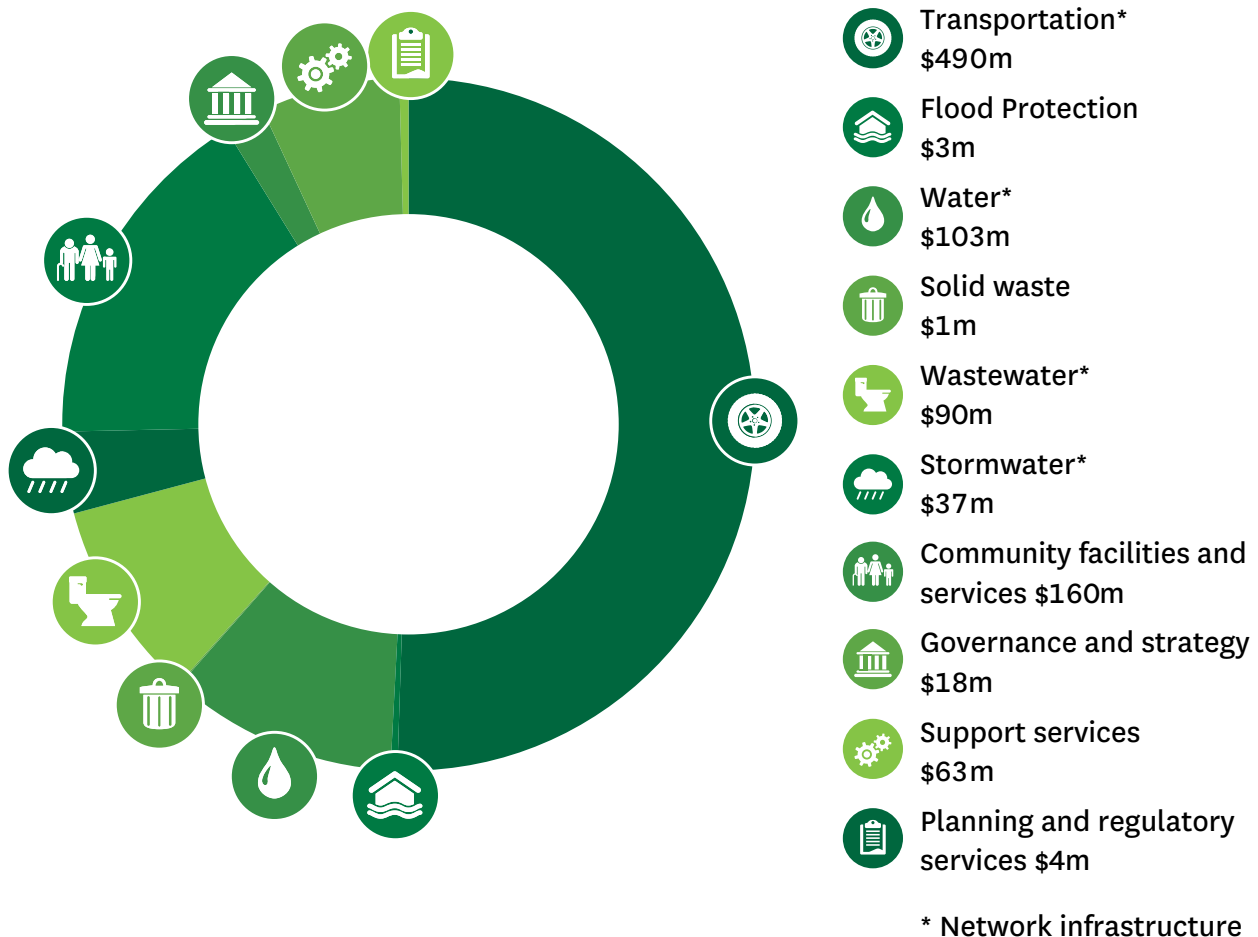
Annual renewals vs depreciation (%)



This graph shows the average ratio of renewals to depreciation to be 66%. This ratio is impacted by several factors including assets remaining useful lives, depreciation rates, the timing of asset replacement, and the addition of new capital assets. Council will continue to monitor asset performance to ensure renewals are completed in order to maintain service

levels in the foreseeable future, and avoid leaving a significant backlog of asset replacement for future generations. As part of Council's three yearly infrastructure valuation, assets useful lives (and therefore depreciation) will be reviewed to ensure these accurately reflect the condition and wear and tear on our network assets. This issue is explored in more depth in the Infrastructure Strategy 2021-31.

Capital expenditure by activity



The graph above shows, over the life of the Plan, 75% of capital expenditure is focused on network infrastructure, reflecting Council's recognition that it still must invest considerable amounts in our core assets to meet the service levels the community expects.

Note: Solid waste expenditure relates solely to transfer stations, which are the only solid waste assets directly owned by Council. The bulk of our refuse management operations (including the landfill and Re-Sort facility) are delivered with our joint venture partner through the Northland Regional Landfill.

However, community facilities like boat ramps, playgrounds, walking tracks and theatres, are a significant component of a happy, engaged, balanced and sustainable community. They also help us to weave the local governments four well-beings: social, economic, environmental, and cultural priorities, into the fabric of our District. While some consider these projects as 'nice to have', Council consider them to be an important aspect in achieving its overall outcomes, while recognising that expenditure on them needs to be kept in check.

Minimising risk and adapting to change

It is more important than ever for our strategy to be flexible enough to allow Council to adapt to the ever-changing environment we are faced with.

In preparing this Plan, Council had to make some assumptions about what will happen in the future (refer page 260 for Significant forecasting assumptions). However, this always brings with it a level of risk. The COVID-19 pandemic has further increased uncertainty of current and future economic conditions. We have identified four major areas of risk that could impact on our ability to deliver on the Financial Strategy 2021-31.

CLIMATE CHANGE AND NATURAL HAZARDS

Our District is susceptible to extreme weather events which can cause significant unplanned repair works and capital costs. While we design and build our infrastructure assets to have resilience to these storm events, we are still often faced with unplanned repairs.

Council's approach to funding storm damage is also addressed within Council's Revenue and Financing Policy. Council would fund maintenance and capital works by borrowing up to its debt limit. If this was not possible then Council would reprioritise and/or defer operating costs and capital spending to accommodate the work required to make good the damage.

No provision has been made for catastrophic events such as tsunamis, as this would be so disruptive that a business continuity plan based on the current operating model would be impractical and other interventions (such as central government support) would be required.

GROWTH AND DEVELOPMENT

We know that population growth and development will continue, but we cannot accurately quantify exactly when, where or to what extent it will occur. Our asset management plans, infrastructure and financial strategies are all based on historical trends and future growth forecasts to give us the best prediction of our District's needs into the future. While several projects that support growth are included in our LTP, we will review actual growth patterns and infrastructure needs each year and adjust the programme accordingly.

COVID-19 RESURGENCE/PANDEMIC

The impacts of COVID-19 will be wide ranging and affect our community in different ways. The severity and duration of the impacts will also be varied. We are still in the early stages of understanding what these impacts might be and how they will impact our community.

With new cases continuing to occur, significant uncertainty and risk remains for the potential of restriction levels being imposed in the future. Council's May 2020 COVID-19 Response Strategy will assist Council's direction in the event that this, or any other pandemic occurs.

Proposed rates increases may be reduced and operational budget cuts imposed. Any reduced rates increase in a particular year could be recovered throughout later years of the Plan by implementing an additional 'catch-up' increase similar to the additional rates increase in year one of the 2021-31 Long Term Plan. This approach provides us flexibility without changing our strategic direction. To minimise the impacts on service delivery, an

option for funding to replace lost revenue, is utilising debt, if there is projected headroom under the net core debt cap for the year. This may result in an unbalanced budget for the year. If it is determined that there is no headroom under the net core debt cap, then Council will look to defer operational and capital expenditure, and/or reduce service levels in order to operate within our financial parameters.

ECONOMIC CONDITIONS

Global economic conditions can negatively impact Council's financial resources, as well as those of our ratepayers and residents. The table below summarises some of the potential impacts caused by economic conditions, and lists measures available to Council to lessen our susceptibility to these.

Potential impacts	Measures
<ul style="list-style-type: none"> • reduced revenue streams • impact on service delivery and capital programme delivery • reduced affordability for our ratepayers • interest rate exposure • supply chain disruption which may cause project delays and cost escalation 	<ul style="list-style-type: none"> • provision to adjust activities if there is a downturn (eg reduce service delivery) • revisit rates increases through the Annual Plan process • scaling back or deferral of capital projects to match population growth or financial resources • access to debt markets and liquidity parameters (borrowing to fund our operations for the short-term) • use of financial instruments such as interest rate swaps to minimise risk and provide a high degree of certainty and protection from global and national events

NZTA SUBSIDIES AND EXTERNAL FUNDING

source of funding for our transportation activities, such as road construction and repair, and are a significant revenue source for achieving a balanced budget. In 2021-22, Council expects to receive NZTA subsidies of \$26 million, representing 53% of the gross cost of both operating and capital expenditure, on a wide range of approved roading projects. At the time of completing this plan, NZTA had not confirmed the subsidies applied for by Council.

In order to maximise Councils eligibility to other central government funding, it may be necessary to change the timing and prioritisation of the planned capital programme.

In the event that the availability of external funding is reduced, Council would consider various options which may include:

- resolving to set an unbalanced budget where it is considered prudent to do so
- consider alternative funding sources (eg debt or rates increases) to fund the current programme,
- defer the maintenance and/or capital programme
- re-prioritise funding (eg reduce service deliver in one area to fund another)

REGULATORY CHANGES

There are several major pieces of legislative reform that will impact on the regulatory environment that councils work in. These are covered in more details in the Infrastructure Strategy.

Council Organisations

Council currently delivers a variety of services through Council Organisations, Council Controlled Organisations and Council Controlled Trading Organisations where it considers this is a more effective, efficient and financially viable option compared to other means of delivery. Refer to Group Entities on page 144 of Volume One for further information.

Monitoring and reviewing the strategy

As part of business-as-usual, we constantly scan the financial and economic environment, as well as our own performance to monitor:

- sustainability of our financial performance and position
- emerging risks
- whether the Financial Strategy 2021-31 is being implemented
- trends in the community's ability to pay.

The Financial Strategy 2021-31 will be reviewed every three years as part of the LTP process. Consideration will also be given to the impacts of any significant changes in local, national or global economic conditions during each year's Annual Plan process.

Supporting documentation

The policies listed below have been developed in conjunction with this LTP and are available upon request:

- Revenue and Financing Policy
- Treasury and Risk Management Policy
- Development Contributions Policy.

Disclosure statement

We have included the Disclosure Statement in this LTP in accordance with the Local Government (Financial Reporting and Prudence) Regulations 2014. Refer to page 174 in Volume One.

The purpose of this statement is to disclose our planned financial performance in relation to various nationally consistent benchmarks, as well as our self-imposed debt and rates limits. These benchmarks enable the assessment of whether we are prudently managing our revenues, expenses, assets, liabilities, and general financial dealings.



INFRASTRUCTURE STRATEGY

2021 TO 2051

TE RAUTAKI KAUPAPA KEI RARO

Executive summary

Council is required to prepare an Infrastructure Strategy for a period of at least 30 years to inform its 10-Year Plan. It is important that the Infrastructure Strategy aligns with the Council's broader strategic direction, including the Financial Strategy.

The purpose of Local Government is to promote the social, economic, environmental and cultural well-being of its community. Central to this is taking a sustainable development approach and the way Council provides its infrastructure needs to reflect these overarching considerations.

The Strategy covers transportation, stormwater, wastewater, water, solid waste, flood protection and parks assets.

There are significant uncertainties within the Local Government sector relating to three waters and regulatory reforms. We have planned for the status quo to continue, but how we deliver our services and manage our assets will be affected by these changes.

The 2021-51 Infrastructure Strategy continues Council's focus from the 2018-48 Strategy on renewals and improving our knowledge of asset condition.

Through this planning round elected members have identified Transportation, City Centre revitalisation, Sustainability (including waste minimisation), Northport/Navy and Housing as key priorities. These priorities align to and underpin Council's vision for:

“An inclusive, resilient and sustainable District”

These priorities and vision have informed the Strategy through years 1-10, alongside longer-term considerations for years 11-30.

Key drivers for the Strategy are growth, regulatory requirements, climate change, community wellbeing and public health outcomes, new technologies, community expectations and capacity to deliver capital works.

Overall Council's infrastructure assets are mid-life and in an acceptable state. We are generally not experiencing the failures that older networks may face. Infrastructure needs

to be maintained, renewed and developed in a cost-effective manner, ensuring that cost is spread equitably across the community and upcoming generations do not face excessive renewal costs or critical failures. Our asset data has improved since the last Plan, but needs further focus as we implement a new Asset Management System.

While renewal expenditure should roughly match depreciation expense in the long term, it is only a broad measure of the effectiveness of the renewal programme. In most activities, renewals are showing an increasing gap between renewal expenditure and depreciation. This is due to growth and level of service project impacts, as well as some asset categories having a longer than expected life or high value assets not being renewed within the period of the Plan.

A review of the levels of depreciation will be undertaken as part of the three-yearly asset revaluation in 2022.

Our assets generally provide a good level of service to our community and are comparable to other similar sized organisations. It is projected that Council will maintain the current levels of service across its infrastructure portfolios, the exception being Transportation which is increasing the level of service expenditure in some areas (i.e. for the sealing of unsealed roads).

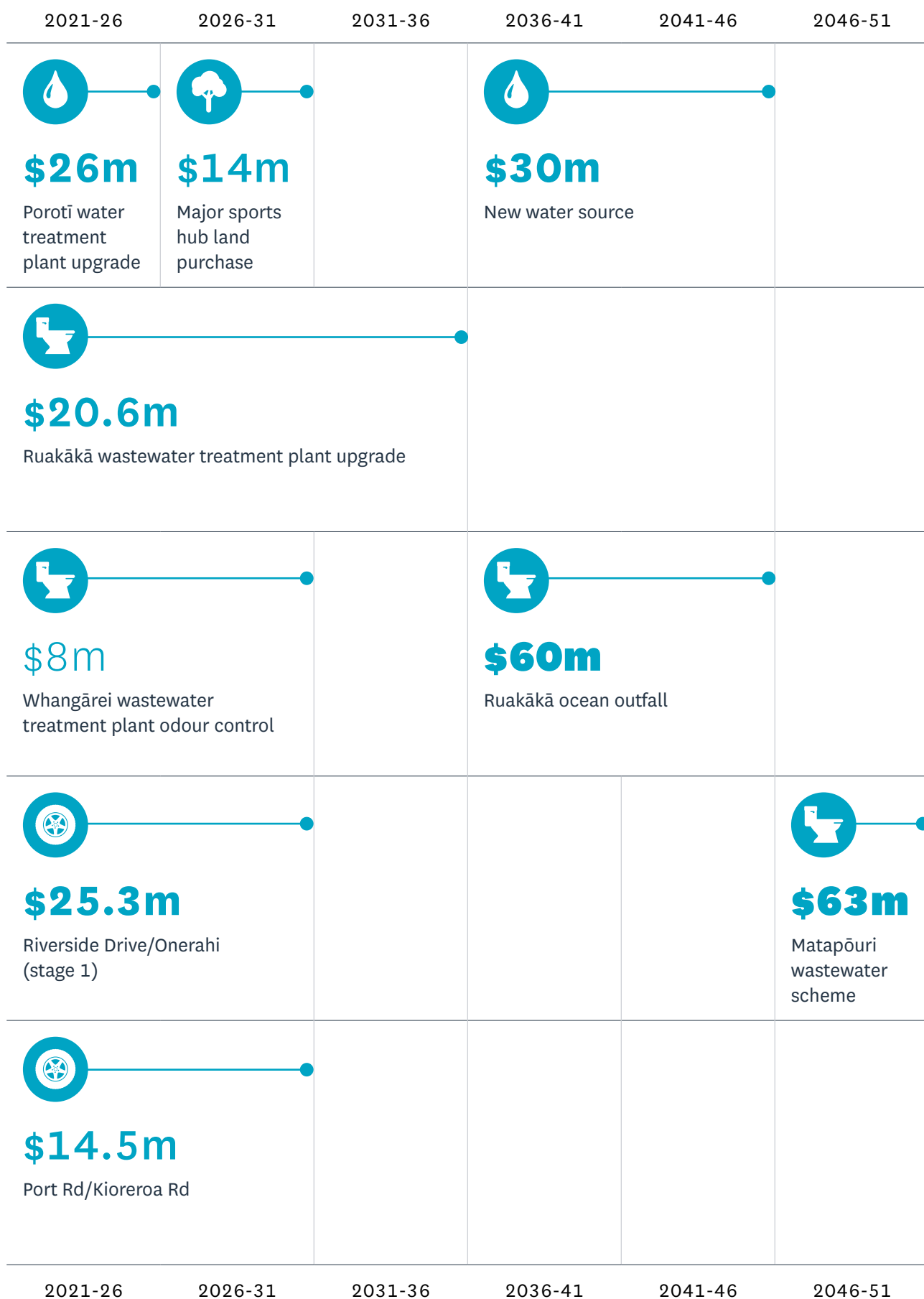
One of Council's financial parameters set for the 2021-31 LTP is to set a balanced budget every year (as defined in the Financial Prudence Regulations). This means our operating revenue is higher than our operating expenses. This helps ensure we have a sustainable and prudent budget for the future. In preparing its budgets Council also needs to allow for the effects of population growth, community expectations, operating costs associated with new assets, and finance costs on additional debt.

Capital expenditure is split between renewals, growth and levels of service; renewals being replacement of existing assets, growth catering for population changes or demand and levels of services providing for improved capabilities and agreed level of service changes. It is acknowledged that climate change will be a key driver of expenditure moving forward. To support this, Council has funded a programme to work with communities to understand risks and opportunities and develop climate change adaptation plans. We will also continue to review the ability to implement financial reporting on climate change going forward.

While we have large infrastructure investments identified as specific projects within the 30 years of the Strategy, overall our renewal programme and project provision ensure that the costs are fairly distributed over the duration of the Strategy.

Significant projects have been identified throughout the 30-year strategy and include major transportation projects at Kioreroa Road/Port Road intersection and Riverside Drive/Onerahi Road, new water source projects at Porotī/Wairua River and a future dam, Ruakākā Wastewater outfall, Matapōuri wastewater treatment and the purchase of a new sportspark hub.

SIGNIFICANT PROJECT TIMELINE



Overall, Council is planning for the delivery of on average \$82m per year over the first 10 years, increasing to \$148m between years 10-20 and \$153m after year 20, these figures are adjusted for inflation. The increase after year 10 addresses the expectations for growth and changing levels of service. Renewals are increasing in line with our growing asset base and maintaining our assets.

Budgets have been reviewed against our ability to deliver projects, especially within the first 10 years of the Strategy. It is noted that our ability to deliver over the past 2 -3 years has been impacted by an increase in Government funded projects, resulting in a backlog on the delivery of internal projects.

A review of our project planning and delivery framework will be undertaken in the early years of this strategy and projects within years 11-30 may be brought forward in future plans as our capacity to deliver is increased.

Transportation historically delivers the greatest proportion of the capital programme, but the expectations of the community are continuing to increase. Given this, and Council's priority on Transportation, there has been a marked increase in the scale of the programme over the first 10 years and continuing throughout the Strategy. This includes the increasing levels of service in the sealing of unsealed roads and a step change in transportation modal delivery including cycleways, shared paths and bus lanes.

Stormwater was identified as a priority in the 2018-48 Strategy. This focus continues. The majority of works currently identified are renewals. It is expected that growth and LOS projects will increase as our knowledge about our assets and their conditions increase through ongoing CCTV and modelling programmes.

While our infrastructure expenditure is signalling increased debt levels over the period of the Long Term Plan we are still well within the debt parameters set in our Financial Strategy, and those set by the Local Government Funding Authority. There is no intention to increase debt beyond the levels shown elsewhere in this Strategy, however, Council also has the capacity to raise debt to deal with abnormal events and emergencies.

This Strategy provides for a balanced and appropriate approach to the funding and management of infrastructure to ensure that it continues to meet the needs of our community at the end of this 30-year period.

Introduction

STRATEGIC FRAMEWORK

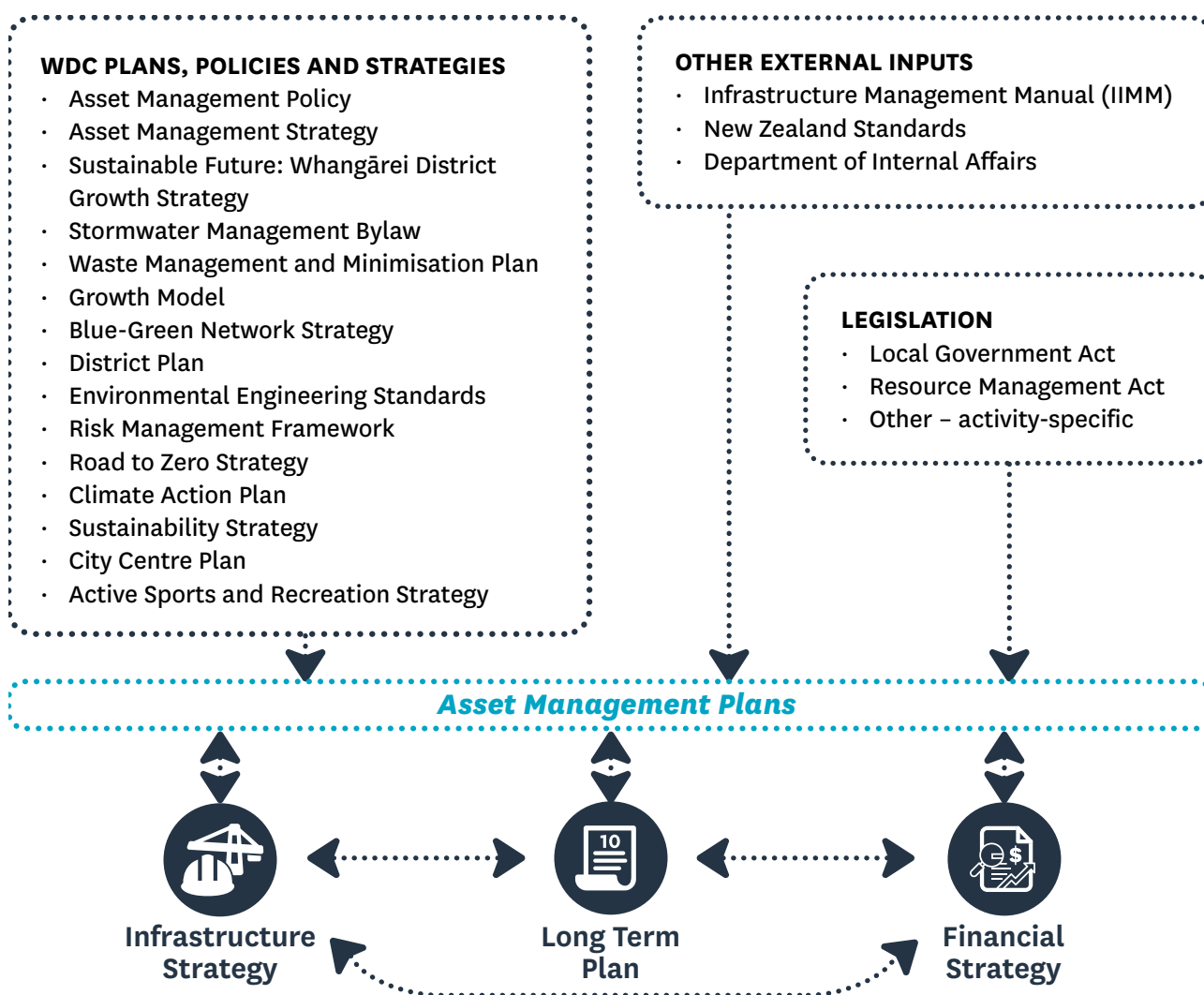
The Local Government Act states that local government must;

“as part of its Long-Term Plan, prepare and adopt an Infrastructure Strategy for a period of at least 30 consecutive financial years”

The Infrastructure Strategy 2021-51 is part of a suite of long, medium, and short-term strategies, plans and policies that contribute to the long-term sustainable management of Council’s infrastructure.

The Infrastructure Strategy 2021-51 is a key component, along with the Financial Strategy 2021-51 of the Long-Term Plan 2021-31.

Infrastructure Strategy and relationship to other documents



The Asset Management Strategy sets the policies, objectives and actions for asset management and underpins system improvements associated with strategic issues identified within this document. The Activity Management Plans each include an improvement section which proactively informs future plans for the activity.

PURPOSE AND SCOPE

The purpose of an infrastructure strategy is to identify the significant infrastructure issues for Council over a 30-year management period, along with the principal options for managing those issues. Section 101B of the Local Government Act 2002 describes the expectation that local authorities consider options, costs, uncertainty and timing of significant decisions to ensure transparency of long-term sustainable, resilient and equitable outcomes.

This is a technical document, often working through complex concepts. As this is part of the LTP it is supported by the associated Consultation Document, the purpose of which is to communicate the key issues and concepts in a way that can be easily understood.

The Infrastructure Strategy 2021-51 provides a high-level tool for ensuring that Council's infrastructure is properly managed throughout its life cycle and that the needs of current and future generations are met. This Strategy applies to the following infrastructure groups:



Water



Flood protection



Solid Waste



Wastewater



Transportation



Stormwater



Parks and
Recreation

Parks and Recreation and Solid Waste which, while not statutorily required, have been included due to the resources they consume and their contribution to Community Outcomes.

In accordance with Section 101B of the Local Government Act 2002 (the LGA), this Strategy sets out:

- how Council will manage infrastructure assets, considering the need for renewals, response to growth and maintaining Levels of Service
- overall assumptions relating to life cycle, demand and Levels of Service
- the significant decisions
- the overall Financial Strategy 2021-31 to manage assets
- significant issues, options and responses associated with the long-term management of Council's infrastructure.

USING THIS DOCUMENT

This document is divided into three parts as outlined below:

Part 1: Drivers of investment and strategic responses across the infrastructure activities.

Part 2: Detail and analysis of each activity

Part 3: Summary – brings the overview and detail together.

PART 1:

Strategic context and drivers for investment

Whangārei District has seen high levels of population growth and development over the past three years and this is projected to continue. The Finance Strategy and Infrastructure Strategy are framed around making sure our District is ready for population increases and economic growth while continuing to provide an appropriate level of service to our community. Over all, Whangārei's infrastructure is adequately funded while balancing our ability to deliver. Over the past three years we have increased renewal programmes, delivered more to the community of Whangārei and built capacity for continued growth.

This document builds on the direction set in the LTP 2018-28, the Infrastructure Strategy 2018-48 and the Financial Strategy 2018-28.

The key strategic direction from Council's new vision is;

“An inclusive, resilient and sustainable District”

To guide the development of the LTP, Council has also identified 5 key strategic priorities:



Transport



Northport and the Navy



City centre revitalisation



Housing



Sustainability (including waste minimisation)

These have framed decision-making throughout the LTP process, including the prioritisation of projects and funding.

In determining the strategic direction of infrastructure management, it is necessary to consider a range of matters. Key drivers have been identified as:



District growth and development



New technologies



A changing climate



Community expectations



COVID-19



Capacity to deliver capital works



New legislation and regulatory reform



Data confidence



Community wellbeing and public health outcomes

There are strategic issues common across both the Infrastructure Strategy and the Finance Strategy, the detail and implications of these are addressed in the sections below.



DISTRICT GROWTH AND DEVELOPMENT

Our District is growing, and we expect it to continue to grow by an estimated 1.6% per annum over the next 10 years, reaching about 115,000 people by 2031, and 144,000 by 2051.

This represents an average annual increase of just over 1,000 people per year. This means that we will also need more houses and potentially more infrastructure. Our housing stock is projected to increase from 41,500 homes today to over 48,000 homes by 2031, and 61,000 by 2051. Updated growth predictions from Statistics New Zealand were supplied in October 2020. These were reviewed and assessed as having only a minor effect on the programmes identified.

Some areas of our District will experience growth at a larger and faster rate than others. Marsden Point/Ruakākā, Tikipunga, Waipū and Kamo are all areas where we anticipate more development and population growth. The expected growth requires considerable investment in infrastructure, services and community facilities at a substantial cost. The costs are shared between Council, the business sector and the community.

Growth will continue to put pressure on our core infrastructure and community facilities in the medium and long term. Our transportation network, water and wastewater services, stormwater, as well as parks and recreational facilities need to have enough capacity to provide for predicted growth. Anticipating the needs of growth in a timely way is a significant challenge for Council.

Planning for growth

To ensure we properly plan for growth, our draft Sustainable Future: Whangārei District Growth Strategy (draft Growth Strategy) has been reviewed to inform the LTP process. This sets out:

- where new development is expected to occur, and
- what investments are needed to ensure existing and future communities thrive.

This allows us to manage the impact of growth and assess and plan for infrastructure requirements for our District over a 30 to 50-year time frame. It focuses most of the development within:

- the existing urban area – Whangārei City, Tikipunga, Kamo, Maunu, Onerahi and Otaika
- the growth nodes of Marsden Point/Ruakākā, Waipū, Parua Bay and Hikurangi where growth is targeted.

This aligns with existing infrastructure service provision. As we continue to grow and develop as a District, it is important that we make timely and appropriate infrastructure investments, so that we can continue to enable growth but also ensure the existing and future communities have the infrastructure that is needed to support their day to day lives.

Because land use patterns affect both the timing and costing of core infrastructure, the Infrastructure Strategy 2021-51 builds on the direction set in the draft Growth Strategy to provide more detailed planning of our infrastructure needs. Our Activity Management Plans (AMPs) have also been developed to encourage growth where it is desirable and where infrastructure is capable of meeting increased demand.

Changing communities

The draft Growth Strategy continues to tell a story of growth, but also of a changing community with more older people (over 60) as well as a growing younger cohort (0-11 yrs).

As our population changes, our residents may need specific services from our infrastructure, for example an older population may require more low impact leisure and recreation activities, including accessible facilities, while a younger population will need more active and informal sport facilities and outdoor activity spaces.

Māori make up nearly a quarter of the District population. The way we plan and implement our infrastructure projects will need to be informed by our partnership with hapū and acknowledge the importance of te ao Māori.

Whangārei attracts many seasonal visitors which have a significant impact on the facilities currently available, including parking, coastal facilities, public toilets, solid waste, water and wastewater demand. A growing number of high value permanent and holiday properties are occurring outside of urban centres, particularly in coastal areas. This puts pressure on the need for facilities and infrastructure in areas where historic population levels have not triggered the need for investment in increased levels of service. It also creates challenges in the management of 'holiday peaks'.

Urban intensification through changes to the planning environment through District Plan changes or central government direction may require early asset upgrades to maintain capacity and service levels.

An increase in population will result in a gradual increase in rateable residential dwellings, the effect of this will be to increase the number of residents requiring services from our infrastructure. This may result in changes to how people use our infrastructure such as transportation and parks as well as increasing the utilisation of the piped assets.

Growth Model

Our population forecasts are derived from the Whangārei District Growth Model, which projects future population, household and dwelling changes over a 30 year period. The Growth Model was reviewed in early 2020 and revised in November 2020 following the release of the latest Estimated Residential Population figures from Statistics New Zealand.

More information can be found in the Draft Whangārei District Growth Model (2021 – 2051) report.

RESPONSE TO DISTRICT GROWTH AND DEVELOPMENT

Sustained growth is expected for the next 30 years. Council is responding to District growth and development is through:

- aligning infrastructure with growth, and focusing on growth hotspots in the District
- developing a new draft Growth Strategy
- undertaking spatial planning in key areas of the District
- ongoing monitoring and reporting of growth and demographics to inform decision making
- working towards meeting the requirements of the National Policy Statement on Urban Development
- decision-making through the Te Kārearea Standing Committee to ensure te ao Māori is incorporated into decision making.



A CHANGING CLIMATE

Our climate is changing, and the future impacts are likely to be significant and wide-ranging. In Whangārei, our communities are already experiencing climate related impacts, from flooding to prolonged periods of drought. For our communities to continue to thrive we must build resilience into our infrastructure planning.

The Infrastructure Strategy 2021-51 and the Finance Strategy response to the impacts of a changing climate is informed by Council's strategic direction, as well as central government legislation and sector guidance.

Impacts of climate change

Climate change encompasses global warming and the associated changes in climate that result from it, including an increase in more extreme climate events such as floods, storms, cyclones and droughts. The latest climate modelling indicates that we can expect ongoing changes in coming decades that will impact our communities throughout the District.

Climate change is not expected to create new hazards that are not already being experienced. However, it is expected that the frequency, location and intensity of some hazards such as storm events (wind damage), flooding, coastal erosion and inundation by sea water will increase.

The District is largely coastal in nature with the majority of residents and population centres located along the east coast. Whangārei City is located within an estuarine environment, with the Hātea River being tidal and at the centre of the city. There are numerous smaller coastal settlements, including Langs Beach, Waipū Beach, Ruakākā, Ngunguru, Tutukākā and along the inner Whangārei Harbour. These settlements are at risk of increased erosion, sea level rise in the long term and potential inundation by sea water as a result of storm surge.

WARMER TEMPERATURES



2040

an increase of 0.7°C to 1.1°C.



2090

Up to 3.1°C hotter

SEA LEVEL RISE



75cm

by 2100

RAINFALL



23%

less spring and winter rainfall by 2100



Higher intensity rainfall events

More severe storm events

DROUGHTS







More frequent dry spells

Lower river flows and aquifer levels

The effect of climate change and hazards on Council's infrastructure over the next 30-year period and beyond, is expected to include:

Effects of climate change

Event	Implication
 SEA LEVEL RISE	<ul style="list-style-type: none"> • coastal inundation • increased erosion • saline intrusion into groundwater • rising water tables
 HIGH RAINFALL INTENSITY	<ul style="list-style-type: none"> • urban stormwater/flooding • sediment transport and erosion
 DROUGHT	<ul style="list-style-type: none"> • water supply • aquifer depletion • wastewater influent toxicity
 EXTREME STORMS/ CYCLONES	<ul style="list-style-type: none"> • increased severity and frequency of event

Whangarei District Council's climate change journey

Council is establishing a strategic approach to adaptation to climate change and mitigation of our environmental impact. Our journey to date has included:



We are still in the early stages of our long term response to Climate Change. This LTP provides funding for Council to work with our local communities to share the information we have, understand how the communities perceive risks and opportunities, and to agree on pathways moving forward to reduce emissions and adapt to the changes we expect to see in the future. This engagement will be our Council's climate change adaptation work programme. The effects of new projects resulting from our climate change adaptation programme are mainly seen in the later years of the Strategy, signalling that work will be required.

As a result of climate change, parts of Whangārei that are habitable currently, may become uninhabitable or inappropriate for further development. By seeking to understand these changes and planning our responses, we seek to avoid creating new risks and reduce the scale of existing risks and impacts and adapt in a just and equitable manner.

Council has explored the ability to include Climate Change as a project driver in financial modelling and analysis. However, until we have an understanding of the community's perception of risks and opportunities and have agreed on pathways and projects to mitigate these, it is difficult to accurately and meaningfully allocate project costs to Climate Change. To support this Council has specifically allocated \$4m in the 2021 Long Term Plan to fund working with communities to understand risks and opportunities and develop climate change adaptation plans. We will continue to review the potential for financial reporting on Climate Change investment as a project driver going forward.

RESPONSE TO A CHANGING CLIMATE

The impacts of a changing climate will need to be considered within 30 years. Council is responding to a changing climate by:

- funding for climate change risk assessments, beginning in 2021
- adoption and implementation of a Corporate Sustainability Strategy
- working in partnership with Kaipara District Council, Far North District Council and Northland Regional Council to develop a consistent response to the risk of a changing climate
- updating hazard mapping to inform decisions on design and location of assets.



COVID-19

COVID-19 has had a profound global impact. Early in the COVID-19 pandemic lockdown in 2020, Council endorsed a COVID-19 Response Strategy. This Strategy aims to set a path for recovery and reset of our economy in response to an economic crisis associated with COVID-19. The 2020-21 Annual Plan introduced immediate measures to help our community. However, the Infrastructure Strategy and Finance Strategy need to support the longer-term recovery and reset.

COVID-19 Response Strategy



Key to our COVID-19 response is being agile and resilient in our response to future COVID-19 related events, such as lockdowns. Implementing agility and resilience will enable us to respond to future unpredictable events including natural hazards.

The Financial Strategy also sets out a pathway for how Council can catch-up from the 2020-21 Annual Plan and the associated Rating decisions. Our ability to be able to fund operational programmes will be key in responding to COVID-19 as well as making sure we are well placed to face the challenges of climate change and continued growth in the District.

RESPONSE TO COVID-19

The impacts and recovery from COVID-19 will focus on the early years of this Strategy. Longer term (over 30 years) it will have a lesser impact. Council is responding to COVID-19 by:

- implementing the COVID-19 Response Strategy
- continuing project spending
- increasing grants available to the community
- continuing monitoring and reporting on our economic recovery to inform decision making.



NEW LEGISLATION AND REGULATORY REFORM

There are several major pieces of legislative reform that will impact on the regulatory environment that councils work in. The reforms will need to be closely monitored for ongoing impacts and are potentially the most significant issues facing the delivery of our infrastructure programme, particularly the outcome of the three water reforms. The key areas are outlined below:

Three Water Services Reform Programme

The Three Water Services Reform Programme is tasked to review how Councils provide three water services. The Northland Councils were already working to integrate and work through opportunities for delivery of three waters services and infrastructure, ahead of the Central Government reforms announced in 2020. A Memorandum of Understanding (MOU) has been signed with central government opting-in to the first stage of the reform and stimulus programme. The MOU commits Council to engage in the first stage of the reform programme – including a willingness to accept the reform objectives and the core design features set out in the MOU and have secured \$11.78m (excluding GST) of funding. In May/June 2021, the Government is expected to make substantive decisions on the next steps for reform. The funding is targeted at projects to increase public confidence in the safety of drinking water, and to improve environmental outcomes.

There is potential for the three water services to be delivered outside of the current territorial authority delivery model. Our communities need three waters services regardless of the outcome of the reforms. The impact of the reform on the ability and approach for delivery of both the three water and the remaining asset services is unknown but has the potential to be significant. This Infrastructure Strategy includes three waters management and projects and is identified as a key challenge with the LTP.

Resource Management Act Reform Programme

New directions for Resource Management in New Zealand have been signalled for the coming years. The reform programme looks to address significant pressures on both the natural and built environments. Urban areas are struggling to keep pace with population growth, water quality is deteriorating, biodiversity is diminishing and there is an urgent need to reduce carbon emissions and adapt to climate change.

It is likely that the reforms will begin within the current term of government and will involve the repeal of the Resource Management Act 1991 (RMA) and its replacement with new legislation including a Natural and Built Environments Act, Strategic Planning Act and Climate Change Adaptation Act.

The Climate Change Response (Zero Carbon) Amendment Act 2019 and Declaration of a Climate Emergency

The Climate Change Response (Zero Carbon) Amendment Act 2019 provides a framework by which New Zealand can develop and implement clear and stable climate change policies that:

- contribute to the global effort under the Paris Agreement to limit the global average temperature increase to 1.5° Celsius above pre-industrial levels
- allow New Zealand to prepare for, and adapt to, the effects of climate change.

This Act provides the guidance and direction on New Zealand's climate change programme including mitigation and adaptation. The impact of this on infrastructure within the life of this Plan has the possibility to be significant with carbon neutral targets effecting cost of construction and operations.

National Policy Statement on Urban Development 2020

The National Policy Statement on Urban Development sets out the direction and requirements for local government in response to future growth and development. Put simply it seeks to ensure that there is enough land available to accommodate future demand for housing and business.

In 2016 the first National Policy Statement on Urban Development Capacity was released. This categorised Whangarei as a 'high growth' area. In response, Whangarei District Council completed a Housing and Business Land Demand and Capacity Assessment (2018). This assessment showed we had enough capacity in the short, medium and long term for housing and business land. This took into consideration the following:

- District Plan provisions (operative and the Urban and Services Plan Change)
- Infrastructure (Planned and Funded in the LTP as well as planned in the Infrastructure Strategy)
- Feasible (What development is likely to achieve a 15% profit margin and is therefore likely to be built)
- An additional 20% margin over the short, medium and long term.

In 2020, a new National Policy Statement on Urban Development (NPS-UD) was released. This categorised Whangarei as a 'Tier 2' area and required Council to do the following:

- Prepare a new Housing and Business Capacity Assessment by 31 July 2021
- Prepare a Future Development Strategy to inform the 2024 - 34 Long Term Plan
- Ongoing monitoring and reporting of key housing and development indications

Full details of the NPS-UD requirements can be found here:

<https://environment.govt.nz/acts-and-regulations/national-policy-statements/national-policy-statement-urban-development/>

We have started to review our 2018 Housing and Business Land Capacity Assessment and we are on track to meet the 31 July 2021 deadline. This assessment will meet our statutory requirements including assessing demand and capacity by housing type and location as

well as looking at the feasibility of development and the incorporation of a competitiveness margin. Once complete this will be available to view on our website.

The outcome of this assessment will inform the next stage of the NSP-UD which will be the Future Development Strategy. This Strategy will outline where, how and when new development will take place in the District and ensure that we have enough land and infrastructure to meet demand over the next 30 years. This Strategy will then inform our Finance Strategy, Infrastructure Strategy and Asset Management Planning for the 2024 - 34 Long Term Plan.

Draft National Policy Statement on Indigenous Biodiversity

The proposed National Policy Statement for Biodiversity sets out the objectives and policies to identify, protect, manage and restore indigenous biodiversity under the Resource Management Act 1991. This is likely to become effective early 2021 and may impact on consenting and compliance.

National Policy Statement for Fresh Water 2020 (NPS-FM)

The National Policy Statement for Freshwater Management 2020 and water reforms are requiring freshwater be managed in a way that:

- that 'gives effect' to Te Mana o te Wai through involving tangata whenua
- works with tangata whenua and communities to set out long-term visions in the regional policy statement
- prioritising the health and wellbeing of water bodies, then the essential needs of people, followed by other uses.

The high level outcomes of the NPS-FM is to improve degraded water bodies and maintain or improve all others using bottom lines defined in the document.

How the Northland Regional Council implements the requirements of the NPS-FM will impact on the future provision and potentially operations and maintenance of infrastructure including consenting.

Draft National Policy Statement on Highly Productive Land

The Draft National Policy Statement on Highly Productive Land aims to improve the way highly productive land is managed while recognising the full range of values and benefits of primary production land. This draft Policy may limit or change the direction in which the city can expand, and therefore where infrastructure will be needed.

Urban Development Act 2020

This Act gives powers to Kainga Ora including the ability to modify, add to, or suspend provisions in key RMA documents (including Regional and District Plans and government policy statements) within an identified project area. This may impact on infrastructure as this may change where and when infrastructure is required to be provided.

Drinking Water Standards

The drinking water standards were revised in 2018 to protect the safe availability of drinking water. It potentially impacts on our treatment of water and may lead to the requirement to service outlying additional communities.

Te Tiriti o Waitangi Settlements

The recent treaty settlement for the Kaipara Moana may impact on our infrastructure within the Kaipara Harbour catchment, which includes the Hikurangi Flood Protection Scheme. Any future treaty settlements may impact on Council functions or governance arrangements (i.e. through the establishment of co-governance entities in any deed of settlement between iwi/hapū and the Crown), including how we manage our infrastructure assets in those areas.

Northland Regional Plan

There is ongoing work on the Northland Regional Plan in response to government direction, this includes freshwater and hazard mapping covering:

- priority rivers
- coastal hazards
- flood susceptibility.

Going forward this work could impact on development capability, consenting and our response to climate change.

Whangārei District Plan

The Urban and Services Plan changes are currently underway. The Hazards, Biodiversity and Esplanade sections of the District Plan will be reviewed in 2021. These may impact on the rules around consenting for infrastructure provision.

All infrastructure activities have assets that are subject to resource consents. Most consents are managed through the AMPs and the consenting process. However, consents that involve significant water takes, significant discharges or have the potential for substantive environmental impacts, are of strategic importance. Strategically, important consents are associated with:

- Wastewater – treatment and discharge options, including land and water discharges and any ocean outfall
- Stormwater – network and pump stations in urban areas and pipe outfalls
- Water – provisions for the take of water at low flow
- Flood Protection – Hikurangi Flood Management Scheme renewals
- Solid Waste – discharges from landfills and consents for ReSort and Purewa Landfill
- Hard protection structures in the coastal and river environments along roads and reserves.

RESPONSE TO NEW LEGISLATION AND REGULATORY REFORM

The current reforms are likely to be introduced in the early years of this Strategy but will impact the long-term delivery and management of infrastructure.

Council's will respond to regulatory changes by:

- implementing new legislative and policy requirements as required that result from the National Policy Statements on Urban Development and Freshwater
- factoring in legislative reform in key policy and planning decision making, such as the Climate Action Plan and draft Growth Strategy
- delivering the first tranche of three waters funding, using that funding to work with other Northland Councils and hapū/iwi on the options for the provision of three waters going forward
- acknowledging the uncertainty around Council's involvement in tranches two and three of the three waters programme, and the impact of this on planning for the continued provision of these services through the Long Term Plan (this approach is in accordance with local government sector advice)
- acknowledging the potential implications of the suite of central government reforms (i.e. three waters, RMA and regulatory) on the local government sector and continue to maintain an agile approach. Actively engage with central government over legislative change by submitting on proposed changes and to actively lobby for the best outcomes for our community and region.



COMMUNITY WELLBEING AND PUBLIC HEALTH OUTCOMES

The four well-beings (social, economic, environmental and cultural) have been re-introduced into the Local Government Act. This gives a renewed emphasis on Councils to think holistically across the four wellbeings through its infrastructure decision making.

Within the wellbeings, there is also increased expectation on public health, particularly in relation to water standards. The changing expectations and legislations around public health is a growing driver for infrastructure. This could include changes to water security and supply, fluoridation, summer algae levels, and swimability of rivers and beaches.

For transportation, improvements in public health and safety is identified as one of their key step changes.

RESPONSE TO COMMUNITY WELLBEING AND PUBLIC HEALTH

Community wellbeing and public health outcomes will be considered across the 30 years of this Strategy. Council's response is to:

- continue to fund and deliver safe drinking water through our potable water networks
- align our activities and levels of service with the four wellbeings
- fund transport programmes to improve the safety of our local road networks and cycleways/shared paths through:
 - » reducing dust risk despite uncertainty in unsealed road sites to be approved by Council
 - » focussing on improving safety to reduce road accidents
 - » increasing alternative transportation options such as cycleways.



NEW TECHNOLOGIES

The Infrastructure Strategy 2021-51 is a forward-looking document covering the next 30 years. Over this period the issues and solutions for the management and provision of infrastructure will change considerably. This will be driven by advances in technology and changes in the way we live and work. Over such a long horizon, it is difficult to predict future trends with certainty. However, Council is now beginning to see changes that will inform and influence its 30-year vision. Changes in technology are key to resilience and enable agile and adaptive infrastructure provision.

This section captures those changes, along with some of the likely responses.

Emerging technologies and trends strategic context

TRANSPORTATION

The trend towards transport choice will continue as cycling and walking continue to grow in popularity for both recreation and commuting. This increased demand will require an appropriate response in the design and location of shared paths, walkways and cycleways, both on and off road. Demand will also increase for e-bikes and e-scooters, making it easier to travel longer distances.

As cities grow, so does the patronage and popularity of public transport. As our urban area develops, our public transport will need to respond to avoid congestion. Technology will also help the reliability and usability of public transport.

Technology will influence how we move around our District. Electric vehicles will reduce environmental effects through zero noise and air emissions. This will likely reduce reverse sensitivity issues (the impacts of new activities) with neighbouring properties and improve public health and amenity.

Self-drive technology will enable a more efficient movement of private, public and freight vehicles, therefore making our transport system work better. This technology also has the potential to improve road user safety.

WATER

Technology will play a vital role in the monitoring and compliance of our water supply. Technology to automate and monitor complex treatment process and distribution networks are being implemented in the development of the Whau Valley water treatment plant and will be rolled out to other facilities throughout the District. The use of these technologies allows us to more effectively manage our water treatment processes, reducing the likelihood of non-compliances and optimising performance. Climate change and the focus on freshwater allocation means that as we grow, we are not guaranteed to be able to increase water takes from our current sources. Technology will enable the use of poorer quality raw water supplies, while ensuring ever more stringent and complex standards can be met.

WASTEWATER

The future treatment of wastewater offers opportunities for the promotion of grey water recycling to reduce demand on the network. There are also opportunities to build on existing initiatives to generate energy from the wastewater treatment process and reuse end products. More advanced treatment methods such as membrane filtration are becoming more widely available which allow for higher standards of treatment within the current treatment plant footprint. Water reuse is an emerging area both within land based application and industrial use.

STORMWATER

The future of stormwater management will recognise and maximise multiple outcomes for our environment and communities. This includes reduced flooding, improved water quality and stream health and recreation spaces. A key focus will be to integrate innovative stormwater treatment solutions to help connect urban areas to our natural environment through the implementation of the Blue/Green Network Strategy.

FLOOD PROTECTION

More innovative equipment and modelling is likely to be available going forward. There will also be greater ability to predict flood events, allowing for evacuation of people, livestock and property and the protection of taonga species such as tuna.

SOLID WASTE

The future focus will be to minimise the volume of waste we currently produce. The promotion of minimisation and recycling is likely to be complemented by the actions of government and corporations. However, there will be a continued need to manage the waste process, including landfill waste-to-energy technology.

PARKS AND RECREATION

The way we use our public spaces is changing. The Active Recreation Strategy and Open Space Strategy highlights what sports are growing and where current allocation doesn't meet demand. As we grow, we will likely experience decentralisation of parks and recreational infrastructure, or their placement in outlying rather than central parts of our District. This will require new land acquisition, but also reviewing how we use the land that we already own and how we provide for the increasing emergence of non-organised recreation.

As the climate changes new turf management practices and technologies will need to be reviewed to enable us to maintain our parks to with reduced water and with hotter temperatures.

A further trend is toward recognising streets as public space assets and designing them so that they are better used by our communities.

EMERGING TECHNOLOGIES AND TRENDS STRATEGIC RESPONSE

Advances in technology and changes in the way we live and work, have the potential to affect a wide range of Council assets. While it is difficult to predict future trends accurately and respond to them with certainty, there are steps that Council can take to ensure that it keeps up to speed with developing technologies and trends. To address this issue Council will:

- consider the design and location of shared paths, walkways and cycleways to support multiple transportation options
- maintain a 'watching brief' on emerging technologies to understand trends and potential requirements
- where possible, future proof the assets built today
- look at wastewater reuse to support the maintenance of our parks and reserves especially in areas where water is not reticulated
- plan for key emerging issues and trends through initiatives such as precinct planning and placemaking
- look for opportunities to maximise outcomes for our environment and communities through the management of stormwater and the implementation of the Blue/Green Network Strategy.



COMMUNITY EXPECTATIONS

Community Outcomes

Community Outcomes guide everything that Council does, as a set of goals that the community has identified as being important. All seven infrastructure activities contribute to at least one community outcome.

		Water	Wastewater	Stormwater	Transport	Flood Protection	Solid Waste	Parks and Recreation
Outcome		Contribution: High Medium Low						
EFFICIENT AND RESILIENT CORE SERVICES								
POSITIVE ABOUT THE FUTURE								
CARING FOR THE ENVIRONMENT								
PROUD TO BE LOCAL								

Levels of Service

A level of service is the quality of service for an activity that Council is targeting or expects to meet.

The Level of Service describes what the community can expect from Council's infrastructure and activities and is a combination of the:

- quality of infrastructure provided by Council
- standard to which infrastructure is maintained
- services that the assets provide to the community.

Council's overarching Strategy is focussed on ensuring that Levels of Service identified in the LTP are maintained. This section of the Infrastructure Strategy 2021-51 addresses strategic options and Council's anticipated response or choice of option required to maintain Levels of Service across the individual activities, given overall asset condition and the funding environment. The anticipated responses to key issues, along with the renewals profile that makes up each activity funding strategy, are targeted at maintaining current Levels of Service. Specific levels of service are detailed in the activity sections of this Strategy.

The following table outlines some of the key issues that may affect our ability to either deliver our current levels of service or change strategic direction.

Issues affecting Levels of Service

Concern	Potential change	Present status
Climate change	<ul style="list-style-type: none"> loss of assets, relocation, delivery of service, change in standards 	<ul style="list-style-type: none"> WDC Climate Change Adaption Strategy and action plan
COVID-19 response and effects	<ul style="list-style-type: none"> funding, delivery of service 	<ul style="list-style-type: none"> 10-point Economic Recovery Response in Annual Plan
Three Waters Reform programme	<ul style="list-style-type: none"> funding, ownership, delivery of service 	
Management of remaining assets	<ul style="list-style-type: none"> engagement in tranche one delivery and options analysis watching brief and agile responses 	
Drinking Water Standards	<ul style="list-style-type: none"> change in standards 	<ul style="list-style-type: none"> anticipating changes and effect on Levels of Service and performance measures
Proposed Regional Plan for Northland altering Drinking Water, Wastewater and Stormwater consenting and technical standards	<ul style="list-style-type: none"> change in standards 	<ul style="list-style-type: none"> engagement with NRC
Major incoming commercial business: Northport, Naval base	<ul style="list-style-type: none"> increased growth 	<ul style="list-style-type: none"> has potential to impact on all activities planning for associated growth undertaken in support of Strategy
Local government reform including RMA reform – for example new environmental standards for a range of activities such as biodiversity, freshwater, wastewater discharges	<ul style="list-style-type: none"> change in standards 	<ul style="list-style-type: none"> has potential to impact on all activities but significant uncertainty remains. Watching brief and agile responses



CAPACITY TO DELIVER CAPITAL WORKS

Like all councils, Council has experienced difficulty in delivering its capital programme resulting in carry forwards over financial years. Carry forwards have been across all activity areas. Whilst there has been considerable improvements since the last LTP period, increasing budgets mean that project delivery will remain a challenge.

Our challenge is scaling up to deliver and this has been recognised through the development of our AMPs and LTP. Transportation has an added capacity constraint in years 1 -10 as a consequence of works being undertaken through funding from the Provincial Growth Fund and the Crown Infrastructure Partnerships 'shovel ready' funding. This will result in a concentration of major capital works over the 11-20-year period. However, Council is working with suppliers with well signalled work programmes.

We have worked closely with elected members to develop a strategy to improve the timely delivery of capital projects over the next 10 years. This includes:

- developing project specific funding and delivery programmes for major projects and 'one offs'
- getting the scoping right up front and adjusting the staging of programmes so that project design and consent is achieved first with appropriate funding available, followed by larger funding amounts in later years for project delivery
- providing for flexible programmes, with supporting prioritisation and reporting processes, so that the timing of prioritised projects can be moved under delegation to reflect changing circumstances
- identifying, where appropriate, opportunities for the community to deliver programmes of work, particularly in the parks and community facilities space
- building capacity to manage the delivery of programmes
- working with contractors to ensure they have visibility of the capital works programme and can plan for a longer term pipeline of projects.



DATA CONFIDENCE

The following table outlines the confidence we have with our asset information to inform the Infrastructure Strategy.

Details on the breakdown and specific confidence levels are outlined within each activity section and Activity Management Plan. The confidence level is assessed against the International Infrastructure Management Manual Data Confidence grading system (Table 4.2.7.2).

In summary we have medium to high confidence in our critical assets such as water treatment facilities, reservoirs, wastewater treatment plants and pump stations. For our stormwater assets where our confidence is relatively low to medium, we have not identified any critical assets.

Data confidence is covered in further detail within each activity area of the Infrastructure Strategy.

Asset Group	Data confidence	Comment
Water	High	High confidence in information across the portfolio particularly buildings, reservoirs and treatment plants. Underground assets have extensive maintenance records giving confidence that renewal strategies are appropriate.
Wastewater	Medium	Reasonable confidence in data across the activity. An area of focus is improving quality of condition data for gravity mains through an ongoing condition assessment programme. Ongoing modelling of the network is planned to identify and manage asset criticality.
Stormwater	Low/Medium	Reasonable component information, but location and condition data is inconsistent. There is an ongoing asset data capture programme to improve knowledge levels including new asset capture and network modelling.
Flood Management	Medium	Medium confidence in data across the activity, but limited componentisation of data. This is not critical as most assets are above ground and condition and age are known at a functional level.
Solid Waste	Medium	Medium confidence in data across the activity as these are above ground assets.
Parks and Reserves	High	High confidence in data across the activity. Lower levels of componentisation for cemetery assets but information is continually improving.
Transportation	Very High	Very high confidence in data across the activity. Ongoing, well defined condition assessment programme and database.

PART 2:

Response by Activity Area

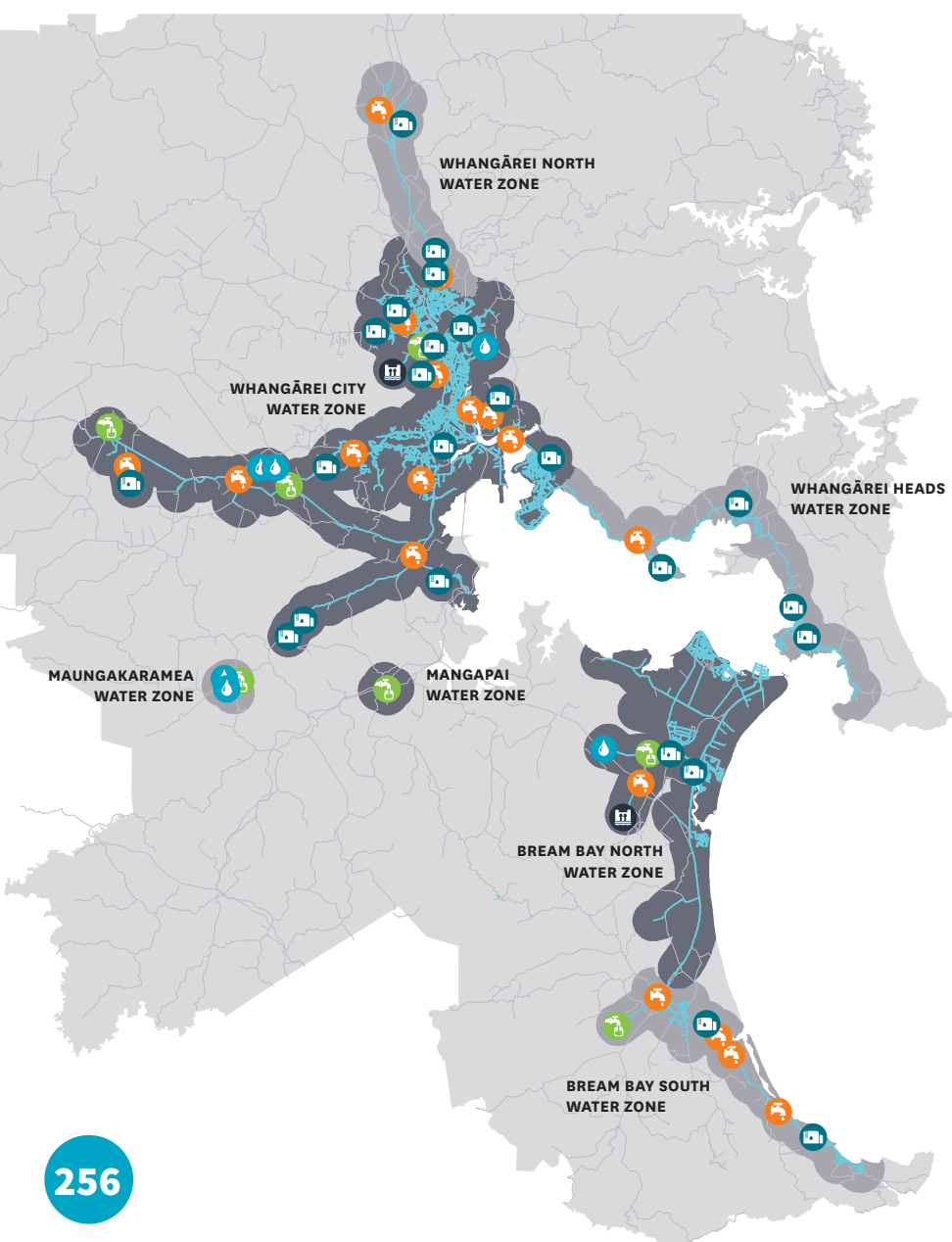


WATER

Overview

The water activity covers the collection of raw water and the treatment and distribution of drinking water to reticulated areas within the community. Water can be made available to properties outside of the reticulated area via private tanker deliveries. Water is also available for fire-fighting throughout the reticulated network.

Water facilities



\$370M

worth of assets

26,500

m³/day (average)

26,100

customers



765km

Pipes



4

Dams



46

Reservoirs



17

Pump
stations



11

Water
sources



7

Treatment
plants







Critical water assets

The following assets have been identified in the Water Activity Management Plan 2021-31 as critical to the network and a resilience strategy adopted for their operation and management.

- reservoirs – Priority 1
- dams and sources (WS) – Priority 2
- trunk mains and raw water mains – Priority 3 and 4
- water treatment plants (WTP) and structures – Priority 5
- pumps (PS) – Priority 5
- control valves – Priority 6
- distribution mains – Priority 3 and 7.

Asset groups are identified as critical where their loss impacts a large area, can cause non-compliance or interfere with critical control points in the network.

Critical assets assessments and treatment programmes

Critical Asset group	Assessments	Treatment programmes
 Sources	bore security, quality testing, visual	upgrades and maintenance
 Dams	comprehensive safety reviews	CSR programme
 Treatment Plants	structural, condition, SCADA – process monitoring	maintenance, replacements and upgrades
 Reservoirs	structural, security, SCADA – levels	rehabilitation
 Trunk mains	condition- sample testing, modelling, pressure testing	replacements and upgrades
 Pump stations	condition audits, SCADA – flows	maintenance, replacements and upgrades

Key water issues

The following table indicates significant issues and responses identified in the Water Activity Management Plan 2021-31

Issue	Options	Implications
Climate change will impact raw water availability and have other potential impacts on water quality which could reduce resilience.	Do nothing	<ul style="list-style-type: none"> • more restrictions during long dry spells • possibility of running out of water • economic impact on businesses and wider community.
	Water use reduction strategies and source optimisation	<ul style="list-style-type: none"> • short term benefits • additional long term costs for community i.e. rainwater tanks • helpful for consent renewals • increased operational costs.
	Develop new water sources and treatment	<ul style="list-style-type: none"> • drought resilience improved • able to support wider community, even outside District • ability to address growth issue • significant capital costs.

MOST LIKELY MANAGEMENT SCENARIO

Council will need to manage its existing water sources as well as possible to ensure the impacts of drought conditions are minimised. Optimising water use from different sources from a resilience perspective rather than a cost perspective will allow dam water to be saved for extreme droughts. New water sources will also need to be developed.

To address this issue Council will:

- undertake a conjunctive use model to better understand water availability and operational needs
- upgrade the Porotū WTP to treat water from the Wairua river
- investigate new water sources and develop as required.

Issue	Options	Implications
Information available on some assets is insufficient for proactive management of assets	Do nothing	<ul style="list-style-type: none"> • failure to maximise expenditure decisions • increased costs as renewal programme may not be based on accurate information • increased potential for unexpected failure of network.
	Rely on modelling only	<ul style="list-style-type: none"> • modelling alone may over- or under-state asset condition and capacity • asset modelling relies on the best information available at the time, which may be incomplete • increased long term cost.
	Fund asset data and systems improvement	<ul style="list-style-type: none"> • the accuracy of models improves as data is collected • reduced cost as maintenance and renewal expenditure is prioritised based on best available information • provides baseline information for long term planning.

MOST LIKELY MANAGEMENT SCENARIO

There are limitations on historic information. Council prefers to extend and verify the information currently available in the asset database so that it can be better used for proactive management of assets.

To address this issue Council will:

- continue its data improvement/validation programme which has been undertaken as part of the AMS upgrade from Hansen to TechOne/SIGMA however data cleansing and improvement is an ongoing process
- increase funding for condition assessments and modelling on network assets
- while not a factor in the adequacy of data, Council will also fund the upgrade or replacement of the Asset Management Information System (AMIS), which is now unsupported (assistance is no longer available from the manufacturer).

Issue	Options	Implications
Some ageing water reticulation pipes are in poor condition, with many older pipelines constructed from out of date materials such as asbestos cement	Do nothing	<ul style="list-style-type: none"> • ongoing deterioration and failure of the water supply network • increasing water lost as leakage • inability to deliver an appropriate Level of Service.
	Maintain existing pipes	<ul style="list-style-type: none"> • increased difficulty and cost of repair • some materials may not be repairable due to unavailability of older materials • leakage and increased cost • reduction in Levels of Service.
	Upgrade pipes using new materials	<ul style="list-style-type: none"> • extends uniformity of network pipelines • ability to use 'fit for purpose' materials • lower long term maintenance costs • more reliable water supply network • maintains Levels of Service • significant Capital costs.

MOST LIKELY MANAGEMENT SCENARIO

The remaining alkathene and galvanised steel rider mains are operating past their predicted life and are in poor condition. Leakage and breakage rates in these pipes directly contribute to higher than desirable unaccounted for water figures and maintenance costs. Many of the distribution mains are made of asbestos cement and may be nearing the end of their predicted life. Older cast iron pipes in residential areas have become severely encrusted inside and several cannot meet fire-flow requirements (level of flow required by the fire service in the event of a fire). Council prefers to upgrade distribution pipes as they start to fail using new, 'fit for purpose', materials. To address this issue Council will:

- continue to implement a pipe replacement programme
- continue a programme of operating a lower water pressure in some areas to reduce strain on ageing pipes and reduced leakage, until replacement can be implemented
- upgrade pipes using new materials, where required
- increase its renewal programme as more pipes reach the end of their useful lives.

Issue	Options	Implications
Water treatment plants require continuous upgrading and ongoing expenditure to ensure production and to maintain water quality standards	Run to failure	<ul style="list-style-type: none"> • increased maintenance costs • high risk of failure despite redundancies • potential inability to meet future demand and water quality standards • potential decrease in Levels of Service for some plants.
	Improve maintenance and renewal programme and upgrade, where appropriate	<ul style="list-style-type: none"> • extends useful life • increased costs over time • upgrades alone may not allow a plant to meet increased demand • does not address site constraints.
	Upgrade to use technology/best practice as it becomes available and replace, where appropriate	<ul style="list-style-type: none"> • maintenance and upgrade extends useful life • more cost-effective option where plant is reaching the end of useful life, or upgrade costs are becoming untenable • full replacement enables site constraints to be addressed.

MOST LIKELY MANAGEMENT SCENARIO

There are seven water treatment plants in the District. To ensure a safe, reliable water supply for the community, Council's preferred option is to upgrade and/or replace them, as required. To address this issue Council will:

- replace the Whau Valley Treatment Plant (in progress)
- upgrade Porotī WTP to support the current and new Wairoa River source
- continue with a programme of maintenance and renewal for other water treatment plants
- consider further upgrades/replacements over the life of the Strategy to optimise performance and asset life.

Issue	Options	Implications
Some critical pumps and drives have exceeded their design life and are now due for either replacement or refurbishment	Run to failure	<ul style="list-style-type: none"> • additional long term cost • failure of critical pumps and drives • increased risk to the delivery of flow and pressure • reduction in Level of Service.
	Effective maintenance regime	<ul style="list-style-type: none"> • increased backlog of renewals and replacements • additional long term costs.
	Maintain, renew and upgrade before failure	<ul style="list-style-type: none"> • increased reliability of critical assets • maintains Level of Service • ability to address growth issues.

MOST LIKELY MANAGEMENT SCENARIO

Council prefers to manage critical equipment and reticulation assets through a combination of preventative maintenance, condition assessment and planned renewal programmes.

To address this issue Council will:

- undertake condition assessments as part of business as usual
- undertake renewals as part of a plant upgrade or planned minor projects
- replace electrical and control assets as they fail.

Issue	Options	Implications
Requirements for improved Drinking Water Standards, monitoring and/or fluoridation, may increase costs	Do nothing	<ul style="list-style-type: none"> • changing requirements may result in unplanned expenditure • non-compliance may result in prosecution.
	Monitor changes and respond as required	<ul style="list-style-type: none"> • measured and timely response to changes • active participation in any review of Standards • Level of Service maintained over time.
	Anticipate changes	<ul style="list-style-type: none"> • potential for expenditure where not required • anticipated response may not address changes • potential to achieve higher Levels of Service.

MOST LIKELY MANAGEMENT SCENARIO

Water standards and monitoring requirements are expected to become more stringent over time, particularly with a new regulator, Taumata Arowai, due to commence operation mid 2021. There is also an ongoing national debate regarding fluoridation. Council prefers to monitor changes and respond to these issues as necessary. To address this issue Council will:

- include some strategic funding to comply with potential changes to drinking water standards
- not undertake fluoridation unless desired by the community, or required by regulation
- seek subsidies to off-set the costs of compliance, where available.

Issue	Options	Implications
Sanitary assessments are required by the LGA. Council has little knowledge of private water supplies which are currently controlled by NRC and Northland DHB. This may become an issue for Council under the proposed legislation.	Do nothing	<ul style="list-style-type: none"> • does not meet Council's obligations under the LGA for Sanitary Assessments • risk of prosecution
	Meet minimum requirements of the LGA	<ul style="list-style-type: none"> • meets requirements of LGA • focusses on key growth areas and areas with high seasonal visitors • informs future LTP processes and allows for investment in infrastructure, based on need.
	Proactively work with private suppliers to improve their supplies	<ul style="list-style-type: none"> • pre-empt legislative requirements • time and resource intensive • funding required to be effective.

MOST LIKELY MANAGEMENT SCENARIO

Sanitary assessments help to understand the existing water supply provisions and their effectiveness. Detailed sanitary assessments have not been undertaken in communities such as Ngunguru, Tutukākā, Matapouri and other coastal areas that have high fluctuations in seasonal populations. Council has basic information and works with Ministry of Health to understand if there are water related health issues.

To address this issue Council will:

- undertake basic sanitary assessments for smaller communities and coastal communities to meet its obligations under the LGA (in progress)
- undertake basic risk assessments to identify any potentially at risk water supplies
- consider the outputs of sanitary assessments in the 2024-34 Long Term Plan.

Assumptions including uncertainty

Condition assessment of above ground assets is based on physical inspection. As a result, Council has sound data on dams, reservoirs, buildings and other above-ground assets. Underground assets, such as water pipelines, are more difficult to assess as detailed CCTV imaging is not possible. Pipeline condition assessment is therefore primarily age-based, coupled with sampling of failed or replaced pipes.

There is always uncertainty surrounding the District Growth projections and resulting collection of development contributions for growth projects.

Bream Bay's water service area demand forecasting is subject to uncertainty around the expansion of NorthPort and possible future connection to Mangawhai. In addition, the future of the Marsden Point Refinery is also uncertain and this has the potential to have a major impact on the water supply in Bream Bay.

The following assumptions are specific to the Water activity:

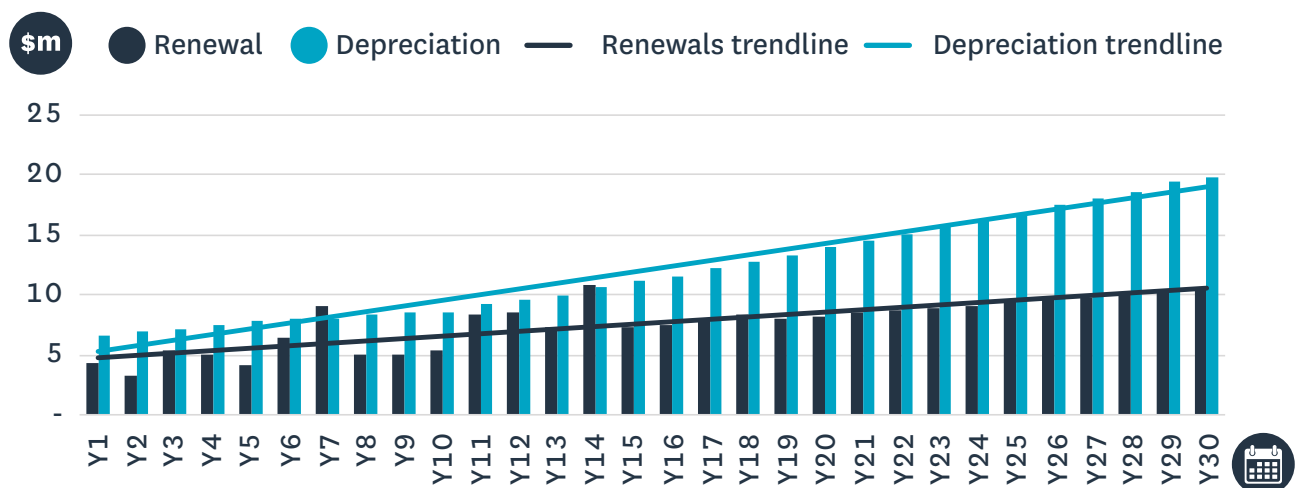
- water demand per capita will remain constant
- no single large user of water will commence operation or cease operation
- there will be no marked change in rainfall patterns
- development will follow the patterns in the draft Growth Strategy
- there are no unexpected changes in water production/supply legislation
- there are no unexpected changes in Service Levels.

Activity Funding Strategy

The water renewals profile below shows the budgeted renewals for years 1-10 of the Strategy relative to depreciation. Depreciation is then forecast for years 11 – 30 with renewal requirements identified through the AMP also being forecast over that period. For the first 10 years, renewal decisions are based on the known condition of the assets. Beyond the 10-year timeframe, they are based on the age of the asset, in accordance with the parameters and assumptions in the AMP.

The graph below shows the required renewal budget relative to depreciation over the life of the Strategy.

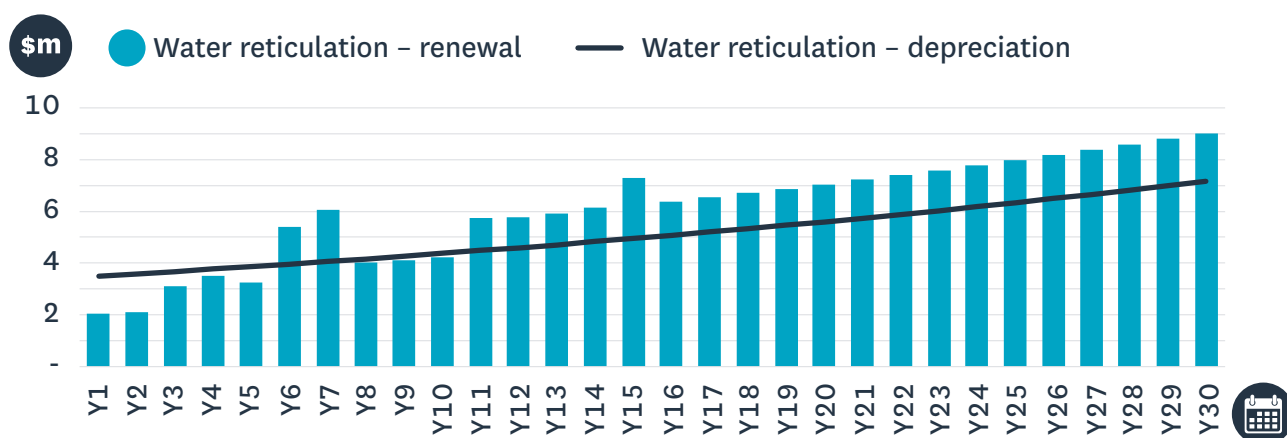
Water renewal expenditure



Expenditure on renewals across all the water asset categories is relatively constant over the 30 years. Notable renewals over the first 10 years of the Strategy include upgrades to trunk mains and capacity improvements throughout the network. In addition, the upgrade of the Porotī treatment plant is planned for years 1-4. Details are contained in the major capital works and significant projects section below. Over the life of the Strategy, the gap between the projected renewals and depreciation widens. This is partly explained by the new Whau Valley water treatment plant which has increased the total capital value. This is now included in the depreciation profile. Only one planned renewal of a reservoir is planned over the next 30 years

In general pipeline replacements are in line with asset depreciation rates, especially after year 11.

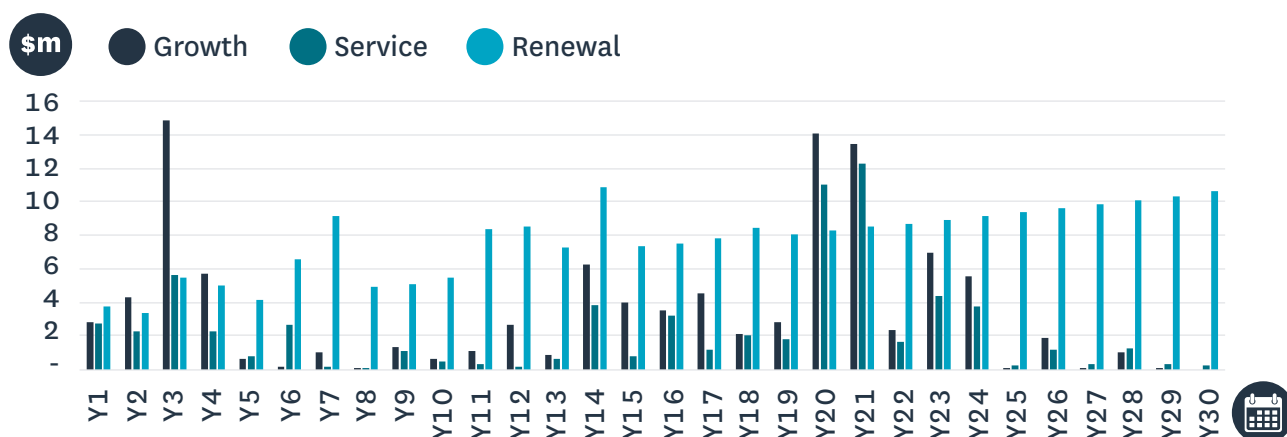
Water reticulation renewals vs water reticulation depreciation



When projected to 30 years there are no significant bow-waves (when several assets reach the end of their usable lives at the same time) in the water renewal profile.

The following graph shows the split into Levels of Service, Growth and Renewals over the 30 year time frame of this strategy.

Water capital expenditure by splits



Renewals are generally the largest driver of water expenditure (grey). Growth projects cause peaks in expenditure, typically these are one off large projects such as the upgrade of the Porotī water treatment/Wairua River source plant in year three and development of a new dam water source in years 20 and 21 of the Strategy. These large projects will also impact on depreciation going forward.

Levels of Service

The water activity has the following Levels of Service which are supported by performance measures included in the activity profile section of this document:

- we provide safe, high-quality drinking water to all our customers
- the water supplied is continuous and is adequate for customers' use
- in times of emergency there is adequate water supply available
- we manage the water supply system in a sustainable way that also caters for growth.

While the allocated funding will enable Levels of Service to be maintained over the life of this strategy, key challenges faced relate to:
















- continuity of supply, particularly in regard to climate change
- compliance with drinking water standards and introduction of new mandated standards
- direction and outcomes of the three water reform
- maintaining or upgrading security to avoid wilful damage or contamination.

To address these issues Council will prioritise supply assets and security to reduce risk and will monitor and respond to changes in Drinking Water Standards.

Other significant or major capital expenditure

Over the life of the Strategy, water has two potentially significant projects, the Porotī WTP upgrade and Wairua River water source, and a new storage dam. These are covered in detail under the significant decisions section of this Strategy. The following major projects (excluding programmes) are identified where non-renewal expenditure exceeds 10% of the total capital for the activity in any year of delivery.

Water activity major projects

								\$m
Description	2021-26	2026-31	2031-36	2036-41	2041-46	2046-51	Key Driver	Uninflated Cost
Porotī water treatment plant upgrade							LOS/ growth	26
Whau Valley Dam chimney drain							LOS	2.45
Onerahi trunk main – upgrade stage 1&2							Growth	4.5
Otaika Valley to city trunk main renewal stage 1 & 2							Renewal	4.5
Porotī trunk main renewal							Renewal	1.0
Station Rd trunk main – extra capacity							Growth	1.1
Vinegar Hill trunk main							Growth	2.0
Waipū water supply system – extra capacity							Growth	1.4
Kamo reservoir (Dip Rd) – additional capacity and pipe work							Growth	2.82
Maungakaramea reservoir – extra capacity							Growth	1.0
Three Mile Bush reservoir and pipework							LOS	2.6
Waipū reservoir – additional capacity							LOS	1.1
Pyle Rd east fire main and capacity upgrade							LOS	1.1
SH1 Tarewa intersection to Maungakaramea (in conjunction with roading)							Renewal	4
Onerahi reservoir – extra capacity							Growth	2.5

Description	2021-26	2026-31	2031-36	2036-41	2041-46	2046-51	Key Driver	Uninflated Cost
Ahuroa WTP upgrade							Renewal	2
New water source							Growth/ LOS	30
Ngunguru reservoir, trunk main and reticulation							Growth	12
Ruakākā water treatment plant upgrade							LOS	1.1
Ruddells water treatment plant upgrade							LOS	2.1
Sergeant Hill reservoir							Growth	3.1
Mains extension Glenbervie Sands Rd/Clapham Rd							Growth	1.9
Glenbervie reservoir and land							Growth	2
Mains extension Glenbervie Sands Rd to Harris Rd							Growth	2
Hikurangi reservoir – extra capacity							Growth	1.6
Maunu reservoir – extra capacity							Growth	2
Parua Bay reservoir – additional capacity							Growth	1.1
Mains extension to Ocean Beach							Growth	1.2
Vinegar Hill upper reservoir							Growth	1.6
Cove Rd trunk main upgrade							Renewal	1.6
Langs reservoir and new land							Growth	2.5
Connection to Mangawhai							Growth	2.1

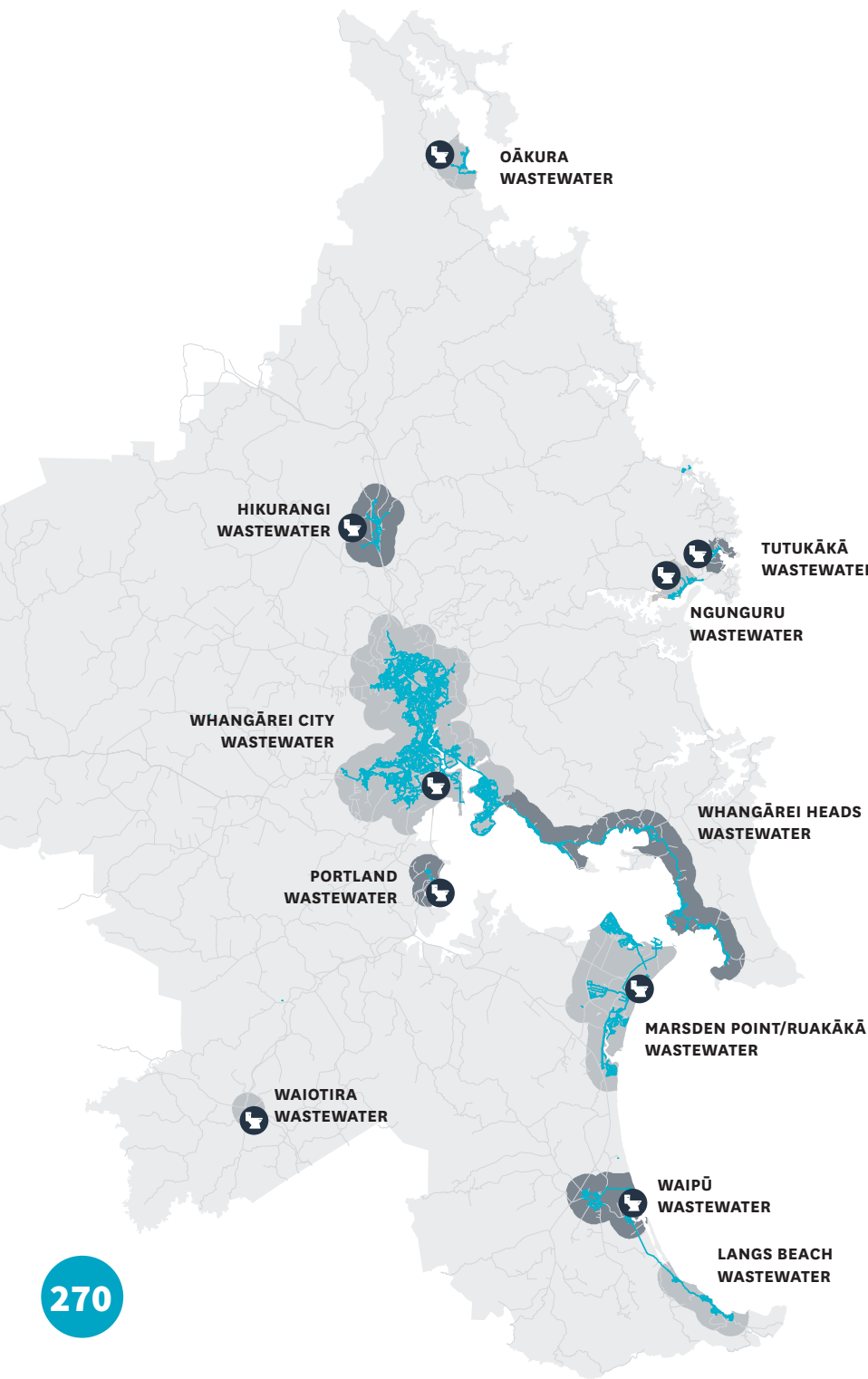


WASTEWATER

Overview

The wastewater activity incorporates facilities that collect, treat and discharge wastewater. The networks services 54,000 residents throughout the District, representing 62% of the total District population. The system consists of 48,000 assets distributed throughout 12 schemes and includes a Effluent Disposal Scheme (EDS) in Onerahi and Pressure Sewer Systems connected to council mains.

Wastewater schemes



\$440M

worth of assets

20,000

m³/day (average)

60,500

populaation served



860km

Pipes and connections



9

Treatment
plants

Critical Wastewater Assets

The following asset groups are identified as critical because their failure can cause large sewage spills to the environment. These include:

- wastewater pump stations
- large rising mains (>800mm diameter)
- wastewater treatment plants (WWTP).

136 pipe assets were deemed to be critical based on a risk analysis scenario of being:

- 100m from waterways and Coastal Marine areas
- 7m from arterial and state highways or crossing rail or airport runway
- within instability areas.

The current resilience strategy for critical assets is limited to preventative maintenance inspections. Further work is planned in conjunction with the Climate Change Strategy and the hydraulic model update (due 2021-22).

Critical Assets

Site	Resilience status
Whangārei Wastewater Treatment Plant	The Whangārei Wastewater Treatment Plant treats all wastewater produced by Whangārei City. Complete failure of the plant would result in untreated discharge to Whangārei Harbour via Limeburners Creek. To minimise the risk the plant has a range of contingencies in place, including equipment redundancies.
Pump stations at: <ul style="list-style-type: none">• Onerahi• Okara Park• Robert Street• Hātea Drive• Waverly Street• Otaika• Kioreroa Road	<p>In the event of a pump station failure, particularly at the Okara Park Pump Station, raw sewage could be discharged to Whangārei Harbour. To minimise this risk, pump stations are equipped for:</p> <ul style="list-style-type: none">• back-up/plug-in generators to mitigate against power failure; or• multiple stand-by pumps in case of pump failure; and/or• telemetry alarm systems to notify against failures. <p>In addition, there are storage reservoirs and treatment at Hātea and Tarewa Park, along with storage at Parua Bay. Most pump stations have four hours' storage capacity.</p>
Trunk Gravity Main at Okara Park	The condition of this gravity main has recently been assessed as good and it is monitored regularly.
Okara Park Pump Station to Whangārei WWTP rising main	This rising main is the main pipe to the Whangārei Treatment Plant and has redundancy for part of its capacity.

Key Wastewater Issues

The following table indicates the key issues and responses identified in the Wastewater Activity Management Plan 2021-31

Key Issues	Response	LOS – Performance measure/ Implications
Significant Inflow and Infiltration (I&I) during periods of wet weather	<ul style="list-style-type: none"> • I&I investigations as an ongoing program within operational budgets • ongoing inflow and infiltration reduction projects 	<ul style="list-style-type: none"> • Council will collect, treat and dispose of wastewater through a reliable wastewater network which is managed to ensure blockages, breaks or spillages are kept to a minimum
Potential backlog of assets requiring renewal	<ul style="list-style-type: none"> • robust renewal plans and budget requests 	<ul style="list-style-type: none"> • Council will collect, treat and dispose of wastewater through a reliable wastewater network which is managed to ensure blockages, breaks or spillages are kept to a minimum
Unreliable and missing data for underground assets	<ul style="list-style-type: none"> • AM Plan recommends the implementation of data collection programs to improve asset understanding 	<ul style="list-style-type: none"> • inability to plan for future maintenance and enhancement programmes
Discharges from some WWTPs are approaching or exceeding consent conditions.	<ul style="list-style-type: none"> • funding for monitoring and plant upgrades. Renewal of consent for WWTP (main plant) underway. See potential risks 	<ul style="list-style-type: none"> • compliance with the Northland Regional Council's resource consent conditions

Issue	Options	Implications
Information available is insufficient for proactive management of some assets	Do nothing	<ul style="list-style-type: none"> • failure to maximise expenditure decisions • increased costs as renewal programme may not be based on accurate information • increased unexpected failure of network.
	Rely on modelling only	<ul style="list-style-type: none"> • modelling alone may over- or under-state asset condition and capacity • asset modelling relies on the best information available at the time, which may be incomplete • increased long-term cost.
	Fund asset data and systems improvement	<ul style="list-style-type: none"> • the accuracy of the model improves as data is collected • reduced cost as maintenance and renewal expenditure is prioritised based on best available information • provides baseline information for long term planning.

MOST LIKELY MANAGEMENT SCENARIO

There are limitations on historic data relating to asset location, condition and usage. Council prefers to extend and verify the information currently available in the asset database so that it can be better used for proactive asset management purposes.

To address this issue Council will:

- undertake a data improvement/validation programme
- maintain funding for condition assessments and modelling on network assets
- while not a factor in the adequacy of data, Council will also fund the upgrade or replacement of the Asset Management Information System (AMIS), which is currently unsupported.

Issue	Options	Implications
Wastewater assets subject to early failure require replacement	Do nothing	<ul style="list-style-type: none"> • ongoing deterioration and failure of the wastewater network • more expensive reactive maintenance • inability to deliver Level of Service.
	Continue with renewals and update materials	<ul style="list-style-type: none"> • ability to use better fit-for-purpose materials • lower long term maintenance costs • more reliable network • maintains Levels of Service.

MOST LIKELY MANAGEMENT SCENARIO

Council prefers to continue a renewals programme that replaces older materials with fit-for-purpose modern materials, based on physical condition assessments.

To address this issue Council will:

- continue to undertake a renewals programme based on physical condition assessment and modelling
- increase physical condition assessments
- identify the causes of faster than expected asset deterioration.

Issue	Options	Implications
Sanitary assessments, as required under the LGA and in the proposed Water Services Bill, have not been undertaken for some time	Do nothing	<ul style="list-style-type: none"> • does not meet Council's obligations under the LGA • risk of prosecution.
	Meet minimum requirements of LGA	<ul style="list-style-type: none"> • meets requirements of LGA • focusses on key growth areas and areas with high seasonal visitors • informs future LTP processes and allows for investment in infrastructure based on need • at high level confirm with NRC that any private wastewater schemes discharges are compliant (no known issues currently) • focus sanitary assessments on larger rural and coastal communities.

MOST LIKELY MANAGEMENT SCENARIO

Council has decided to work collaboratively across the region and has work underway to undertake the required sanitary assessments. The risks associated with a changing regulatory environment are noted, especially the proposed Water Services Bill.

The need for sewerage schemes in communities such as Maungatapere, Maungakarama, Matapouri and other coastal areas that have high fluctuations in seasonal populations is not well understood. Sanitary assessments help understand the existing wastewater provisions and effectiveness to the community. Council prefers to undertake sanitary assessments in areas that indicate growth, as well as those areas that have high seasonal populations.

To address this issue Council will:

- include indicative costings in the Strategy where information is available
- meet its obligations under the LGA with respect to sanitary assessments for smaller communities and coastal communities, with an emphasis on those communities that are experiencing growth or seasonal pressures
- consider the outputs of sanitary assessments and confirm funding requirements in future planning rounds.

Issue	Options	Implications
The Discharge Consent for the Whangārei Wastewater Treatment Plant expires in 2022. New water quality standards and environmental regulations may result in new consent conditions that are more stringent than current conditions.	Do nothing	<ul style="list-style-type: none"> • treatment plant will be non-compliant • potential that a significant upgrade to the treatment plant is still required • understanding of risk is not refined over time.
	Monitor/model current discharges and negotiate consent conditions	<ul style="list-style-type: none"> • provides an accurate, evidence-based, approach to consent renewal • cost to community can be measured against environmental benefits • the risk can be well understood and minimised, with Council able to proactively respond to future upgrade requirements.
	Plan an upgrade of the treatment plant in anticipation of consent	<ul style="list-style-type: none"> • potential loss of planning investment • potential cost of up to \$40m to install a treatment plant that may not be required.

MOST LIKELY MANAGEMENT SCENARIO

The Whangārei Wastewater Discharge Consent currently allows for treated wastewater to be discharged to Whangārei Harbour via Limeburners Creek and wetlands. Consent renewal is required by 2022 and may result in changes to discharge quality conditions, resulting in the need to upgrade the existing treatment plant. The changes to consent conditions are unknown, and are currently being worked on. Changing requirements could result in the need for minor to major upgrades to the Plant. In a worst-case scenario (low-med risk), Council could be required to install a new treatment plant which could cost in excess of \$40m.

To address this issue Council will:

- undertake an extensive monitoring programme of the existing discharge levels
- proactively manage the issue with Northland Regional Council (and other stakeholders)
- currently considering an adaptive pathways strategy as part of the consent renewal to proactively manage potential changes to discharge requirements and plant augmentation e.g. incremental upgrades and process changes – based on agreed trigger levels.

Issue	Options	LOS – Performance measure/ Implications
The One Tree Point/Ruakākā area has potential for rapid growth. If actual growth is greater than our projections, the wastewater system will quickly run out of capacity and upgrades will need to be brought forward	Do nothing	<ul style="list-style-type: none"> • does not provide for growth • potential effects on the environment and community from poor quality discharges • unable to comply with consent conditions.
	Staged upgrades	<ul style="list-style-type: none"> • provides for growth, without pre-empting that growth • ensures consent and regulatory compliance.
	Anticipate growth with full upgrade	<ul style="list-style-type: none"> • does not allow for uncertainty in growth models • cost is not spread over time.

MOST LIKELY MANAGEMENT SCENARIO

Council has a current consent to construct a new ocean outfall at Ruakākā as part of a wider upgrade of the treatment plant. As wastewater flows increase, there are several trigger levels, where staged upgrades will occur over time, with the full upgrade and outfall currently planned for 2038. There is a risk that growth in the Ruakākā area will result in planned upgrades needing to be brought forward.

To address this issue Council will:

- monitor growth and wastewater flows at the current Ruakākā Wastewater Treatment Plant
- undertake staged upgrades as required
- Investigate options for re-use of treated wastewater –possible sale of treated water would delay need for disposal option.

Assumptions including uncertainties

The reliability of asset data is a key risk. Condition assessment of wastewater assets is based on physical inspection. As a result, Council has sound data on treatment facilities, pump stations, buildings and other above-ground assets. Underground assets, such as pressure mains and pipelines, are more difficult to assess. Wastewater pipeline condition assessment by CCTV are undertaken on a scheduled programme and when issues arise in certain catchments.

Improved asset data will be used to update the deterioration model to better reflect the actual condition of the network which in turn will inform depreciation going forward.

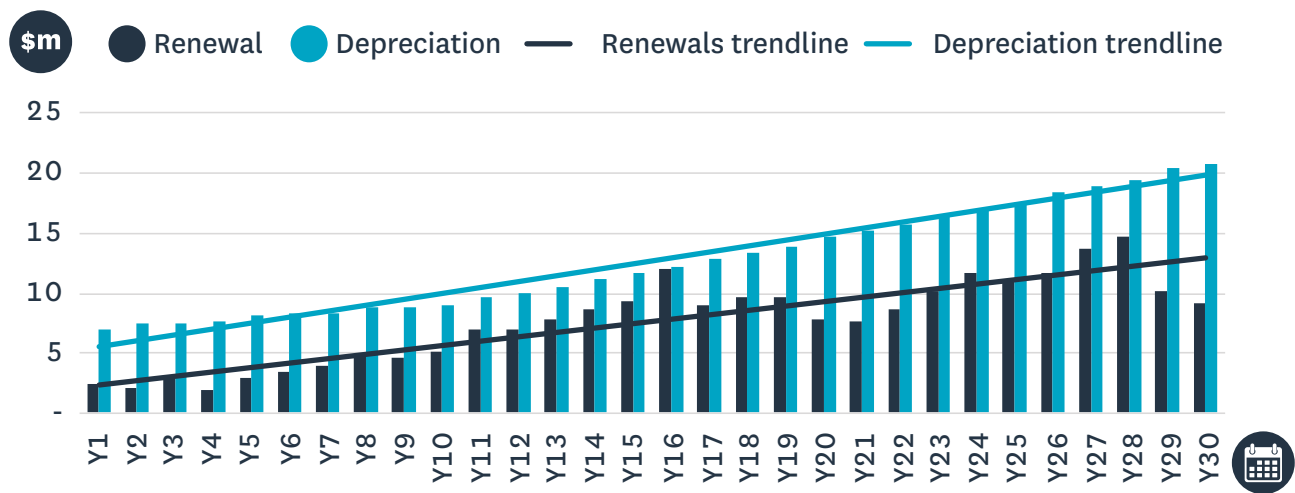
There is always uncertainty surrounding the District growth projections and resulting collection of development contributions for growth projects.

Activity Funding Strategy

The Wastewater renewals profile below shows the budgeted renewals for years 1-10 of the Strategy relative to depreciation. Depreciation is then forecast for years 11 – 30 with renewal requirements identified through the AMP also being forecast over that period. For the first 10 years, renewal decisions are based on the known condition of the assets. Beyond the 10-year timeframe, they are based on the age of the asset, in accordance with the parameters and assumptions in the AMP.

The graph below shows the required renewal budget relative to depreciation over the life of the Strategy.

Wastewater renewal expenditure



The above graphs are a consolidated view of all the asset categories making up the Wastewater portfolio. Therefore, there are a range of assets which have varying lives and replacement profiles. Information on the depreciation profiles on the individual asset categories are contained in the Wastewater AMP for the first 10 years of this strategy.

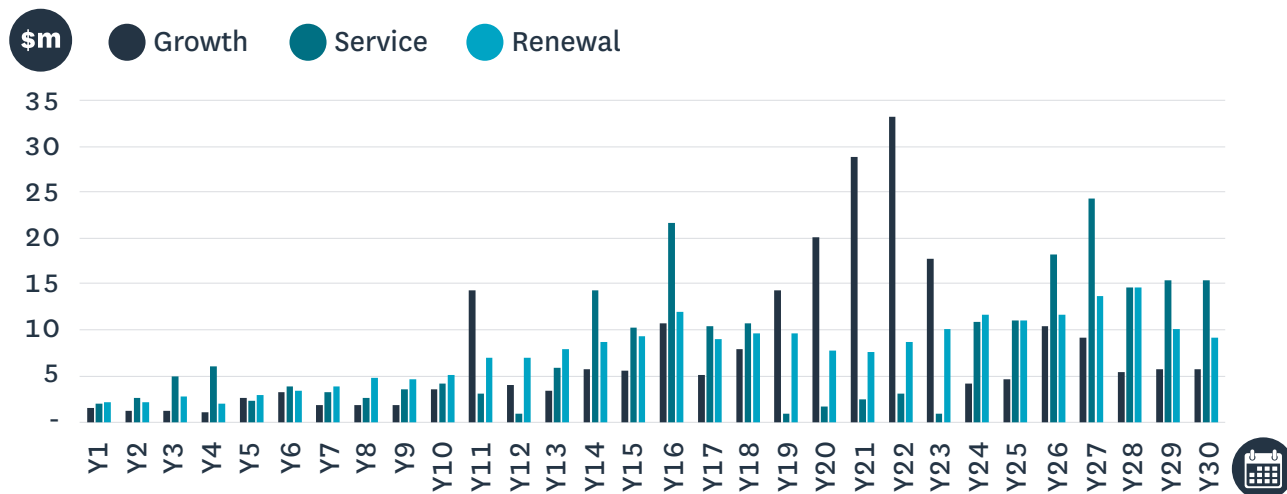
Although the renewals profile appears to signal a slowly decreasing rate of renewals against depreciation, actual CCTV data is showing that the network does not have a high proportion of failing assets. Most of the pipes within the wastewater network are AC and depending on location, are lasting beyond the listed 60 year expected life. This means that budgeted renewal is adequate to match actual deterioration.

Council is implementing a revised inspection process based on the 3rd edition pipe inspection manual. This is expected to update the deterioration model to better reflect the actual condition of the network which in turn will inform the depreciation model going forward.

Wastewater pipeline assets tend to be replaced via a reline (80%) rather than a full replacement (20%). This extends the lifetime of the asset by 50 yrs. at 60% of a cost of a full replacement. This strategy allows for a greater number of asset renewals to be managed in the most cost-effective way.

The following shows the split into Levels of Service, Growth and Renewals over the 30 year time frame of this Strategy.

Wastewater capital expenditure by splits



Level of service is the primary driver in the first five years of the Strategy with renewals driving the second five years. Growth projects create expenditure peaks, such as the Ruakākā treatment plant upgrade in yr. 11 and the Waipū plant in yr. 20.

Levels of Service

The Wastewater activity has the following Levels of Service which are supported by performance measures included in the activity profile section of this document:

- in defined service areas, Council will collect, treat and dispose of wastewater through a reliable wastewater network which is managed to ensure blockages, breaks or spillages are kept to a minimum.



















While the allocated funding will enable Levels of Service to be maintained over the life of this Strategy, key challenges faced relate to:

- the 2018 Asset Survival Model indicated that there were some PVC pressure pipes that are showing signs of early failure and requiring renewal. This is expected to increase overall operational cost as reactive repairs are undertaken
- risks associated with meeting consent compliance requirements at the wastewater treatment plants, pump stations and in the network.

To address these issues Council will prioritise funding on renewals and take a proactive approach to monitoring treatment plants and negotiating consent conditions. Where necessary, upgrade funding will be considered in future planning cycles.

Other significant or major capital expenditure

Over the life of the Strategy, wastewater has three potentially significant projects, the Whangārei Wastewater Treatment Plant odour control, a wastewater scheme for Matapōuri (subject to the outcomes of sanitary assessments and consultation) and the Ruakākā ocean outfall. These are covered in detail under the significant decisions section of this Strategy. The following major projects (excluding programmes) are identified where non-renewal expenditure exceeds 10% of the total capital for the activity in any year of delivery.

								\$m
Description	2021-26	2026-31	2031-36	2036-41	2041-46	2046-51	Key Driver	Uninflated Cost
Ruakākā WWTP upgrade and consent (in conjunction with outfall)							Growth	20.6
Ruakākā ocean outfall							Growth	60
Whangārei WWTP							LOS/ growth	8
Matapōuri wastewater scheme							LOS/ growth	63
Kamo capacity upgrade							Growth	18.7
Hikurangi plant renewal							Renewal	8.2
Parua Bay pump renewal							Renewal/ growth	7.6
Waipū plant renewal							Renewal/ growth	19.2
Maungatapere renewal							Renewal	16.4
Ōakura upgrades							Renewal	11.7
Whangārei Heads reticulation							LOS/ growth	10.6

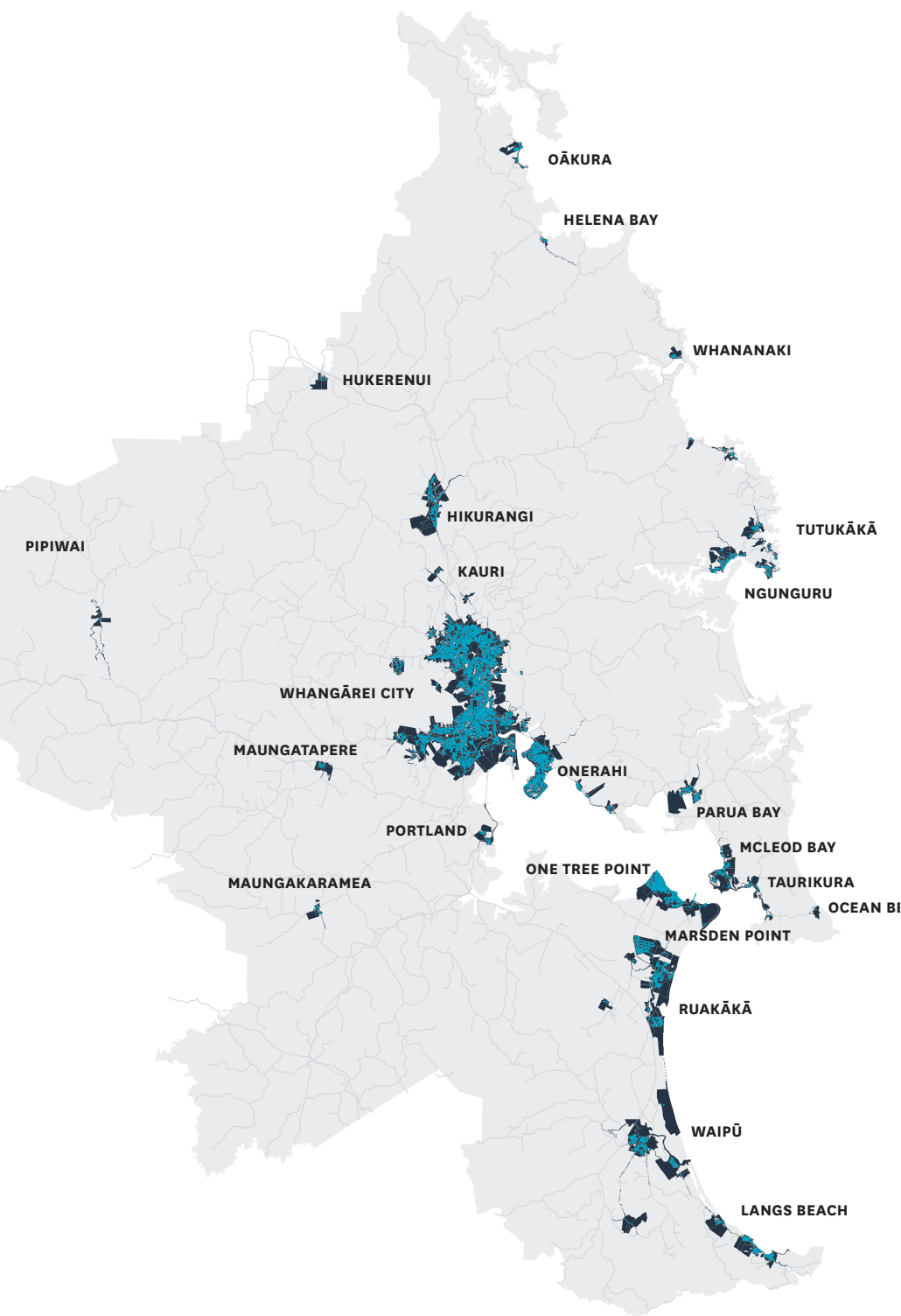


STORMWATER

Overview

The Stormwater network comprises a combination of pipe systems, access holes and sumps open channels, treatments devices, urban rivers and streams to convey rainwater from parks, roads, houses and yards, to streams and the ocean, thereby preventing flooding of properties and roads in defined service areas. There are 11 major stormwater catchments in the Whangārei area and four defined urban catchments of Whangārei, Ruakākā, One Tree Point and Waipū.

Stormwater Service Areas



\$270M

worth of assets

20

floodgates

29

retention ponds



580km

of network including
channels and open drains



Parcels with
stormwater assets

Critical Stormwater Assets

At this point there are no assets considered critical in terms of requiring immediate restorations following a disaster or major event.

Asset types specifically identified in the Stormwater Activity Management Plan 2021-31 as requiring inspection are:

Asset	Resilience Strategy
floodgates	regular inspections
critical inlets	regular inspections
critical open drains	regular inspections
retention ponds	regular inspections
tidal outlets	regular inspections

Key Stormwater Issues

The following table indicates significant issues and responses identified in the Stormwater Activity Management Plan 2021-31.

Significant issues	Response	Performance measure internal
Stormwater assets are deteriorating faster than previously expected	<ul style="list-style-type: none"> modelling and renewal funding 	<ul style="list-style-type: none"> average condition of rated asset stock
There is a significant backlog of assets requiring renewal	<ul style="list-style-type: none"> funding requested to maintain a deliverable renewals programme 	<ul style="list-style-type: none"> blockages/breaks per 100 km of drainage system per month
Data gaps and reliability of data	<ul style="list-style-type: none"> physical surveys of pipes and manhole to address data deficiencies. 	<ul style="list-style-type: none"> % of critical asset base inspected per year for condition assessment
Climate change causing coastal inundation and impacting on the ability of pipes to clear floodwaters	<ul style="list-style-type: none"> Strategy development 	<ul style="list-style-type: none"> the number of flooding events that occur in the Whangārei District; and for each flooding event the number of habitable floors affected. Expressed per 1000 properties connected to the Council's stormwater system
Stormwater Catchment Management Plans need to be updated to support the service assessments	<ul style="list-style-type: none"> funded in LTP 	
Urban stormwater network require consents under the Proposed Regional Plan for Northland	<ul style="list-style-type: none"> modelling and consent application funding requested 	

Issue	Options	Implications
Information available is insufficient for proactive management of assets	Do nothing	<ul style="list-style-type: none"> • failure to maximise expenditure decisions • increased costs as renewal programme may not be based on accurate information • increased unexpected failure of network.
	Rely on modelling only	<ul style="list-style-type: none"> • modelling alone may over- or under-state asset condition and capacity • asset modelling relies on the best information available at the time, which may be incomplete • increased long term cost.
	Fund asset data and systems improvement	<ul style="list-style-type: none"> • the accuracy of models improves as data is collected • reduced cost as maintenance and renewal expenditure is prioritised based on best available information • provides baseline information for long term planning.

MOST LIKELY MANAGEMENT SCENARIO

There are limitations on historic data available. Council prefers to extend and verify the information currently available in the asset database so that it can be better used for proactive asset management purposes. To address this issue Council will:

- undertake a data improvement/validation programme
- increase funding for condition assessments and modelling on network assets
- while not a factor in the adequacy of data, Council will also fund the upgrade or replacement of the Asset Management Information System (AMIS), which is currently unsupported.

Issue	Options	Implications
Some assets are deteriorating more quickly than expected, potentially resulting in a large backlog of stormwater assets requiring replacement	Do nothing	<ul style="list-style-type: none"> • ongoing deterioration and failure of the stormwater network • increased operational spend due to reactive repairs • increases in the extent and frequency of flooding due to failures • reduction in Levels of Service.
	Maintain existing pipelines	<ul style="list-style-type: none"> • using the same materials will reduce the renewal period • ongoing failure points in network resulting in flooding • increased backlog of renewals, with funds diverted from other infrastructure classes • reduction in Levels of Service.
	Renewals and update materials	<ul style="list-style-type: none"> • ability to use better fit-for-purpose materials • lower long term maintenance costs • more reliable stormwater network • maintains Levels of Service.

MOST LIKELY MANAGEMENT SCENARIO

Limited condition testing of the stormwater network has been undertaken. However, this is indicating that some pipelines are deteriorating more rapidly than expected. Pipelines that have been installed in the past 20 years appear to be deteriorating at a faster than anticipated rate, resulting in a shorter life expectancy. There is a tension between what we need to do to renew our assets and our capacity to deliver the programme. This is being addressed as part of the wider asset delivery improvement programme.

Council prefers to prioritise a renewals programme that replaces older materials with fit-for-purpose modern materials in accordance with evidence-based assessments of physical condition.

To address this issue Council will:

- continue to undertake a renewals programme based on physical condition assessment and modelling
- increase physical condition assessments
- review design standards, construction methods and materials for stormwater systems
- enhance construction supervision for stormwater assets that are to be vested in Council.

Issue	Options	Implications
Effects of extreme storm events on the community are not well understood	Do Nothing	<ul style="list-style-type: none"> • not well prepared for flooding events • projects required to protect the community may not be identified in the 30-year plan • potential adverse impact on Council's overall funding strategy
	Undertake flooding assessments	<ul style="list-style-type: none"> • better asset information to model the effects of flooding • increased funding to undertake modelling • interfaces with the Regional Council in relation to river and coastal flooding • capital projects can be considered in future planning rounds • capacity of existing infrastructure to be reviewed against increased infill development

MOST LIKELY MANAGEMENT SCENARIO

Historically, the stormwater system has been designed for a 1:5-year rain event. However, regulatory requirements are increasing and with the projected climate change, the stormwater system is likely to be subject to more frequent and intense events going forward. Council has limited modelling and data to determine the impacts of these trends on the network.

To address this issue Council will:

- increase funding for catchment plans and network modelling
- work with Northland Regional Council to enhance understanding of the impacts of more frequent and severe events.

Issue	Options	Implications
Increased regional environmental and flood protection requirements	Do nothing	<ul style="list-style-type: none"> potential bow-wave of upgrades to install treatment devices once consent conditions are known increased cost over time.
	Retro-fit treatment devices	<ul style="list-style-type: none"> improved water quality ongoing costs, but a reduction in potential bow-wave of renewals.

MOST LIKELY MANAGEMENT SCENARIO

National legislation and regional guidance has signalled there is a need for an increasing focus on water quality. Improved environmental standards may affect the conditions on stormwater network discharge consents, resulting in a potential need to install new treatment devices within the network. In addition, increasing regulatory requirements are also likely to require new stormwater networks to be designed to a higher standard. Council prefers to continue a programme of retro-fitting treatment devices on existing stormwater outlets.

To address this issue Council will:

- provide funding for a programme of retro-fitting treatment devices on stormwater outlets
- actively participate in District and Regional Plan reviews, particularly relating to hazards and flood risk.

Issue	Options	Implications
New requirements under the Proposed Regional Plan for Northland for consents for stormwater urban networks	Do nothing	<ul style="list-style-type: none"> operating the urban stormwater network without consent.
	Obtain new resource consents for networks including existing consented catchments.	<ul style="list-style-type: none"> ongoing costs, but a reduction in potential bow-wave of renewals regulatory compliance.

MOST LIKELY MANAGEMENT SCENARIO

The Proposed Regional Plan for Northland (PRPN) (Appeals Version) makes stormwater networks in the urban areas of Whangārei, Waipū, One Tree Point and Ruakākā discretionary activities that require a resource consent. Work is underway to obtain the required Resource Consents.

The Regional Policy Statement for Northland and PRPN also signals new developments be directed away from 10-year and 100-year flood areas and high risk coastal hazard areas.

Catchment Management Plans are no longer required to support the Regional Plan consent but may need to be updated to manage and understand service requirements. Improved environmental standards may affect the conditions required on these consents. Council prefers to actively negotiate consent conditions based on sound environmental information.

To address this issue Council will:

- apply for consents for the urban networks
- Actively plan for improved monitoring of key stormwater discharge points.

Assumptions including uncertainty

Due to the uncertain nature of growth forecasting and impact of climate change, along with limitations on our understanding of current capacity, accurately providing a defined scope of future stormwater infrastructure required is difficult. A broad pro-rata estimate using population estimates is used and we acknowledge that this approach is simplistic.

Stormwater network models are currently under development with the mapping of overland flow paths and system connectivity a key part of this process. Further work is required to fully develop a network model to be able to more accurately predict the stormwater system's ability to satisfy level of service requirements.

There is an assumption that there will be increased infill development, within the urban areas in line with the draft Growth Strategy. With growth, under the engineering standards there is an expectation that attenuation will be required, however there is a risk that existing infrastructure may not have sufficient capacity.

Stormwater asset data may be suitable for financial purposes, but for asset management the information is inadequate.

Overall the Stormwater asset data confidence was categorised as low/medium overall. This was specifically in regard to the location and condition of some the asset components (an example being historically not capturing service connections to private properties). This arose out of the Stormwater network data gap analysis project which identified gaps in connectivity, manhole levels and lack of service connections. Important assets in the stormwater network are identified as assets that require regular inspections and maintenance to ensure the current levels of service are able to be met (1 in 50 year flood event). Risks for the stormwater network are not based on the impact of the asset failing (as in breaking) they are more around the capacity of the pipe in a storm event. The failure of a single pipe asset during a storm (as pipes are not "in use" in dry conditions) does not meet the definition to be classified at the local significant level (500-5000 customers affected) criticality. Using the network data gaps, overland flows and NRC river flood extents we know where the potential areas where customers are most likely to be affected. We are using this to inform our CAPEX program and in addition to the renewals, projects are planned for the CBD in conjunction with roading and city centre upgrades to address flooding and water quality issues based on our knowledge of where the impacts of capacity issues are known.

Detailed asset information capture, including condition assessments, were undertaken in the 2018-2020 period to better understand the network via 23.9 km of CCTV, 400 manhole surveys and overland flow path modelling. This is planned to be continued through projects identified in the 2021-31 LTP. The renewals programme is now informed more on actual condition gradings of surveyed pipes rather than age and flooding hot spots. Major renewals have been completed in Teal Bay and Okara Drive, Whangarei.

In summary Council has improved its knowledge of the network and has undertaken specific detailed investigations into its condition and serviceability. The results from these investigations provide an indication that the assets are in better overall condition than the theoretical model used to assess overall condition in 2018. The contracts for asset condition assessment will continue throughout the next planning period to address location and condition information and improve our overall data confidence. Nothing to date suggests that there are 'significant issues' to be raised with the community. In addition, overall

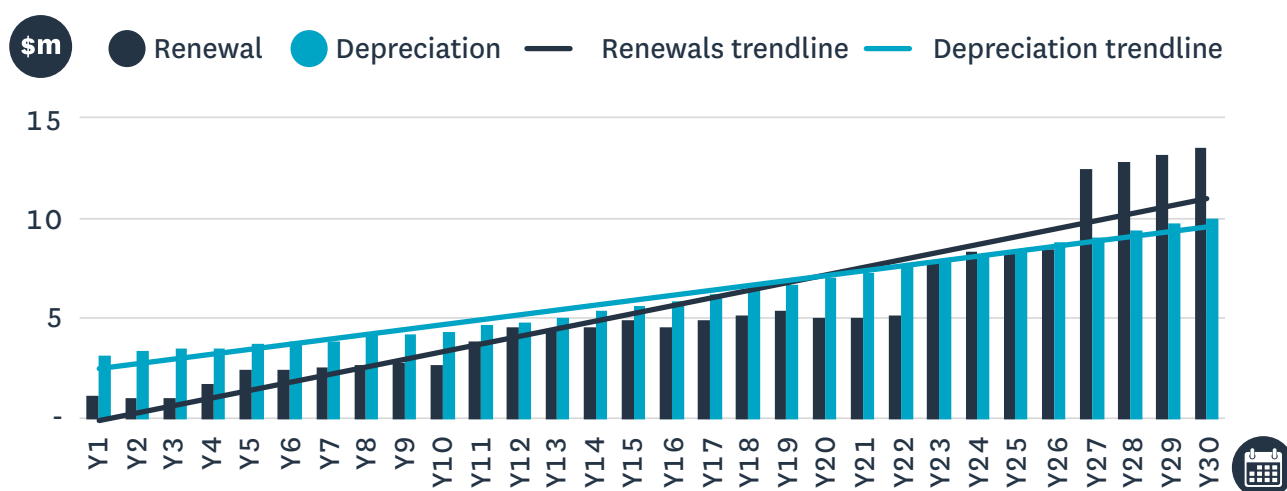
stormwater asset performance seems reasonable, even during significant events well beyond our level of service.

Activity Funding Strategy

The stormwater renewals profile below shows the budgeted renewals for years 1-10 of the Strategy relative to depreciation. Depreciation is then forecast for years 11 – 30 with renewal requirements identified through the AMP also being forecast over that period. For the first 10 years, renewal decisions are based on the known condition of the assets. Beyond the 10-year timeframe, they are based on the age of the asset, in accordance with the parameters and assumptions in the AMP.

The graph below shows the required renewal budget relative to depreciation over the life of the Strategy.

Stormwater renewal expenditure



The above graphs are a consolidated view of all the asset categories making up the Stormwater portfolio. Therefore, there are a range of assets which have varying lives and replacement profiles. Information on the depreciation profiles on the individual asset categories are contained in the Stormwater AMP for the first 10 years of this strategy.

To enable Council to build delivery capacity, expenditure on renewals is relatively low in the early years of the Strategy, progressively increasing from year three. This increase represents a reprioritisation of renewals funding, recognising that there has been historic underfunding within this asset class. As a result, there is a continued increase in renewals, which, if funding levels continue, will address the previous underfunding of renewals over the life of the Strategy. In addition, the condition and capacity of some stormwater assets is not well captured in the Asset Management system. Increased CCTV and work reviewing the asset data will potentially change the splits between renewals and levels of service. This will be used to inform the deterioration model to better reflect the actual condition of the network, which in turn will inform the depreciation levels going forward.

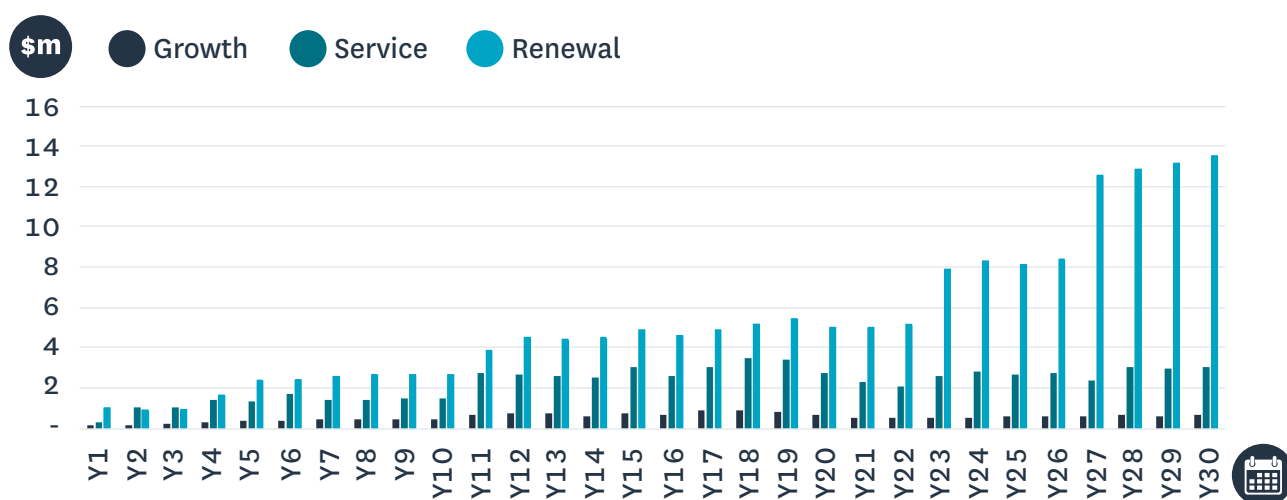
There is potential that there are currently growth and level of service elements within some renewals that is often identified when works are completed. The splits between the different capital categories will be reviewed when information is available via stormwater modelling that is planned to be completed within this Strategy period.

The final years of the Strategy are starting to reflect the probable works required to renew and improve the network resulting from the climate adaptation plans. At this point this work is allocated to renewals not level of service however this will likely change as we get better information. More certainty around the likely scale of funding required will be available once climate change adaptation work has been done with communities to understand risks and opportunities (refer to Part 1 for further discussion of this programme). As a result of this, projected renewals start to track above depreciation towards the end of the Strategy in years 24 – 30.

To address these issues Council has continued to prioritise funding on stormwater renewals, with approximately \$18m being provisioned in the first 10 years of the Strategy.

The following graph shows the split into Levels of Service, Growth and Renewals over the 30 year time frame of this Strategy.

Stormwater capital expenditure by splits



Renewals are the largest driver of expenditure for stormwater. This reflects the historic under investment in stormwater assets. Minor increases in levels of service are to address the expected requirements for stormwater treatment within the network and improve water quality as directed by the National Policy Statement for Freshwater.

Levels of Service

The stormwater activity has the following Level of Service, which is supported by performance measures included in the activity profile section of this document:

- Council will manage the stormwater network to minimise flood risks within defined service areas.





The 2018 –28 LTP saw an increased in funding for stormwater renewals and limited funding for the installation of new treatment devices across the network, this continues within this Strategy.

Our existing assets are being affected by the increasing number and severity of storm events. This results in the degradation of the network over and above expected levels.

Changes to the freshwater regulatory framework may also lead to changes in environmental regulation and our ability to meet consent requirements for our network consents.

Other significant or major capital expenditure

Over the life of the Strategy, stormwater has no potentially significant projects. The following major projects (excluding programmes) are identified where non-renewal expenditure exceeds 10% of the total capital for the activity in any year of delivery.

								\$m
Description	2021-26	2026-31	2031-36	2036-41	2041-46	2046-51	Key Driver	Uninflated Cost
Climate change adaptation response							Renewal	25.2
Blue Green Network							LOS	10



FLOOD PROTECTION

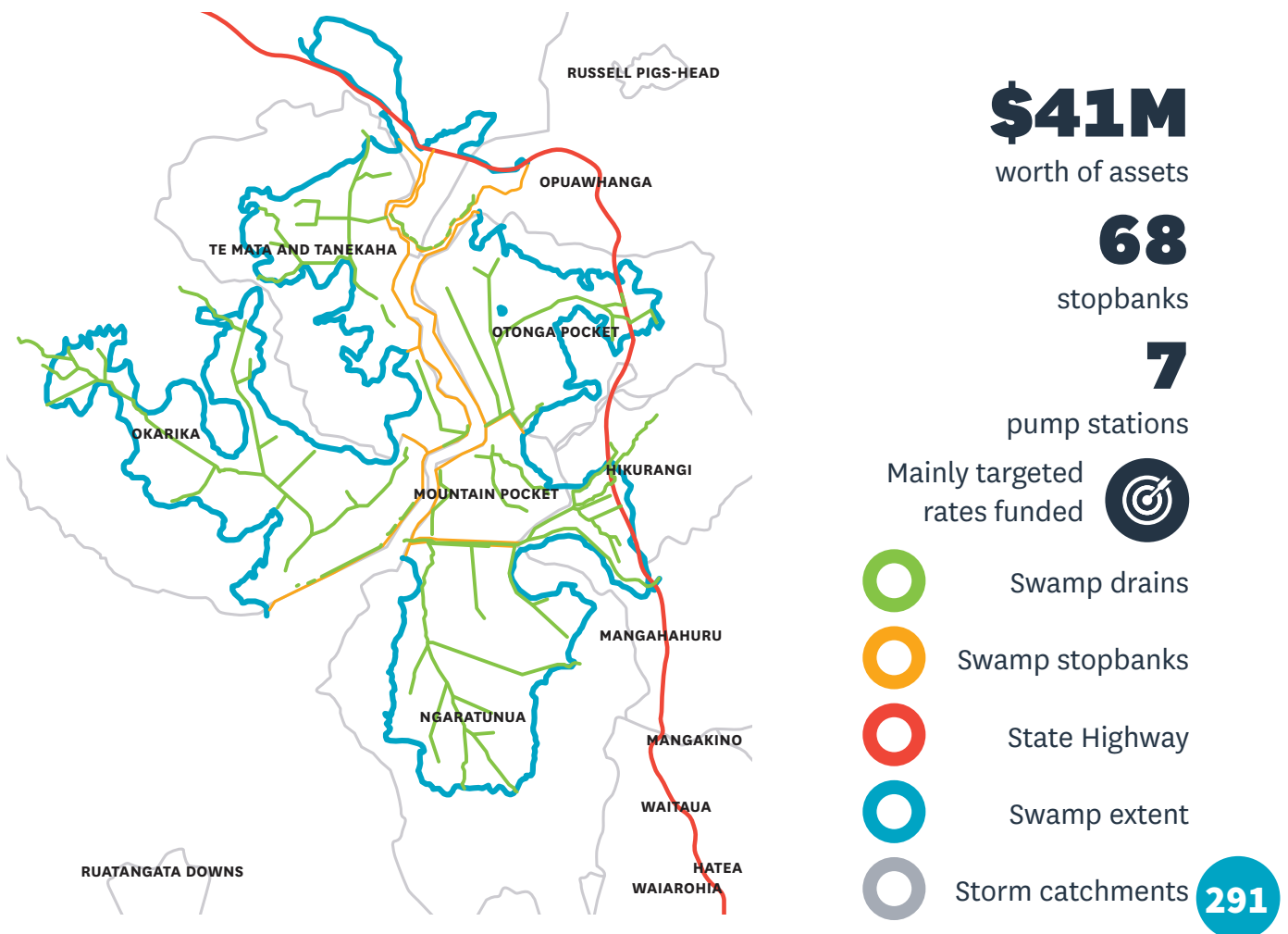
Overview

The Hikurangi Swamp Flood Protection and Control Scheme (The Scheme) was first conceived in the 1920s, with a more substantive Scheme implemented in the 1970's. The Scheme is located north west of Whangārei and is drained by the Wairua River to the Kaipara Harbour. The Scheme comprises a system of control banks, which in the first instance confine floodwater up to the scheme's control banks design flood level.

The Hikurangi Management Area Catchment is one of the most complex catchments in New Zealand. The management area is 520 km², has three or four major contributing river catchments and at least two dozen minor stream contributing catchments. The management area is the headwaters to the largest catchment in Northland approximately 3500 km². The geologic variability is quite significant throughout the catchment as well as land cover and elevation relief of the various sub-catchments.

As the Hikurangi Management Catchment Area drains into the Kaipara Harbour it is a part of the Kaipara Moana settlement which is focused on improving the environmental health of the Kaipara Harbour. Programmes resulting from this settlement may impact the future operation of the flood scheme.

Flood Protection – Hikurangi Management Area Catchment and streams



Critical Flood Protection Assets

The flood protection activity does not contain any assets that are considered critical, in terms of requiring immediate restoration following a disaster or other major event.

Key Flood Protection Issues

The following table indicates significant issues and responses identified in the Hikurangi Flood Management Scheme Activity Management Plan 2018-31.

Issue	Options	Implications
The Scheme is designed to protect pasture in relatively small stormwater events (1:3.5-year return to 1:20). If large cyclonic events are more regular, the investment in the Scheme becomes less economic	Do nothing	<ul style="list-style-type: none">slowly reduces Level of Service from the Schemelong-term implications on farming sustainability.
	Upgrade scheme	<ul style="list-style-type: none">high cost, with economic impacts on the Scheme beneficiariesamendments to the current resource consent required.

MOST LIKELY MANAGEMENT SCENARIO

The long term economic viability of the Scheme will be affected by more frequent high intensity rainfall events brought about by climate change. Greater intensity of storm events may lead to increased requirements for operational and/or capital expenditure. Currently, no contingencies for extreme weather have been included in the LTP budget.

To address this issue Council will:

- monitor the financial, environmental and economic impact of increased flood events and, through a consultative process, evaluate how best to provide additional asset investment where required.

Issue	Options	Implications
The Hikurangi Flood Protection Scheme is funded by targeted rates and is debt free	Continue current rating	<ul style="list-style-type: none"> • funding available for ongoing maintenance • reserve fund built for future maintenance, renewals and upgrades.
	Reduce rating	<ul style="list-style-type: none"> • allows for maintenance only • upgrades to the scheme not funded • potential loss of benefits from scheme.

MOST LIKELY MANAGEMENT SCENARIO

Scheme works are predominantly funded from targeted rates. The Hikurangi Swamp Major Scheme Rating District contributes approximately 90% percent of the total targeted rates and the Hikurangi Swamp Drainage Rating District contributes the remaining 10% percent.

Customer expectations for the return on their targeted rate are changing. The anticipated changes in customer expectations include:

- greater resistance to increases in the targeted rates for flood protection services
- higher aspirations for environmental outcomes
- landowners want to do more maintenance work themselves to reduce costs (e.g.: vegetation control along control banks and floodways).
- call for higher levels of flood mitigation.

Council prefers to utilise targeted rates to build a reserve fund for future upgrades.

To address this issue Council will:

- build a reserve fund for The Scheme to enable future maintenance, renewals and upgrades
- through a consultative process, make decisions in relation to long term funding of Opex, renewals and the level of upgrade to the flood protection design level.

Issue	Options	Implications
Land settlement due to peat oxidation has the potential to slowly reduce the drainage ability of the Scheme	Do nothing	<ul style="list-style-type: none"> land owners with peat soils get reduced protection from the Scheme long-term effects on sustainability of the Scheme.
	Design new pump stations with lower inlet levels	<ul style="list-style-type: none"> high cost potential cost to Scheme beneficiaries directly affected by land settlement.

MOST LIKELY MANAGEMENT SCENARIO

Approximately 15% of the area within the Scheme is fertile peat land. Land settlement affects 15% of the scheme-protected farmland which decreases the rate at which water drains, resulting in degraded channel flow and siltation and more prolonged flooding and pasture loss. This, in turn, has a range of effects on the efficiency of the Scheme. Council recognises that this issue is one of a range of matters that will need to be considered when making decisions on the long term funding of the Scheme.

To address this issue Council will

- develop a long-term action plan and consider adequate resourcing.

Issue	Options	Implications
There is increasing pressure to mitigate the effects of the Scheme on eels and natural habitat	Do nothing	<ul style="list-style-type: none"> ongoing adverse effects on the environment, particularly on habitat and eels increasing community pressure on Council.
	Contribute to environmental improvement programmes	<ul style="list-style-type: none"> provides an inter-agency, co-ordinated approach with Fonterra, Iwi, NRC and farmers reduces overall costs provides wider environmental benefits.
	Replace infrastructure to reduce effects	<ul style="list-style-type: none"> high cost ability to co-ordinate with renewals.

MOST LIKELY MANAGEMENT SCENARIO

The scheme consent incorporates a condition requiring the enhancement of fish passage and deterrents for the entrainment of fish in the scheme pumps. Over time, community and regulatory expectations are increasing. Council prefers to work alongside other agencies and contribute to wider environmental improvement programmes, with the objective of achieving larger environmental gains.

To address this issue Council will:

- fund upgrades to address the impacts of the Scheme, particularly on eels, in line with pump station renewals
- identify and contribute, to appropriate environmental improvement programmes
- co-ordinate with other relevant agencies, business, hapū, iwi and community initiatives
- call for higher levels of flood mitigation.

Assumptions including uncertainties

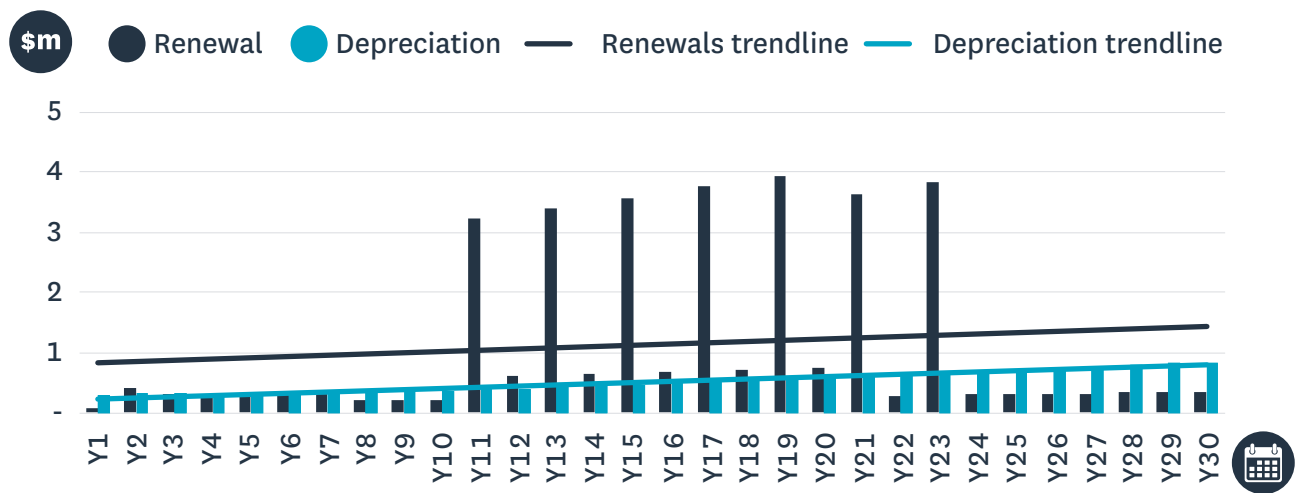
Flood protection rates will increase by Local Government Cost Index (LGCI) each year. An inflation only increase will maintain the effectiveness of the Scheme over the ten-year period, with surpluses building a reserve balance over time. Significant capital expenditure is included within the 30-year Infrastructure Strategy, which may require a larger increase to this targeted rate in subsequent Long-Term Plans.

Activity Funding Strategy

The flood protection renewals profile below shows the budgeted renewals for years 1-10 of the Strategy relative to depreciation. Depreciation is then forecast for years 11 – 30 with renewal requirements identified through the AMP also being forecast over that period. In preparing the renewals profile for flood protection, a range of technical information and asset life data has been considered. These detailed assumptions and parameters are contained within the AMP.

The graph shows the required renewal budget relative to depreciation over the life of the Strategy.

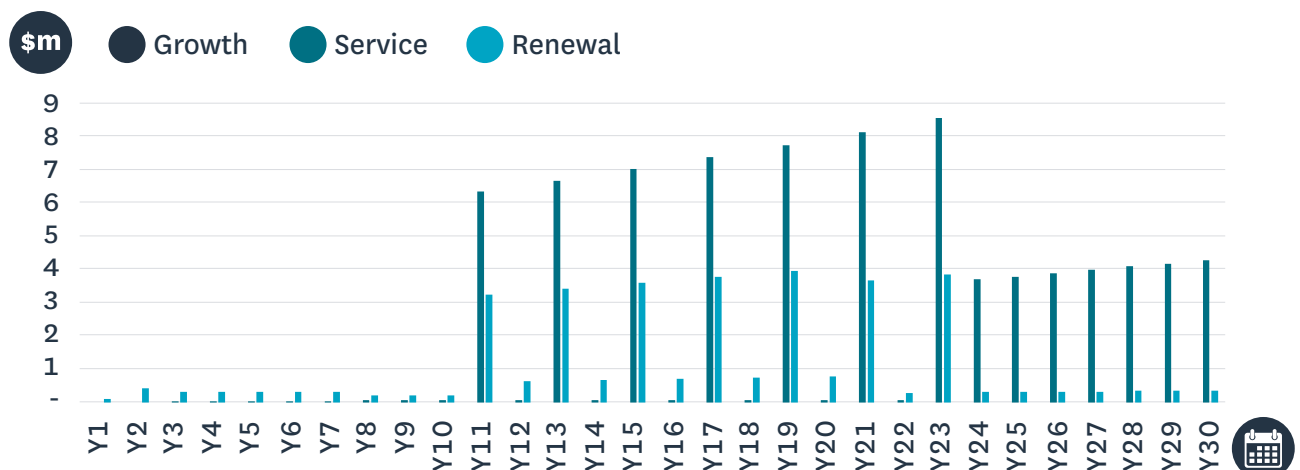
Flood Protection renewal expenditure



While there is limited renewals funding within the early years of the Strategy, there is a spike for flood gates and pump replacements in the mid years of the Strategy with an escalating renewals profile from that point. Also, of note is that all revenue collected from the Scheme is ring-fenced. While a capital programme has been outlined below that includes replacing pump stations with more environmentally friendly pumps Council will consult with Scheme holders and stakeholders to work through the desired levels of service for the Scheme, and the resulting funding requirements (including targeted rates), going forward.

The following shows the split into Levels of Service, Growth and Renewals over the 30 year time frame of this Strategy.

Flood protection capital expenditure by splits



The first 10 years of the Strategy shows small amounts of renewal expenditure. New flood gates and pumps to better protect eels, are scheduled every 2 years from year 11 and funded from levels of service and renewals. This aligns with the expected life of the pumps. In addition, level of service funding has been identified to address the requirements from the climate change adaption plans from yr24 -30.



Levels of Service

The flood protection activity has the following Level of Service, which is supported by performance measures included in the activity profile section of this document:

- Council will provide a reliable and sustainable flood protection scheme, which is managed to mitigate flooding within the Hikurangi Swamp Scheme area to an acceptable level.

Other significant or major capital expenditure

Over the life of the Strategy, there in one potentially significant project, the replacement and upgrading of the drainage scheme pumps to enable greater fish passage which occurs over 5 years. This is covered in detail under the significant decisions section of this Strategy. There are no major projects for the flood protection activity, however funding for the impacts of climate change on the flood scheme have been allocated for the outer years of the plan.

								\$m
Description	2021-26	2026-31	2031-36	2036-41	2041-46	2046-51	Key Driver	Uninflated Cost
Climate adaptation response							LOS	14



TRANSPORTATION

Overview

The transportation activity covers 1,750km of total road network (1,056km of sealed roads and 694km of unsealed roads) 436km of footpaths, 21km of cycleways, 485 bridges and large culverts, 5,407 street lights, 26 traffic signals and traffic support assets worth \$1,277m.

The roading network is classified into roading types under the one network road classification model. 83% of the network consists of Secondary Collector roads and below, while most trips (57%) are undertaken on the Arterial roads which only makes up 6% of the network length.

Council also carries out the following key transportation functions:

- network and asset management
- safety management
- management of corridor access requests and traffic management
- traffic signal operations (on both WDC and NZTA roads in the District).



1,750

km total road network



1,056

km of sealed roads



485

bridges and large culverts



694

km of unsealed roads



20,216

Drainage systems



436

km of footpaths



21

km of cycleways



2

opening bridges



5,407

streetlights



15,049

signs



26

traffic signals



49

active signs (ITS)

Critical Transportation Assets

For transportation, critical assets are typically identified with critical routes. In particular, bridges are identified as critical because their failure impacts safety, access and can be difficult to recover.

The Northland Lifelines Group Infrastructure Resilience Plan identified that the State Highway networks were critical life-lines that provide access for people and emergency vehicles as well as for food and fuel to Northland communities. A map of critical routes being developed as part of the Resilience Plan (RP) and Forward Works Programme (FWP) which is currently under development (e.g. detour routes, life line routes, arterials, isolated communities etc).

Key Transportation Issues

Key issues for the Whangārei's transportation system are:

- poor condition of the urban sealed road network in Whangārei City
- congestion in the city, which is being exacerbated by high population growth
- high fatal and serious crash rate on the District's arterial roads
- an unsealed road network that has a lack of aggregate, some of which is subject to high forestry traffic volumes resulting in poor condition and dust impacts to local residents which may affect public health
- many isolated coastal communities which are heavily reliant on a vulnerable road network for access
- a poorly used bus system in Whangārei City, lack of access to public transport in rural areas, incomplete shared path network and pedestrian severance caused by the State Highway and arterial road network results in poor use of alternative transport modes.

The following table indicates significant issues and responses identified in the Transportation Activity Management Plan 2021-51.

Issue	Problem Statement
Sealed Roads	Larger renewal programmes to address historic backlogs, expensive urban rehabilitations in Whangārei is resulting in our sealed roads having some of the highest costs per kilometre in our peer group.
Drainage	Ad hoc historic maintenance of drainage systems has increased the susceptibility of our pavements to water ingress and premature failure. It also increases the likelihood of flooding and slips during heavy rain events.
Resilience	Poor geology, a subtropical climate and poor drainage systems make our roads susceptible to slips and flooding during heavy rain events, resulting in road closures that often affect critical routes. This is only expected to get worse over time due to the effects of climate change.
Unsealed Roads	Use of out of specification General All Passing (GAP) aggregates on our unsealed roads is resulting in: <ul style="list-style-type: none">• adverse health impacts to residents due to dust• high levels of community dissatisfaction due to poor road condition and• high maintenance costs.

Issue	Problem Statement
Structures	Lack of historic maintenance and renewals of structures is resulting in a large number of structures prematurely reaching the end of their life which is adversely affecting freight access and increasing demands for expensive bridge replacement.
Growth and Alternative Transport	Rapid growth and lack of suitable alternative transport modes are causing congestion in Whangārei during commuter peaks. Lack of alternative transport modes in many communities restricts access to places of employment, education and social opportunities which is leading to severance, safety issues and higher levels of social deprivation.
Safety	Northland has a narrow, winding and unforgiving rural road network which combined with poor driver behaviour has resulted in the region being a high Community at Risk for Death and Serious Injury (DSI) crashes and the rate of DSI crashes is trending upward.

Options and measurement of these issues are detailed in the Transportation AMP, which breaks them down further to link with One Road Network Classification (ORNC) outcomes, Government Policy Statements and various work categories. This results in the options considered not aligning one-to-one with the significant issues above but including minor and strategic issues as well.

SEALED ROADS

Issue	Options	Implications
The cost of urban rehabilitations in Whangārei is expensive, resulting in our sealed roads having some of the highest costs per kilometre in our peer group. This means we can do less for our money.	Do nothing	<ul style="list-style-type: none"> worsening of pavement condition over time (e.g. more potholes and failures) and an increase in long-term maintenance costs, slower travel times and potential safety issues.
	Continue with current programme to maintain levels of services including reducing backlog of works.	<ul style="list-style-type: none"> continuation of an adequate programme of pavement renewals will enable the sealed pavement to be maintained in a fit for purpose condition while optimising the long-term maintenance costs address the poor condition thin asphaltic concrete (TAC) surfacing as these surfaces allow water ingress and premature (and expensive) pavement failure programme incorporates expensive structural asphaltic concrete (SAC) pavements in Whangārei City will keep sealed road costs high.
	Investigate alternative solutions for urban rehabilitations in Whangārei City to reduce the reliance on high cost structural asphaltic concrete (SAC) pavements.	<ul style="list-style-type: none"> improved and more cost effective programme for sealed roads maintaining freight routes to a higher standard will make these roads better able to cope with the increasing freight loads over time, reduce continual disruptive maintenance patching and more resilient to adverse weather events.

MOST LIKELY MANAGEMENT SCENARIO

The consequences of not addressing this issue, is that our sealed roads will deteriorate under increasing traffic and freight demand leading to a reduced level of service, reduced resilience during wet weather events, increased road hazards (pot holes etc.) and increased maintenance costs.

To address this issue Council will:

- carry out an adequate programme of pavement renewals that will enable the sealed pavement to be maintained in a fit for purpose condition while optimising the long-term maintenance costs
- investigate and plan for new technologies to look to replace the expensive structural asphaltic concrete (SAC) pavements over time
- ensure our sealed roads are suitable for the traffic demands, particularly freight, while optimising the long-term maintenance costs.

DRAINAGE

Ad hoc historic maintenance of drainage systems has increased the susceptibility of our pavements to water ingress and premature failure. It also increases the likelihood of flooding and slips during heavy rain events.

Issue	Options	Implications
Pavements are susceptible to water ingress and premature failure. It also increases the likelihood of flooding and slips during heavy rain events.	Do nothing, continue with ad-hoc reactive maintenance.	<ul style="list-style-type: none"> inadequate control of water flows to keep pavements free of water ingress resulting in pavement failure, flooding and scour of roads, particularly on the unsealed network.
	Adopt the Northern transport Alliance (NTA) Drainage Plan and Maintenance Intervention Strategy.	<ul style="list-style-type: none"> able to identify inadequate water-tables in areas that are high risk for water ingress, flooding and scour proactive treatment of these high-risk areas which should prolong the life of the pavement and surfacing and will reduce the amount of water flooding across roads.

MOST LIKELY MANAGEMENT SCENARIO

The consequences of not addressing this issue is that our pavements will continue to fail prematurely due to water ingress. Slips and flooding will continue to cause resilience issues on our roads during heavy rain events resulting in road closures that often affect freight, tourist and detour routes, key lifelines and isolated communities.

To address this issue the Council will:

- adopt the NTA's Drainage Plan and Maintenance Intervention Strategy to identify water-tables in areas that are high risk for water ingress, flooding and scour
- inspect culverts annually to address blocked culverts
- carry out an adequate programme of drainage repairs that enable proactive treatment of these high-risk areas which should prolong the life of the pavement and surfacing and will reduce the amount of water flooding across roads.

RESILIENCE

Poor geology, a subtropical climate and poor drainage systems make our roads susceptible to slips and flooding during heavy rain events, resulting in road closures that often affect critical routes. This is only expected to get worse over time due to the effects of climate change.

Issue	Options	Implications
Whangārei roads susceptible to slips and flooding during heavy rain events, resulting in road closures that often affect critical routes. This is only expected to get worse over time due to the effects of climate change.	Do nothing	<ul style="list-style-type: none"> worsening of pavement condition over time (e.g. more potholes and slip failures) and an increase in long-term maintenance costs, slower travel times and potential safety issues including cutting access to communities.
	Implement the NTA's Resilience Plan and maintenance intervention strategy (MIS) to develop a prioritised programme of retaining wall & slip repairs and flood mitigation required on key arterial routes, tourist routes and on roads that form the only vehicle access to isolated communities.	<ul style="list-style-type: none"> addressing slips and flood mitigation in a proactive manner will reduce the likelihood of catastrophic failure and will reduce ongoing maintenance costs it will minimise delay and disruption on key arterials, tourist routes and will provide security of access for isolated coastal communities considering the impacts of climate change in low-lying coastal areas will help planning of new roads and coastal protection in these areas. This will help future proof the road network from potential sea level rise.
	Investigate alternative to expand the resilience strategy to a Corridor Network Resilience Analysis and FWP.	<ul style="list-style-type: none"> improved and more focused programme for resilience works providing fit for purpose detour routes for the state highway network and key local arterials would enable traffic and freight flows to negotiate the detour efficiently and safely.

MOST LIKELY MANAGEMENT SCENARIO

The consequences of not addressing this issue is that our pavements will continue to fail prematurely during emergency events with the likelihood of delay and travel disruption due to road closures on freight tourist and detour routes and key lifelines.

To address this issue the Council will:

- adopt the NTA's Resilience Plan and Maintenance Intervention Strategy to identify retaining walls & slip repairs and flood mitigation measures
- inspect existing retaining walls and flood protection structures.
- carry out an adequate programme of retaining wall repairs and slip repairs that enable proactive treatment of high-risk areas which should minimise delay and disruption on key arterials, tourist routes and will provide security of access for isolated coastal communities.

UN-SEALED ROADS

Whangārei has a high percentage of unsealed roads. Use of out of specification GAP aggregates on our unsealed roads results in adverse health impacts to residents due to dust, high levels of community dissatisfaction due to poor road condition and high maintenance costs.

Issue	Options	Implications
Unsealed roads are a community priority. There has been limited funding in the past to fund upgrades.	Do nothing	<ul style="list-style-type: none"> • continual worsening of pavement condition with increased potholing, corrugations, gravel loss and dust which is leading to high levels of customer dissatisfaction, and health concerns.
	Continue with current programme of re-metalling roads on an ad-hoc basis.	<ul style="list-style-type: none"> • continual high maintenance costs • continuing to maintain the unsealed network without knowing the pavement depth or condition will retain the current reactive approach to customer complaints which is likely to be suboptimal and result in more customer dissatisfaction • dust has become a significant concern for resident's health, particularly on freight routes, which is driving significant demand for dust suppression and sealing of roads.
	Adopt the Centre of Excellence (CoE) recommendation to use Paige-Green compliant materials as a wearing course on high and medium demand roads where additional pavement strengthening to provide the required strength and shape is undertaken.	<ul style="list-style-type: none"> • maintenance costs are reduced • with low demand routes dust is reduced, but with high demand routes the use of a dust coat seal may still be required to mitigate excessive dust • development of a proactive programme of works.

MOST LIKELY MANAGEMENT SCENARIO

The consequences of not addressing this issue, is that maintenance costs will remain high and roads will deteriorate and create high levels of dust particularly on high freight routes, which leads to high Customer dissatisfaction.

To address this issue Council will:

- adopt the Centre of Excellence (CoE) recommendation to strengthen structural pavement layer and place a Paige- Green compliant material over the pavement
- develop of a proactive programme of works.

STRUCTURES

Lack of historic maintenance and renewals of structures is resulting in a large number of structures prematurely reaching the end of their life which is adversely affecting freight access and increasing demands for expensive bridge and retaining wall replacement

Issue	Options	Implications
Asset information on condition of structures including retaining walls and bridges, is limited. Some bridges are unable to carry 50MAX traffic impacting on freight movements.	Do nothing	<ul style="list-style-type: none"> bridges will continue to deteriorate and as their structural integrity is impacted more will be added to the 50MAX register impacts on freight movement and economic growth it also has health and safety implications if bridges and retaining walls are not maintained retaining walls will also deteriorate and potentially fail during storm events if inspections are not undertaken.
	Annual inspection programme of critical bridge and coastal structures. will enable maintenance work to be identified in a timely manner and potentially reduce more expensive repairs in the future. A retaining wall forward works plan is being developed for the first time and this is identifying demand for retaining wall renewals and replacement	<ul style="list-style-type: none"> programmes will enable maintenance work to be identified in a timely manner and potentially reduce more expensive repairs in the future and prevent further bridges being added to the 50MAX register reduce ongoing maintenance costs on bridges and retaining walls.
	Continue the annual inspection programme and implement a forward works programme for the replacement and upgrade for bridges and retaining walls.	<ul style="list-style-type: none"> the removal of bridges from the 50MAX restriction register will enable more use of these higher productivity vehicles and will reduce freight costs and improve opportunities for investment increased upgrades adds resilience to the network enabling better freight routes and a safer network.

MOST LIKELY MANAGEMENT SCENARIO

The benefit of a fit for purpose bridge and retaining wall asset that provide access for freight and high productivity vehicles (50Max and HPMV) on arterial, freight and detour routes.

The consequences of not addressing the problem statement is that our structures will deteriorate over time leading to further restrictions on freight. It also increases the risk of bridge or retaining wall failure resulting in safety issues and complete loss of access.

To address this issue Council will:

- implement an annual inspection programme
- implement a strategy that creates a forward works programme
- fund a forward works programme.

GROWTH AND ALTERNATIVE TRANSPORT

Rapid growth and lack of suitable alternative transport modes are causing congestion in Whangārei during commuter peaks. Lack of alternative transport modes in many communities restricts access to places of employment, education and social opportunities which is leading to severance, safety issues and higher levels of social deprivation.

Issue	Options	Implications
Congestion during commuter peaks and lack of alternative modes.	Do nothing	<ul style="list-style-type: none"> without addressing capacity issues at known problem areas in Whangārei, there will continue to be delays to freight and frustration to road users – these delays will continue to grow as the city increases in population. no increases to public transport provision continue to support private vehicle use and congestion in Whangārei no change to the cycle network will result in lower uptake of users and less health and congestion relief benefits being achieved without improving walking and cycling links and bus services to rural towns, these communities will continue to suffer from community severance, safety issues and lack of access to employment, education and social opportunities which will result in continuing high levels of social deprivation.
	Continue with current programme	<ul style="list-style-type: none"> implementation of the major capital works such as four-laning and junction improvements at the known problem areas continue the implementation of the Walking and Cycling Strategy to connect disparate sections of the network supporting the Regional Councils initiatives to extend bus services.
	Investigate ongoing upgrade programmes based on changing road use over time. Including alternative solutions for increasing modal changes to the transportation network.	<ul style="list-style-type: none"> continue to scope and develop options for network upgrades to manage congestion and peak flows expand the focus of the Walking and Cycling Strategy to extend to outlying communities create a step change uptake of other transportation modes.

MOST LIKELY MANAGEMENT SCENARIO

The constrained road network in Whangārei City and high dependence on private vehicle use results in higher traffic volumes on its arterial road network and is resulting in congestion in the commuter peaks. The high traffic growth rate in Whangārei is expected to continue for the near future due to high population, freight and tourism growth.

To address this issue Council will:

- address capacity issues at known problem areas
- support the Northland Regional Council bus initiatives to encourage higher passenger numbers and would reduce private vehicle use and congestion – rural bus services would reduce rural commuter traffic on key arterials servicing the city
- provide cycleway connections in Whangārei
- improve walking and cycling connections in rural towns.

SAFETY

Northland has a narrow, winding and unforgiving rural road network which combined with poor driver behaviour has resulted in the region being a high community at risk for Death and Serious Injury (DSI) crashes and the rate of DSI crashes is trending upward.

Issue	Options	Implications
Whangārei has a high community at risk rating for DSI crashes, exacerbated by the narrow and winding road network.	Do nothing	<ul style="list-style-type: none"> without adequate investment into road safety measures, the increasing trend in fatal and serious injury crashes on the Northland local road network is likely to continue not achieving the Road to Zero Strategy .
	Continue with current programme: <ul style="list-style-type: none"> Targeting investment on areas with highest safety risk. Road safety promotion programme Speed management reviews Traffic mode segregation as part of the Walking and Cycling Strategy Safer crossing points 	<ul style="list-style-type: none"> targeted investment on the areas with the highest safety risk reduce crash rates target road safety promotion activities in high risk areas identified in the Communities at Risk register continue to implement speed management reviews across the District safer walking and cycling routes through traffic mode segregation improving crossing points and routes for pedestrians and cyclists.
	Investigate alternative solutions for implementing a road widening programme through the pavement rehabilitation programme. Further development of the Road Safety Programme.	<ul style="list-style-type: none"> road widening will provide more road space before a vehicle encroaches on the unsealed shoulder and will provide more space for cyclists and pedestrians increased road safety to a higher level.

MOST LIKELY MANAGEMENT SCENARIO

The consequences of not addressing this issue is that we will increase the trend in fatal and serious injury crashes on the Whangārei local road network is likely to continue and we will not meet our Road to Zero targets.

To address this issue Council will:

- target investment on areas with highest safety risk
- implement the road safety promotion programme
- undertake speed management reviews
- traffic mode segregation as part of the Walking and Cycling Strategy
- provide safer crossing points.

Assumptions including uncertainty

Uncertainty in funding due to COVID-19 economic response and Waka Kotahi New Zealand Transport Agency (NZTA) business case environment and current funding availability.

Support for major projects such as:

- four-laning from Whangārei to Port Marsden Highway
- potential for Ports of Auckland to partially move to Northport
- potential for the Navy to move to Whangārei
- the revitalisation of the Northland rail network and possible rail link to Northport.

The proposed major projects in the region may have downstream impacts on the local roading networks which are not yet scoped or understood.

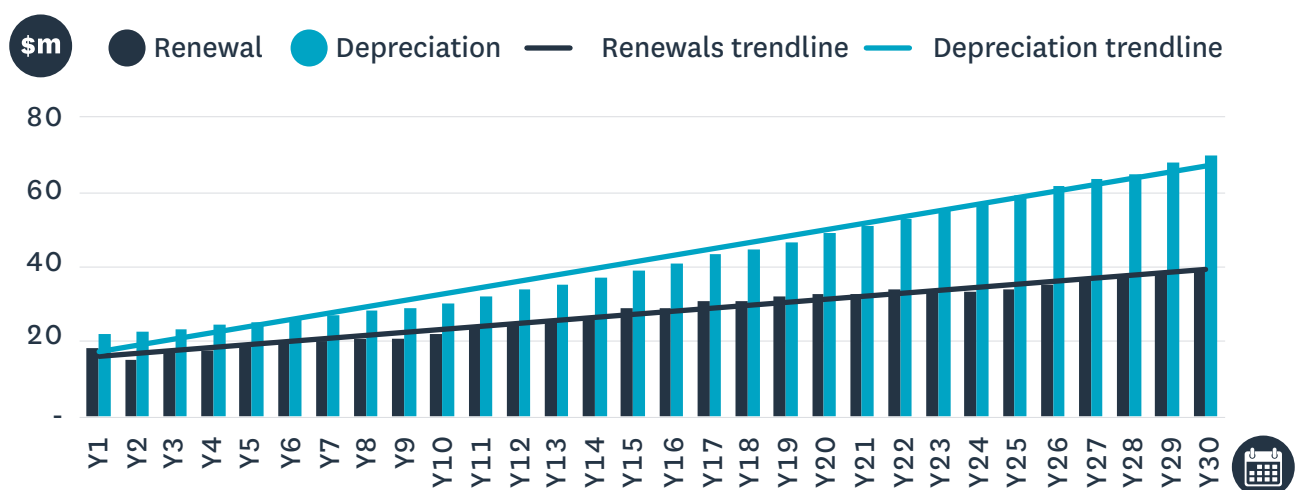
Activity Funding Strategy

In the long term, it is possible that Northport could develop as a more significant container port and support container freight to and from Auckland as the Port of Auckland grows to capacity. Two container cranes have been installed at the port for this purpose. However, for this to succeed, road and rail links to Auckland would need to be upgraded and the Marsden Point rail link will be required

The urgency to undertake initiatives to help mitigate climate change appears to have increased and this may affect the types of activities that are undertaken in the future.

The transportation renewals profile below shows the budgeted renewals for years 1-10 of the Strategy relative to depreciation. Depreciation is then forecast for years 11 – 30 with renewal requirements identified through the AMP also being forecast over that period. The graph below shows the required renewal budget relative to depreciation over the life of the Strategy.

Transportation renewal expenditure



The above graphs are a consolidated view of all the asset categories making up the Transportation portfolio. Therefore, there are a range of assets which have varying lives and replacement profiles. Information on the depreciation profiles on the individual asset categories are contained in the Transport AMP for the first 10 years of this strategy.

Renewals are driven by national standards adopted by NZTA, along with other mandatory non-financial performance standards required by the Department of Internal Affairs (DIA).

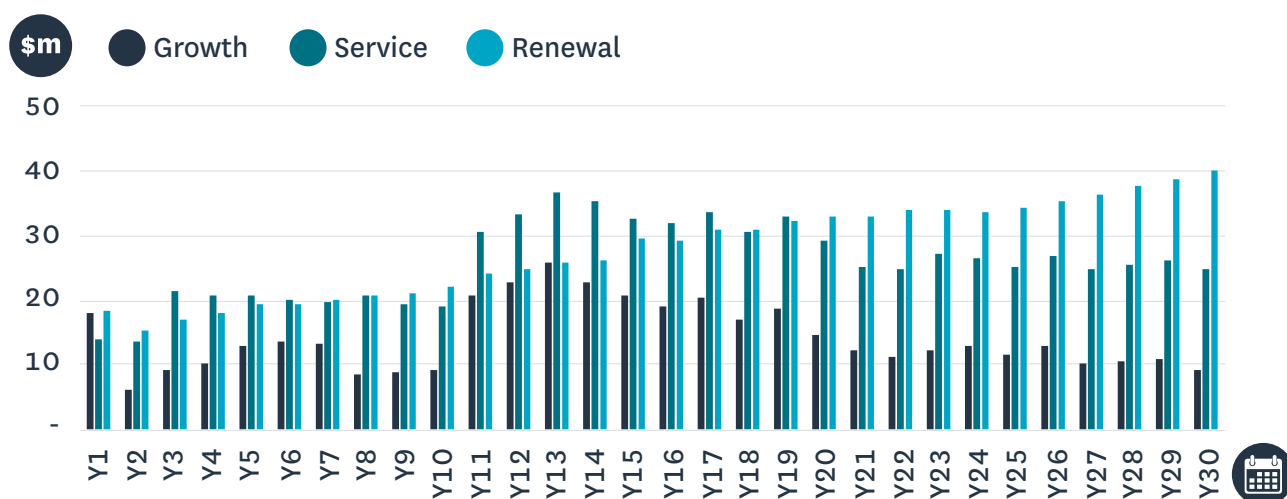
The principle condition rating model that determines an asset's condition and the overall renewal profile is the NZTA deterioration model (DTIMS). As a result, there is a relatively high level of confidence in modelling.

The renewals expenditure profile is relatively consistent over the 30 years. Renewal funding for the transportation activity is enough to maintain current Levels of Service over the medium to long term, however, the maintenance of existing Levels of Service may not meet increasing customer expectations. No bow wave or increase in renewals in the later years are identified. Renewals priorities are identified in the major projects table below.

The differential between depreciation and renewals is slowly widening over the 30 year period of the Strategy. As this profile contains all transportation assets, including bridges and structures which can have a high value and a long life, this will partially account for this gap.

The following graph outlines the total Transportation capital expenditure by primary drivers (Growth, Level of Service and Renewals).

Transportation capital expenditure by splits



The profile shows a step change level of service expenditure prioritised over growth and renewals. This is primarily driven by the sealing of roads, which has been projected over the 30 years. This reflects our community's expectations around roading provisions, and addresses public health and safety in managing dust.

Growth projects have been pushed out to the mid-term of the Strategy (through yrs. 11-20). This may result in a temporary decline in customer satisfaction in some areas. However, the city pinch points have been addressed by the Strategy as outlined in the major projects table.

Total funding has increased overtime as has our capacity to deliver projects. In addition to Council funded projects, we are also delivering significant central government funded projects. This has impacted on our planned delivery, with some projects brought forward. An example of this is the Port Rd/Kioreroa Rd intersection upgrade, of which Council is funding \$6m out of \$16m project.

Levels of Service

The transportation activity has the following Levels of Service, which are supported by performance measures included in the activity profile section of this document:

- the District's roading network will be maintained in a satisfactory condition and in accordance with national safety and engineering standards
- we will support alternative transport methods.

























Funding for the transportation activity is sufficient to maintain current Levels of Service over the medium to long term. Levels of Service have been increased in terms of increasing the numbers of rural roads to be sealed. However, the maintenance of existing Levels of Service may not meet increasing customer expectations, the Department of Internal affairs (DIA) mandatory non-financial performance measures for the safety of local roads or the requirements of ONRC, once implemented.

These issues will be monitored over time with any changes to Levels of Service being considered in future planning rounds.

Other significant or major capital expenditure

Over the life of the Strategy, there are two potentially significant projects, the four-laning of Onerahi/Riverside Dr and the Port/Kioreroa Road Intersection. These are covered in detail under the significant decisions section of this Strategy. The following major projects (excluding programmes) are identified where non-renewal expenditure exceeds 10% of the total capital for the activity in any year of delivery.

Transportation major projects

								\$m
Description	2021-26	2026-31	2031-36	2036-41	2041-46	2046-51	Key Driver	Uninflated Cost
Waterfront to City Connection – John & James Street							LOS	12.1
Riverside Drive/Onerahi (stage 1)							Growth	25.3
Port Rd/Kioreroa Rd							Growth/CIP	14.5
Seal Extensions							LOS	65.5
Tikipunga Shared Path							LOS	10.0
Kamo Route Bus Priority Lanes/4-Laning							LOS	24.0
Reyburn St/Okara Dr/Port Rd Bus Priority Lanes/4-Laning							LOS	25.0
Tikipunga Route Bus Priority Lanes/4-Laning							LOS	25.0
SH1 to SH14 Maunu Link Road (Pompallier Link)							LOS	15.0
SH1/SH14 Connection (Hospital Road)							LOS	10.0
Tarewa Rd Intersection Upgrade and Tarewa/Walton 4-Laning							LOS	25.0
Hātea Dr 4-Laning							LOS	12.0
Park N Ride Facilities							LOS	16.0
Marsden Point Upgrades							LOS	16.0
Commuter Rail Service							LOS	16.0



SOLID WASTE

Overview

The Solid Waste activity provides refuse collection and disposal services throughout the District, including recycling collection, litter control, transfer stations and the Puwera Landfill.

Solid waste has:

- the Puwera Landfill and Re:Sort facility (through a joint venture)
- seven transfer stations
- a rural recycling facility
- \$1.7m replacement cost.



1

Landfill



5

closed landfills



7

transfer stations



35%

of kerbside waste
diverted to recycling

Critical Solid Waste Assets

The Solid Waste activity does not contain any assets that are considered critical in terms of requiring immediate restoration following a disaster or other major event.

Key Solid Waste Issues

The following table indicates significant issues and responses identified in the Solid Waste Activity Management Plan 2021-31

Issue	Options	Implications
A long-term renewal and maintenance programme is required to ensure assets do not deteriorate	Deferred maintenance and renewal	<ul style="list-style-type: none">• increased rate of asset failure and reduced asset life• increased reactive maintenance• lower Levels of Service and customer satisfaction• eventual bow-wave of renewals.
	Maintenance and renewal	<ul style="list-style-type: none">• maintains assets at current levels• spreads costs over a longer period• maintains Level of Service.
	Upgrade now	<ul style="list-style-type: none">• greater cost• investment may exceed capacity requirements• improved Level of Service.

MOST LIKELY MANAGEMENT SCENARIO

Many of Council's Solid Waste assets are in good to excellent condition with capacity over the next 30 years. However, a reduced asset maintenance and renewal programme will result in these assets deteriorating over time.

To address this issue Council will:

- review the condition and capacity of Solid Waste assets each three-year LTP cycle
- provision funding for asset maintenance and renewal
- where investment for major maintenance or renewal is identified, Council will consider funding through a combination of user charges and Level of Service funding.

Issue	Options	Implications
There are increasing visitor numbers to the District, resulting in an increasing need for seasonal solid waste facilities, particularly in coastal areas	Do nothing	<ul style="list-style-type: none"> • reduction in Levels of Service • increased litter and solid waste issues • reduction in reputation as a destination.
	Provide appropriate facilities	<ul style="list-style-type: none"> • reduction in litter, particularly in busy areas • higher cost to the community • maintain Levels of Service.

MOST LIKELY MANAGEMENT SCENARIO

Council recognises that tourism provides an economic benefit to the community. However, increased seasonal visitor numbers place greater pressure on solid waste collection and disposal and on managing litter. In many cases, visitors do not directly contribute financially to the management of Solid Waste. Council prefers to promote the economic benefits of tourism and spread the cost of providing Solid Waste services that promote a clean and healthy environment across the wider community.

To address this issue Council will:

- recognise the wider economic benefits of seasonal visitors
- provide public litter bins, particularly in high use areas and fund these through general rates.

Assumptions including uncertainty

No specific assumptions relating to Solid Waste have been identified.

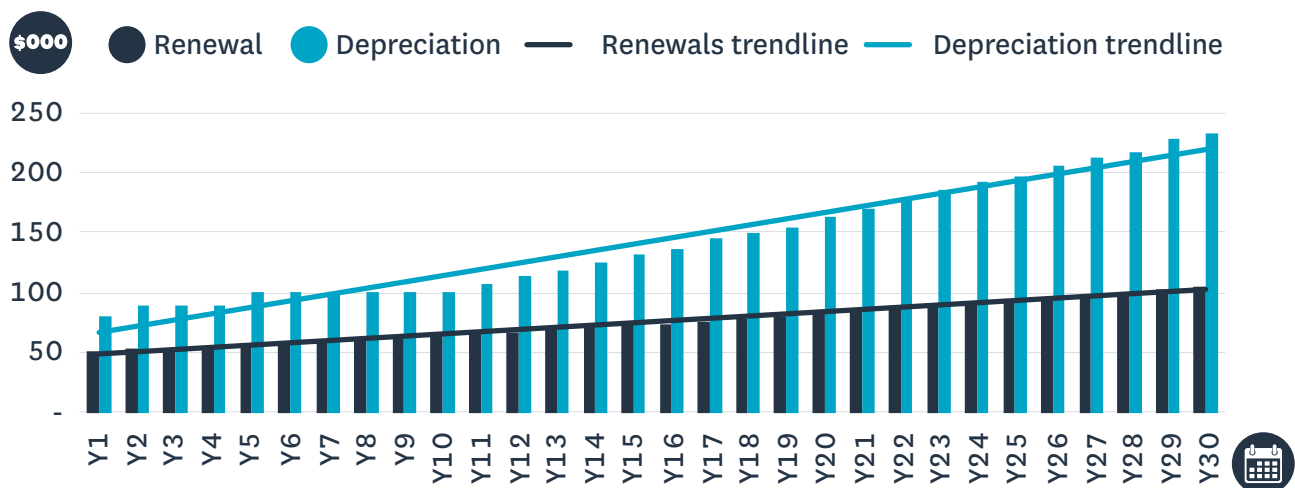
Activity Funding Strategy

The solid waste renewals profile below shows the budgeted renewals for years 1-10 of the Strategy relative to depreciation. Depreciation is then forecast for years 11 – 30 with renewal requirements identified through the AMP also being forecast over that period. For the first 10 years, renewal decisions are based on the known condition of the assets. Beyond the 10-year timeframe, they are based on the age of the asset, in accordance with the parameters and assumptions in the AMP.

Broadly speaking, priorities for the solid waste replacement programme will be assessed in terms of frequency of asset failure, ability to meet service level standards and the risk of environmental damage.

The graph below shows the required renewal budget relative to depreciation over the life of the Strategy.

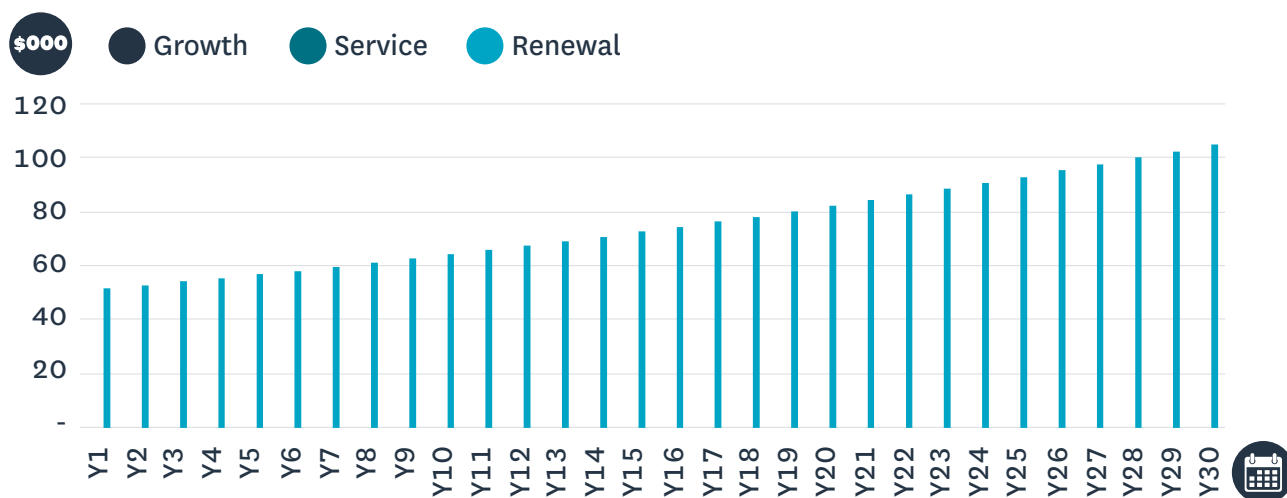
Solid Waste renewal expenditure



In general, renewals are budgeted as run to failure replacements, however in reality they have varying levels of wear and tear that determine actual replacement timeframes.

The following graph outlines the total solid waste capital expenditure by primary drivers (Growth, Level of Service and Renewals). There are no level of service or growth projects projected over the 30 year period of the Infrastructure Strategy.

Solid waste capital expenditure by splits



Levels of Service

The Solid Waste activity has the following Levels of Service, which are supported by performance measures included in the activity profile section of this document:

- Council will provide kerbside refuse and recycling collection services to all properties in the District and transfer stations will be operated throughout the District
- Council will foster waste minimisation by supporting recycling and waste reduction practices so that a continued reduction in refuse sent to landfill occurs
- Council will provide and empty public rubbish bins and undertake litter control throughout public places in the District.

The funding allocated will enable Levels of Service to be maintained over the life of this Strategy.

Other significant or major capital expenditure

Over the life of the Strategy, there are no potentially significant projects and no major projects.



PARKS AND RECREATION

Overview

The asset groups that form the Parks and Recreation activity can be divided into two sub-activities:

1. land
2. facilities – Improvements to land that further enable its recreational use (valued at \$89m)

Council provides parks and facilities which support the health and wellbeing of the community – providing areas for sport and recreation, protecting ecosystems, biodiversity and landscapes, and providing spaces that are restful and enhance visual and community amenity.

Council provides public amenities to support the health and wellbeing of the community by providing areas for burial, and for the comfort and convenience of visitors and residents. Facilities are provided for sport and recreation and civic space and key historic and cultural features are protected and enhanced.

The Parks and Recreation Department currently manages the following asset groups:

- sport and recreation
- parks and gardens
- cemeteries and crematorium
- tracks and walkways
- playgrounds and skateparks
- coastal structures and seawalls.



5,034
ha open space



24
sportsparks



5
stakeparks



19,000
park and street trees



250
maintained parks



44
playgrounds



436
km maintained tracks



8
cemeteries
(including historical closed cemeteries)

Critical Parks assets

No critical risks have been identified within the Parks Activity in terms of their contribution to the network as a whole.

Key Parks issues

Issue	Options	Implications
Growth requires increased land provision across Parks and Recreation categories	Do nothing	<ul style="list-style-type: none">the average number of hectares per 1000 residents will decrease over timeuser experience will be reduced.
	Rely on developments only	<ul style="list-style-type: none">smaller green spaces may be provided locally at the discretion of the developerthe ability to provide suitable sports grounds will be reducedmajor sportsfields will become congested impacting on Council's ability to support active participation.
	Rely on development contributions and seek a major strategic purchase	<ul style="list-style-type: none">suitable local green spaces can be purchased or negotiated with developers.recreational and sporting participation of the community is provided for.

MOST LIKELY MANAGEMENT SCENARIO

Increased numbers of residents, particularly in areas that may experience higher than expected growth, place additional pressure on existing recreational facilities. As growth occurs, the availability of suitable land also becomes an issue, making it more difficult and expensive to provide appropriate facilities.

Council cannot rely on planning techniques to ensure that open space is provided within new developments as this is not currently a requirement within the District Plan. Without projects identified in the LTP such as neighbourhood reserve purchases, Council cannot collect development contributions to purchase land or enter into Private Developer Agreements to offset DCs against land to vest as part of new subdivisions.

The Active Recreation and Sport Strategy has identified a need for a significant land purchase to respond to growth with a facility similar to Kensington Park.

Council will address this issue by:

- reviewing current Parks and Recreation sites to determine their area of benefit and capacity
- considering more strategic land purchases and provide funding for a major strategic land purchase
- providing funding for neighbourhood park land purchases.

Issue	Options	Implications
Balancing competing priorities for the renewal of core assets against funding for growth and increased Levels of Service	Focus only on funding renewals	<ul style="list-style-type: none"> • loss of amenity and opportunities for the community • will not meet increasing community expectations • unlikely to attract visitors and new residents.
	Consolidate and prioritise 'sense of place' funding into a dedicated programme	<ul style="list-style-type: none"> • ability to focus on cornerstone projects • funding for projects to be completed on time and within budget • meets increasing expectations.

MOST LIKELY MANAGEMENT SCENARIO

There is an increasing expectation for higher levels of amenity and 'more things to see and do' in both traditional infrastructure projects and as a result of key amenity projects completed or enhanced within recent years (i.e. the Hātea Loop and Pocket Park which have been broadly supported). As a growing District, there is a greater expectation to see these types of projects across our urban and rural areas, which can compete with renewals funding.

To address this issue Council will:

- consolidate Sense of Place funding into dedicated programmes
- focus on cornerstone projects around the waterfront/City Centre and the Blue/Green Network Strategy.

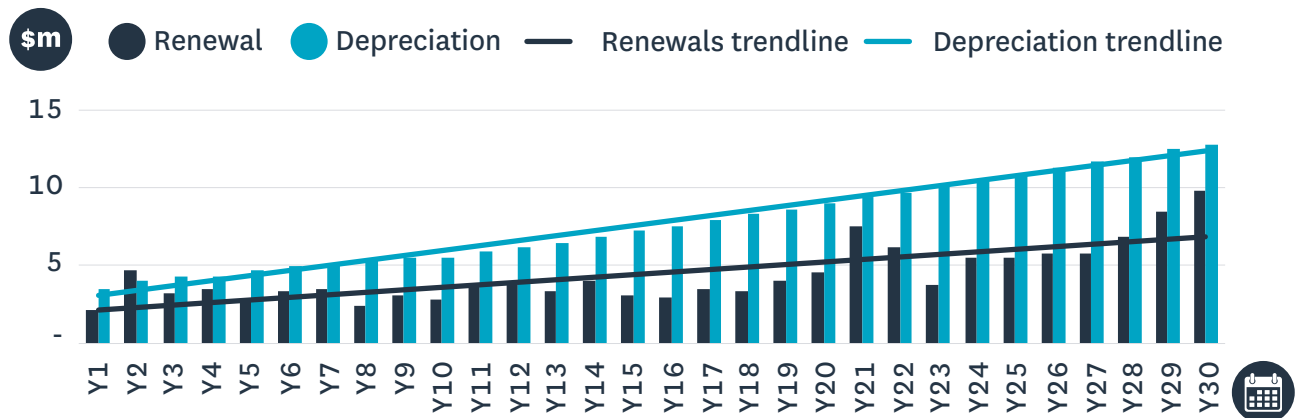
Assumptions including uncertainty

No specific assumptions relating to Parks have been identified.

Activity Funding Strategy

The Parks renewals profile below shows the budgeted renewals for years 1-10 of the Strategy relative to depreciation. Depreciation is then forecast for years 11 – 30 with renewal requirements identified through the AMP also being forecast over that period. For the first 10 years, renewal decisions are based on the known condition of the assets. Beyond the 10-year timeframe, they are based on the age of the asset, in accordance with the parameters and assumptions in the AMP.

Parks and Recreation renewal expenditure



The graph shows the required renewal budget relative to depreciation over the life of the Strategy.

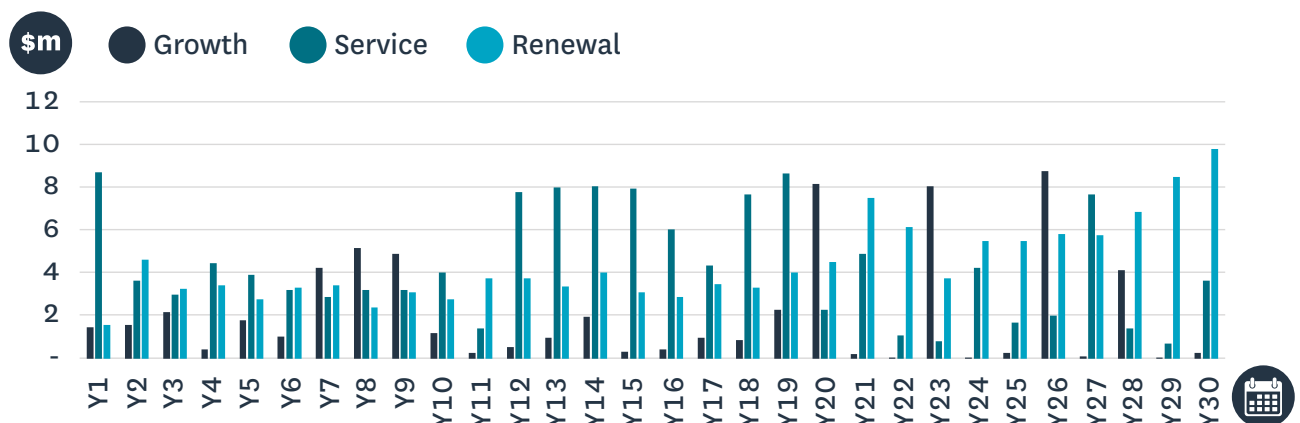
Renewals now incorporate an improved asset knowledge especially around coastal structures which distorted previous renewal profiles.

In year two of the Strategy, renewals track higher than depreciation funding, with the trend then balancing out over the life of the Strategy. Depreciation for the renewal of certain asset groups such as tracks is under estimated, as historically these assets were not capitalised. Council has, however, assessed and funded renewal requirements for these assets within the supporting AMP and LTP.

As per the Capitalisation Policy, Council is working through a programme to get these asset classes into our system, where appropriate.

The following graph outlines the total parks capital expenditure by primary drivers (Growth, Level of Service and Renewals).

Parks and Recreation capital expenditure by splits



There is a spike of level of service projects in year one such as implementing the Blue Green network and new sea walls. These are detailed in the major projects table below.

Projects to service growth and community expectations are represented throughout the 30 years of the strategy. Renewals are relatively consistent up to year 20, when they increase significantly. Parks assets have the shortest lives of the activity groups often requiring renewals every 20-30 years.

Levels of Service

The Parks and Recreation activity have the following Levels of Service, which are supported by performance measures included in the activity profile section of this document:

- Council will provide and maintain outdoor sporting facilities to support and promote active recreation of the community through participation in both organised and informal sporting activities
- Council will provide and maintain a range of reserves, including built facilities, to meet the needs of the community, as well as protecting and enhancing the natural environment
- Council will provide and maintain cemeteries and a crematorium in a satisfactory manner
- Council will provide well maintained and accessible public toilets in high use areas.

While the funding allocated will enable Levels of Service to be maintained over the life of this strategy, key challenges faced relate to the:

- acquisition of appropriate land for new or expanded sportsfields, playgrounds and other facilities
- the need to develop a new facility similar to Kensington Park
- rising cost of sports and track renewals, although effects on Level of Service can be minimised through prioritisation and maintenance
- need to balance/rationalise funding for growth and Levels of Service against renewals funding to ensure there is sufficient funding for core assets.











To address these issues, Council has provided for the acquisition of sportsfield land within the first 10 years of the strategy and will investigate other strategic land acquisition requirements as required.

Elsewhere, proactive management and prioritisation will be undertaken to maintain Levels of Service, with any additional funding requirements identified (i.e. for coastal assets) being considered in the next LTP.

Other significant or major capital expenditure

Over the life of the strategy the follow major projects have been identified.

Parks major projects

								\$m
Description	2021-26	2026-31	2031-36	2036-41	2041-46	2046-51	Key Driver	Uninflated Cost
Blue Green Network Property Acquisitions/Easements/Lease Changes							LOS	12
Pohe Island – Master Plan							LOS	3
Upper Hātea Loop Development 3.5km							LOS	2.6
Hātea Loop Waterfront Shared Path Widening 4.5km							LOS	2.3
New Seawalls OTP							LOS	1.56
Ruakaka Recreation Centre Carpark								1
Sandy Bay Seawall							LOS	1.53
Major Sports Hub land purchase							Growth	14
Neighbourhood parks land purchase							LOS	21.3
Onerahi Beach development							LOS	2.2

KEY ASSUMPTIONS AND UNCERTAINTIES

Description	Assumption	Uncertainty and risk
Levels of Service	Council will maintain current Levels of Service for the duration of this Infrastructure Strategy.	<p>Level of uncertainty: Low-Medium.</p> <p>Risk: Any reduction in the levels of funding may result in a loss of service levels.</p>
Growth	Growth will continue at a rate, and in locations, that are consistent with current growth models.	<p>Level of uncertainty: Low-Medium.</p> <p>Risk: Any swings in growth may place additional pressure on infrastructure funding and/or Levels of Service. Council will mitigate this risk by monitoring growth, updating models with verified data and reprioritising programmes through Annual Plan processes where necessary.</p>
Economic drivers	That economic drivers are consistent with those considered in the Draft Sustainable Future: Whangārei District Growth Strategy and the spatial pattern provided for in current growth models.	<p>Level of uncertainty: Low.</p> <p>Risk: The draft Growth Strategy and growth model consider, and are driven by, economic drivers affecting Whangārei District. Any changes from the drivers within those documents are likely to be immaterial and can be reviewed through the requirements for a development strategy under the NPS-UDC.</p>
Demand	Peak demand for infrastructure will continue to follow survey patterns.	<p>Level of uncertainty: Low.</p> <p>Risk: Seasonal population increases in some areas may place additional pressure on infrastructure and could temporarily impact Levels of Service. To mitigate this. Demand on local tourism could also increase as a result of the COVID-19 restrictions. Council will consider updating the peak population survey.</p>
Capacity to deliver	That Council will be able to secure appropriate resourcing to deliver the increased capex programme.	<p>Level of uncertainty: Medium.</p> <p>Risk: Council's ability to deliver on the strategy is driven by effectively scheduling and resourcing the capex programme. In preparing the LTP capex programme, department managers for each activity have assessed the internal resourcing required over the life of the LTP. It is anticipated that the market will respond with contractor capacity.</p>

Description	Assumption	Uncertainty and risk
Inflation	Unless stated otherwise, modelling, graphs and costs have been inflated by LGCI based on Business and Economic Research Limited (BERL) projections in accordance with the financial assumptions and model supporting the LTP.	<p>Level of uncertainty: Medium-High.</p> <p>Risk: Inflation maybe under- or over-stated. Impacts of this are considered under the financial assumptions supporting the LTP.</p>
Depreciation	Depreciation rates and data on the useful lives of infrastructural assets are based on revaluation of the rate average for each activity, in accordance with the financial assumptions and model supporting the LTP.	<p>Level of uncertainty: Low-Medium.</p> <p>Risk: Depreciation may be under- or over-stated. This risk will also reduce, over time, as revaluations are undertaken and modelling is validated.</p>
Vested assets	Vested assets are fit-for-purpose and will meet their forecast lifecycle.	<p>Level of uncertainty: Low-medium.</p> <p>Risk: Faster than expected deterioration of vested assets could increase the need for renewals.</p>
Asset modelling	Current asset condition modelling is subject to limitations but reflects the best information available to Council for decision making at this time.	<p>Level of uncertainty: Medium.</p> <p>Risk: Uncertainty of asset condition may lead to poor prioritisation of funding and renewals. To mitigate this risk, Council will target funding for assessment of asset condition for older assets and in areas where works are planned. This risk will also reduce, over time, as more condition assessments are undertaken and modelling is validated.</p>
Data accuracy	Data held in the Asset Management System follows the assumptions made in the individual Activity Management Plans.	<p>Level of uncertainty: Medium.</p> <p>Risk: Uncertainty around data structures and recording may lead to inconsistent information which effects the ability to model the asset values and condition. The Asset Data team have asset data standards when recording new assets. The Asset System upgrade is also enabling review of the data.</p>
Regulatory compliance	All regulatory requirements are complied with.	<p>Level of uncertainty: Medium.</p> <p>Risk: Forecasting is based on current regulatory requirements, including national guidance, Regional and District Plans. Increasing regulatory requirements can lead to the need for high cost, unplanned upgrades or new assets. Changes to the regulatory environment are identified as a potential strategic issue and risk.</p>

Description	Assumption	Uncertainty and risk
National water quality standards	Treated water quality complies with the New Zealand Drinking Water Standards and approved Public Health Risk Management Plans (Water Safety Plans) and that treatment plants can cope with changes to these standards with only minor upgrades.	<p>Level of uncertainty: Low.</p> <p>Risk: There is a risk of prosecution if Drinking Water Standards are not met. Council will monitor any changes to standards and respond where necessary.</p>
National Policy Statement on Urban Development Capacity	The National Policy Statement on Urban Development Capacity sets out a process for high growth Councils to assess feasible capacity and produce a Development Strategy. While this process will not be completed prior to the adoption of this strategy, Council has assumed that it has sufficient feasible capacity based on initial assessments undertaken.	<p>Level of uncertainty: Low.</p> <p>Risk: Should Council not have sufficient feasible capacity it will need to provide for this through future planning and funding processes.</p>
Service delivery models	Council has recently reviewed the delivery of services under Section 17A of the LGA. In doing so, Council has adopted a mixed delivery model with the delivery of many services covered by this strategy outsourced to contractors and some core services, such as treatment plant operation, retained in-house. It is assumed that service models will remain constant over the life of this strategy.	<p>Level of uncertainty: Low.</p> <p>Risk: A major change to the mechanism for infrastructure service delivery as part of future Section 17A review may affect how infrastructure is managed, resulting in different funding or priorities.</p>
Storm damage	Council does not budget for storm events.	<p>Level of uncertainty: Medium.</p> <p>Risk: Lack of funding provision for emergency works may result in reduced renewals as renewal funding gets diverted to fund flood damage repairs.</p>
Regional airport	That an upgrade to parts of the road network to support and service any new regional airport will be funded as part of the overall Airport proposal.	<p>Level of uncertainty: Low.</p> <p>Risk: The proposed regional airport is currently in planning stage and roading requirements are not clear. To mitigate this risk Council will budget for any roading requirements as part of the project.</p>

PART 3:

Managing an integrated network

When managing Whangārei's infrastructure, we are ensuring that we are looking across the asset portfolios to align projects and their timing and ensure the best decisions are made for the community. It is part of our management strategy to manage across the business, this includes improvements to our asset data systems, implementing a project viewer and creating a culture of holistic service provision.

It is usual that not all potential works identified in the Activity Management Plans can be afforded or scheduled within available funding and resources. The budgeting process prioritises expenditure on maintenance and renewals over creating new assets. There are several factors that potentially impact on the prioritisation of projects and programmes.

One of Council's financial parameters set for the 2021-31 LTP is that council will set a balanced budget every year (as defined in the Financial Prudence Regulations). This means our operating revenue is higher than our operating expenses. This helps ensure we have a sustainable and prudent budget for the future. Council also needs to allow for the effects of population growth, community expectations, operating costs associated with new assets, and finance costs on additional debt in preparing its budgets.

SIGNIFICANCE AND ENGAGEMENT

This Infrastructure Strategy 2021-51 also addresses significant infrastructure issues, assets and decisions. Significance is determined by Council's Significance and Engagement Policy 2020.

The policy deems a matter to be significant if, in Council's judgement, two or more of the following criteria/measures are met:

Significance criteria

Criteria	Measure
impact on Council's direction	major and long-term
change in Council's current Level of Service	major and long-term
level of public impact and/or interest	major and District-wide, or major for an identified community of interest
impact on Council's capability (non-cost)	major and long-term
net financial cost/revenue of implementation, excluding any financial impact already included in a long-term plan/annual plan	net capital expenditure >10% of total rates in year commenced, and/or net operating expenditure >2.5% of total rates in year commenced

SIGNIFICANT DECISIONS

The following section outlines the projects deemed to be significant after applying the above criteria.

Riverside Drive/Onerahi Road upgrade

Upgrading Riverside Drive and Onerahi Road to meet the traffic increase from growth in the Whangārei Heads/Parua Bay/Onerahi areas is expected to have a high level of public interest as there will be few options for alternative routes whilst work is underway.

Riverside Drive/Onerahi Road– options

Options	Implications	Alternatives
Do Nothing	<ul style="list-style-type: none"> • increased congestion over time • increased maintenance costs • loss of economic productivity due to delays. 	<ul style="list-style-type: none"> • undertaking a partial upgrade to three lanes, or introducing overtaking lanes will cause the same level of temporary disruption as four lanes, but will not have a long-term reduction in congestion.
Four-laning Estimated \$30m based on initial investigations	<ul style="list-style-type: none"> • temporary disruption during construction • increased transport efficiency in the long term • reduced congestion. 	<ul style="list-style-type: none"> • do nothing and maintain the road – this will result in increased maintenance costs resulting from more traffic movements over the same pavement and will not reduce congestion.
Partial four-laning plus Bypass Estimated \$40m based on initial investigations	<ul style="list-style-type: none"> • temporary disruption during construction • increased transport efficiency in the long term • reduced congestion • potential additional unassessed cost due to unsuitable ground conditions encountered on bypass route. 	<ul style="list-style-type: none"> • do nothing and maintain the road – this will result in increased maintenance costs resulting from more traffic movements over the same pavement and will not reduce congestion • four-laning Riverside Dr and Onerahi Rd from Dave Culham roundabout to Onerahi roundabout.

MOST LIKELY SCENARIO – FURTHER INVESTIGATE OPTIONS FOR ROAD WIDENING

Projected high growth in the Whangārei Heads area is expected to trigger a programme of works to meet the access needs of these communities. Transport planning indicates a reduction in the Level of Service provided on the Riverside Dr/Onerahi Rd route, from the Dave Culham Rd roundabout, particularly during peak commuter periods. Options for road widening and/or a bypass route of Onerahi have been investigated in the early stages of this project. In addition to the roading upgrades, Council intends to continue to invest in the walking and cycling connection to Onerahi.

Timing: 2024-28

Estimated uninflated cost: \$30m – \$25.3m has been allocated for Stage One in the first 10 years of this LTP. Total project costs are anticipated to be \$30m. Stage 2 funding will be assessed and allocated in the following LTP.

Note: Detailed option analysis and costings will be done through the project planning stages.

Port Road/Kioreroa Road intersection upgrade

The upgrade of the Port Rd/Kioreroa Rd intersection to four lanes, comprising of a two lane bridge widening, new walking and cycling path, construction of a new 2 lane roundabout incorporating a Kiwi Rail crossing, and the upgrade of 3km of a major access road through a significant commercial/industrial zone in urban Whangārei, is expected to have a high level of public interest as there will be few options for alternative routes whilst work is underway.

Port Road 4 Lane Bridge and Kioreroa Intersection upgrade

Options	Implications	Alternatives
Do Nothing	<ul style="list-style-type: none">increased congestion over timecontinued poor safety recordloss of economic productivity due to delays and impacted access to Port Nikau.	<ul style="list-style-type: none">any increase in traffic lanes would require the construction of a secondary bridge, which will widen the access to the intersection, but it will not improve the traffic congestion due to limited intersection capacity.
2-Lane Bridge widening including walking and cycling access	<ul style="list-style-type: none">temporary disruption during constructionminor reduction in traffic congestion – short term.	<ul style="list-style-type: none">doing nothing will only allow the congestion to increase due to planned traffic growth for Whangārei, it will also impede economic productivity due to reduced access to Port Nikauupgraded intersection along with the addition road widening to four-lanes by way of a bridge, will increase the capacity for traffic, reducing long term congestion and increasing economic productivity.

2-Lane Bridge Widening and construction of a 2-lane roundabout incorporating Kiwi rail crossing and the upgrade of 3kms of major access roads

- major disruption during construction
- increased traffic efficiency in the long term
- reduced congestion in the long term
- reduced safety incidents
- increased economic productivity with improved access to Port Whangārei and Port Nikau.

- doing nothing will only allow the congestion to increase due to planned traffic growth for Whangārei, it will also impede economic productivity due to reduced access to Port Nikau
- upgrading the intersection without widening the approach roads to four lanes and in turn constructing a bridge would cause major disruption and would not ease the traffic congestion in the long term.

MOST LIKELY SCENARIO

This project has been planned by Council for several years and Community is expecting if not starting to demand improvement to this intersection.

This important transport infrastructure project will stimulate and enable increased industrial and commercial growth resulting in increased employment. There are also reduced vehicle operating costs, travel time and safety savings. This project also supports a shift in mode of transport to more active modes such as walking and cycling, and improved Passenger Transport across the District. WDC's long term transport strategy is dependent upon the modal shift to cycling and PT.

The project has already been consulted on by the Council as part of the 2018-28 Long Term Plan.

Funding of \$10m has been approved from the CIP Shovel Ready Programme, in December 2020.

A further \$6m for the project has been applied for as part of Council's 2021-31 LTP and the 2021-24 RLTP requesting NZTA subsidy funding.

Timing: 2021-22

Estimated uninflated cost: \$16m (\$6m from Council)

Porotī water treatment plant upgrade

The Whangārei City area including Hikurangi and Whangārei Heads is supplied by the Whau Valley Dam, the Hātea River, Porotī Springs and Maunu Springs. These supplies are not able to provide for a 1 in 50 year drought without the need to impose restrictions. A new water supply to supplement the existing sources is required. Water Services has been investigating a new water source for many years and prior to the 2012 LTP gained a resource consent to take up to 21,000m³/d from the Wairua River in times of drought.

The raw water from the Wairua River is to be treated at the Porotī Water Treatment Plant (WTP). This will require a full upgrade of the WTP as well as construction of an intake and raw water pipeline from the river.

Porotī Water treatment plant upgrade – options

Options	Implications	Alternatives
Do Nothing	<ul style="list-style-type: none">• consent to take water could expire and need to be reconsented• unable to provide for the 1:50 yr drought• impact of Climate Change e.g. changes to rainfall leading to lack of capacity in catchments and potential water shortage.	<ul style="list-style-type: none">• increase demand management and water conservation measures• fast track main replacements to reduce lost water and increase leak detection• still require new water source.
Upgrade Porotī WTP, including an intake and pipeline from the Wairua River.	<ul style="list-style-type: none">• ability to supply growth community and maintain LOS• improved source resilience• reduced risk of water restrictions even during dry summers.	<ul style="list-style-type: none">• identify a different source for a new water supply and construct new WTP to treat new source.

MOST LIKELY SCENARIO

Upgrade Porotī WTP, including an intake and pipeline from the Wairua River.

Timing: \$26m (estimated uninflated cost) over years 1-4 of the strategy (2021-2025).

New water dam source

Several reports have been completed with the purpose of assessing options for a new water source. A preliminary appraisal of a new water source at Wahakukopu Rd to meet projected demand in the next 50 years was undertaken in 2008.

New Water Source for Whangārei

Options	Implications	Alternatives
Do Nothing	<ul style="list-style-type: none"> • growth not catered and therefore unable to meet service levels in future • unable to provide for the 1:50 year drought • impact of Climate Change e.g. changes to rainfall leading to lack of capacity in catchments and potential water shortage. 	<ul style="list-style-type: none"> • identify a different source .
Dam source at Ngunguru or Mangahahuru	<ul style="list-style-type: none"> • water quality from the Ngunguru may struggle to be treated by the upgraded Whau Valley water treatment plant • dairy factory may not support Mangahahuru option. 	<ul style="list-style-type: none"> • built new WTP near Ngunguru or Mangahahuru.
Build Wahakukopu Dam	<ul style="list-style-type: none"> • ability to supply growth community and maintain LOS • improved source resilience • reduced risk of prolonged inability to supply portable water • reduce risk of service interruptions due to power outages. 	<ul style="list-style-type: none"> • identify a different source, possibly Mangakāhia River or Peach Orchard Road Dam.

MOST LIKELY SCENARIO

Timing: 2039-42

Estimated uninflated cost: \$30m

Note: given the timeframe for delivery of this project costings remain indicative. Detailed option analysis and costings will be done through the project planning stages. Whilst Whangārei District Council own the land for the dam and the majority of the catchment, there is no consent to construct a dam. If consent cannot be obtained then other options may need to be considered.

Ruakākā wastewater treatment plant – upgrade, design and consent

The consenting of this project is scheduled to be reviewed in the current LTP period and is a precursor to the Ruakākā ocean outfall project. It is subject to uncertainty around the impacts of reconsenting conditions and growth, which will impact timing and cost.

Ruakākā wastewater treatment plant – Upgrade design and consent – options

Options	Implications	Alternatives
No Upgrades within consented timeframe	<ul style="list-style-type: none"> • zoned growth not catered for • non-compliance with consent conditions • loss of current investment in consent negotiations. 	<ul style="list-style-type: none"> • use planning regulations and other mechanisms to slow growth in the Ruakākā area, resulting in loss of economic opportunity.
Reconsent for land disposal. Upgrade plant for capacity only.	<ul style="list-style-type: none"> • high cost of land • appropriate land may not be available • new consenting requirements • cost and risk are likely to make this option unfeasible. 	<ul style="list-style-type: none"> • construct a new ocean outfall as part of the overall upgrade of the Wastewater Treatment Plant.
Upgrade WWTP to include Sequencing Batch Reactor (SBR) to provide a higher level of treatment	<ul style="list-style-type: none"> • compliance with existing consent conditions • allows for a staged upgrade within the current treatment and discharge framework • provides for zoned and future growth. 	<ul style="list-style-type: none"> • use disposal onto land as the main medium for discharge. This could be undertaken in conjunction with a smaller ocean outfall, but overall costs would be higher.

MOST LIKELY SCENARIO – RUAKĀKĀ WASTEWATER TREATMENT PLANT UPGRADE, DESIGN AND CONSENT

The Ruakākā and One Tree Point area is expected to experience high growth in the foreseeable future. Growth is expected to result in a need for an increase in discharge of treated wastewater. Given the volume, and the land area required, land disposal was determined not to be a feasible option.

The most likely scenario is to undertake a staged upgrade of the Ruakākā Wastewater Treatment Plant to keep pace with growth in the interim, prior to the major investment in a new ocean outfall from 2038.

Timing: from 2021 for extension of the consent, timing of physical works will be dependant upon growth

Estimated total uninflated cost: \$20.6m – \$6.6m is budgeted in the first 10 years of the LTP. The remaining 15 M is anticipated to be spent in the following years of the Strategy. (Based on the current known information and technology.)

Ruakākā ocean wastewater outfall

This project is scheduled to occur mid strategy. It is subject to uncertainty around the impacts of growth, available capacity, timing and cost. A decision to proceed with the Ruakākā ocean outfall is likely to be significant due to the level of public interest and the net financial cost of implementation.

Ruakākā ocean wastewater outfall – options

Options	Implications	Alternatives
No Upgrades	<ul style="list-style-type: none"> • zoned growth not catered for • non-compliance with consent conditions • loss of current investment in consent negotiations 	<ul style="list-style-type: none"> • use planning regulations and other mechanisms to slow growth in the Ruakākā area, resulting in loss of economic opportunity.
Land Disposal Estimated at \$112m based on suitable land for disposal being purchased within 5 km	<ul style="list-style-type: none"> • high cost of land • appropriate land may not be available • new consenting requirements • cost and risk are likely to make this option unfeasible. 	<ul style="list-style-type: none"> • construct a new ocean outfall as part of the overall upgrade of the Wastewater Treatment Plant.
Ocean Outfall Estimated at \$60m based on the current information and technologies	<ul style="list-style-type: none"> • compliance with existing consent conditions • allows for a staged upgrade within the current treatment and discharge framework • provides for zoned and future growth. 	<ul style="list-style-type: none"> • use disposal onto land as the main medium for discharge. This could be undertaken in conjunction with a smaller ocean outfall, but overall costs would be higher.

MOST LIKELY SCENARIO – RUAKĀKĀ OCEAN WASTEWATER OUTFALL

The Ruakākā and One Tree Point area is expected to experience high growth in the foreseeable future. Growth is expected to result in a need for an increase in discharge of treated wastewater. Given the volume, and the land area required, land disposal was determined not to be a feasible option.

The most likely scenario is to undertake a staged upgrade of the Ruakākā Wastewater Treatment Plant to keep pace with growth in the interim, with a major investment in a new ocean outfall from 2038.

Timing: from 2038 (or earlier) until 2044

Estimated uninflated cost: \$60m (based on the current known information and technology).

Note: given the timeframes for delivery of this project all costings are high level/indicative and detailed option analysis and costings will be done closer to the time.

Replacement/upgrade of Whangārei wastewater treatment plant

The current consents for the main WWTP expire in 2022 for discharges to air, land and water. It is anticipated that odour control will be required. The new consent conditions may require further upgrades which could be significant due to changing discharge standards and the net financial cost of implementation.

Upgrades to Whangārei Wastewater Plant – options

Options	Implications	Alternatives
Do Nothing	<ul style="list-style-type: none">• non-compliance with consent conditions.	<ul style="list-style-type: none">• Operate plant without a current consent.
Upgrade treatment plant to maximise capacity	<ul style="list-style-type: none">• non-compliance with new consent conditions• abatement notices and public dissatisfaction• limitation to growth.	<ul style="list-style-type: none">• include odour control and nutrient removal in treatment plant upgrade.
Plant development to address consent requirements	<ul style="list-style-type: none">• compliance with consent conditions long term• public support• enabling growth in the Heads and Whangārei City areas.	<ul style="list-style-type: none">• upgrade treatment plant to maximise capacity. Continue to operate under expired consent conditions.

MOST LIKELY SCENARIO

Timing: 2021-28

Estimated uninflated cost: \$8m for odour control.

Potential future costs

Up to \$22m may be required if nutrient removal is necessary.

Note: given the timeframe for delivery of this project costings remain indicative. Once the consent conditions are known a detailed option analysis and costings will be done through the project planning stages.

Matapōuri wastewater scheme

Council will undertake sanitary assessments to help understand the existing wastewater provisions and effectiveness to the community. Should a scheme for Matapōuri be identified as a preferred option is it likely to be of significant public interest, with consultation with the community being undertaken.

Matapōuri wastewater scheme – options

Options	Implications	Alternatives
Do Nothing	<ul style="list-style-type: none">• degradation of the environment from septic systems .	<ul style="list-style-type: none">• limit growth in the area• no new development
Upgrade individual households wastes systems.	<ul style="list-style-type: none">• require upgrades to private systems• regular inspections and maintenance to ensure functioning.	<ul style="list-style-type: none">• reticulated wastewater scheme with network and treatment.
Wastewater scheme with network and treatment	<ul style="list-style-type: none">• land purchase, consenting and infrastructure installation costs prior to connection.	<ul style="list-style-type: none">• upgrade individual households wastes systems.

MOST LIKELY SCENARIO

Timing: 2044-50

Estimated uninflated cost: \$63m

Note: given the timeframes for delivery of this project all costings are high level/indicative and detailed option analysis and costings will be done closer to the time.

Major sportshub purchase and development

Major sportshub purchase and development – options

Options	Implications	Alternatives
Do nothing	<ul style="list-style-type: none"> increased carparking congestion reduced LOS damaged facilities affect more clubs due to overuse. 	<ul style="list-style-type: none"> purchase expensive residential property in Kensington to acquire more land temporarily relocate clubs/codes to other sites, may cause conflict, booking issues, and result in damage to fields from over use.
Non regional hub site	<ul style="list-style-type: none"> maintains some LOS but capacity issues wont enable development to regional level each site requires core facilities e.g toilets/carparking/clubrooms/fencing/lighting. 	<ul style="list-style-type: none"> maintain LOS through many small sites – long-term purchase and maintenance costs are higher without the economies of scale.
Rural location	<ul style="list-style-type: none"> cheaper land purchase services may be problematic e.g. Three Waters, power extended travel time to site may be limited access roads leading to congestion. 	<ul style="list-style-type: none"> large rural site capable of becoming full regional hub within scenic environment may showcase the District potential to include other Parks activities in the experience adjacently e.g tracks & walkways, park, playground/skatepark.
New urban site	<ul style="list-style-type: none"> large reasonably central regional site economies of scale to develop clean site with readily available infrastructure many access roads could cater for various codes walking/cycling links and distance enables reduced carbon footprint. 	<ul style="list-style-type: none"> potential to include other Parks activities in the experience adjacently e.g tracks & walkways, park, destination playground/skatepark maintains large greenspace in residential area.

MOST LIKELY SCENARIO – NEW URBAN SITE

Council's Active Recreation Strategy identified the need for a additional sports hub to address the growing need for active recreation within Whangārei. The purchase of a significant area of land will be required to provide this. An urban site has been identified as the most likely and best option. The estimated \$14m does not include development.

Timing: 2028-29

Estimated uninflated cost: \$14m

Note: Detailed option analysis and costings will be done through the project planning stages.

FUNDING STRATEGY

Whangarei District Council currently owns a wide range of assets that deliver the seven infrastructure activities. These assets range from in-ground pipes, pumping stations and treatment plants to roads, parks and recreational facilities. The long term management of Council's infrastructure is funded through a combination of community rates (general and targeted rates), Council borrowing (debt) and returns on investments.

In developing the Infrastructure Strategy 2021, Council considered three primary options for addressing issues:

- deliver at current Levels of Service
- deliver current Levels of Service without sufficient funding
- focus on meeting only selected community expectations.

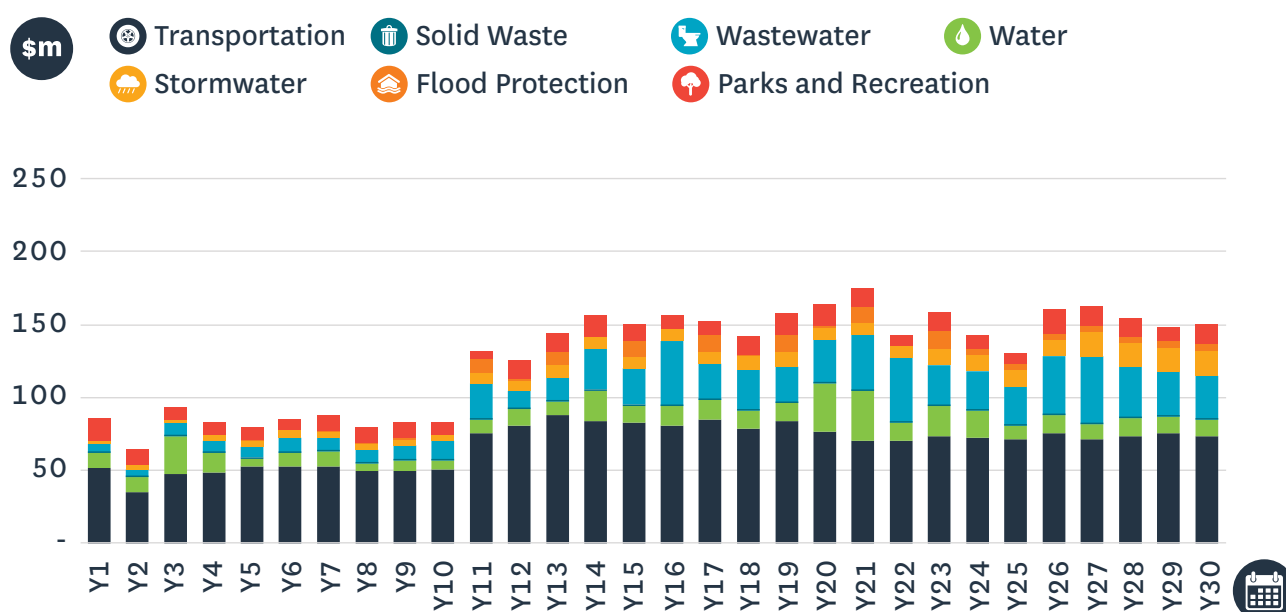
However, growth and increasing expectations for amenity and public health and safety have emerged as strategic issues since the last strategy, noting that some of these amenity projects are outside the activities covered by the Infrastructure Strategy. These, along with increased focus on the management of unsealed roads, mean there is competition for funding.

In modelling these options, Council has used the LTP budget for years 1-10, with years 11-30 coming from programmes and projects identified within AMPs. This ensures that any projects not included within the 10 years of the LTP are considered over the 30-year life of the strategy.

Council's delivery on the strategy is driven, in part, by its ability to build on recent improvements in capex delivery. However, it is acknowledged that there are still capacity constraints to deliver a significantly increased programme of work. Council is currently developing a strategy to address this.

Over the 30 years, this results in the following capex (capital expenditure) profile for the infrastructure activities.

Capital expenditure by activity

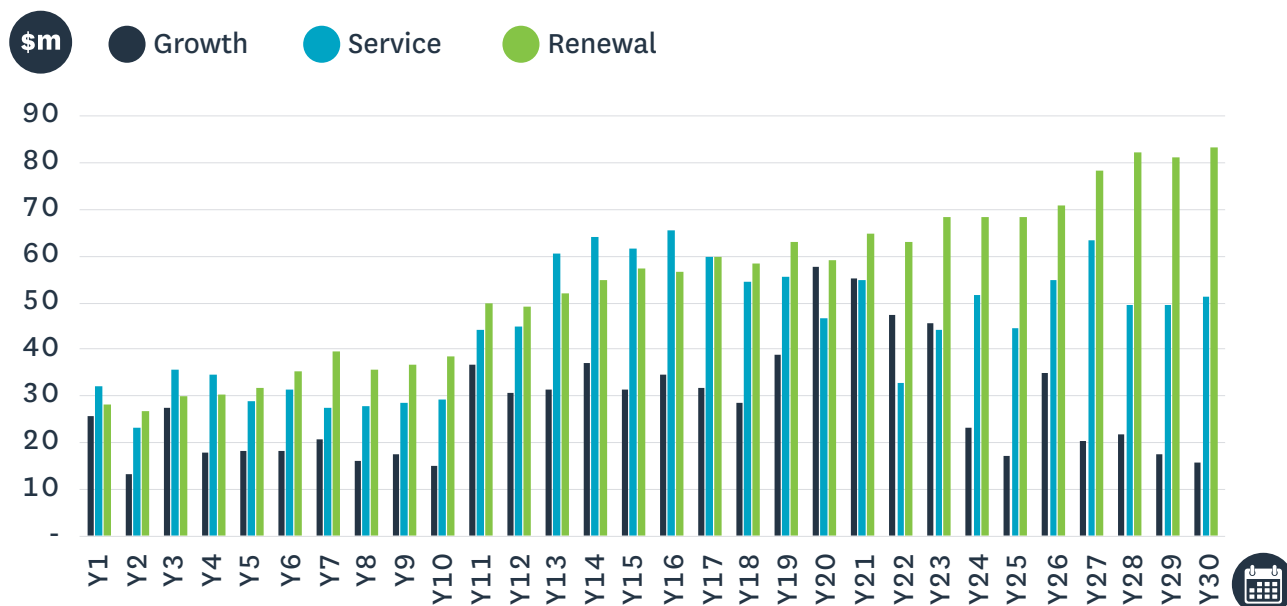


Transportation has the largest programme of works, this reflects the elected members key strategic priorities and the focus on a connected and resilient roading network in order for the District to grow and thrive. Out beyond the 10-year period significant new projects and upgrades to wastewater and water start to be reflected in the 30-year strategy. These projects are jointly driven by growth and renewals and our response to a changing regulatory environment, including an allowance for climate change.

While levels of service can be maintained in the short to medium term, an increase in growth and level of service projects may be required to meet changing community expectations over the medium to long term, particularly in Transportation. This may lead to a temporary impact on meeting community expectation for the development of Whangārei, which will be monitored closely. In the next iteration of the Infrastructure Strategy Council will review community expectations for increased levels of service, its capacity to deliver and the community's ability to pay. If necessary, following that analysis projects currently projected in year 11+ may be brought forward.

As seen in the graph below, when split by driver, there is a steady increase in renewal expenditure. This is to be expected as the Councils asset base grows and work is programmed. As discussed above growth and level of service projects increase after year 10. The increase in level of service projects is in part driven by the increase in spend in Transportation, including the initiative to seal a greater number of unsealed roads in the District. Of note, are several 'spikes' across the life of the strategy, where growth or Level of Service projects are required to meet anticipated/increased demand.

Capital expenditure by splits

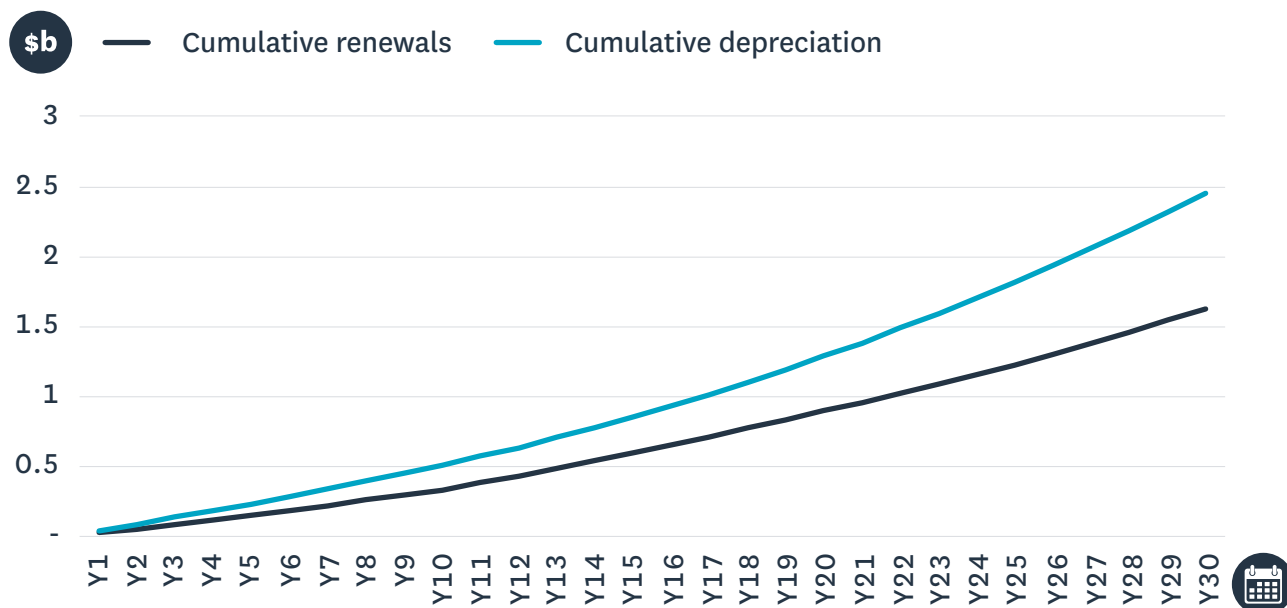


Also of note is that the gap between renewals to depreciation (devaluation of an asset due to age, wear and tear) is moving further apart over the life of the Strategy, especially in the later years. This is in part driven by Council's focus on level of service improvements, particularly in transportation, and large infrastructure growth projects after year 11 which add to the asset base to be depreciated.

Because of our increasing knowledge of our asset base including condition assessments, it has become apparent that some of our assets are lasting beyond their expected lives. Asset

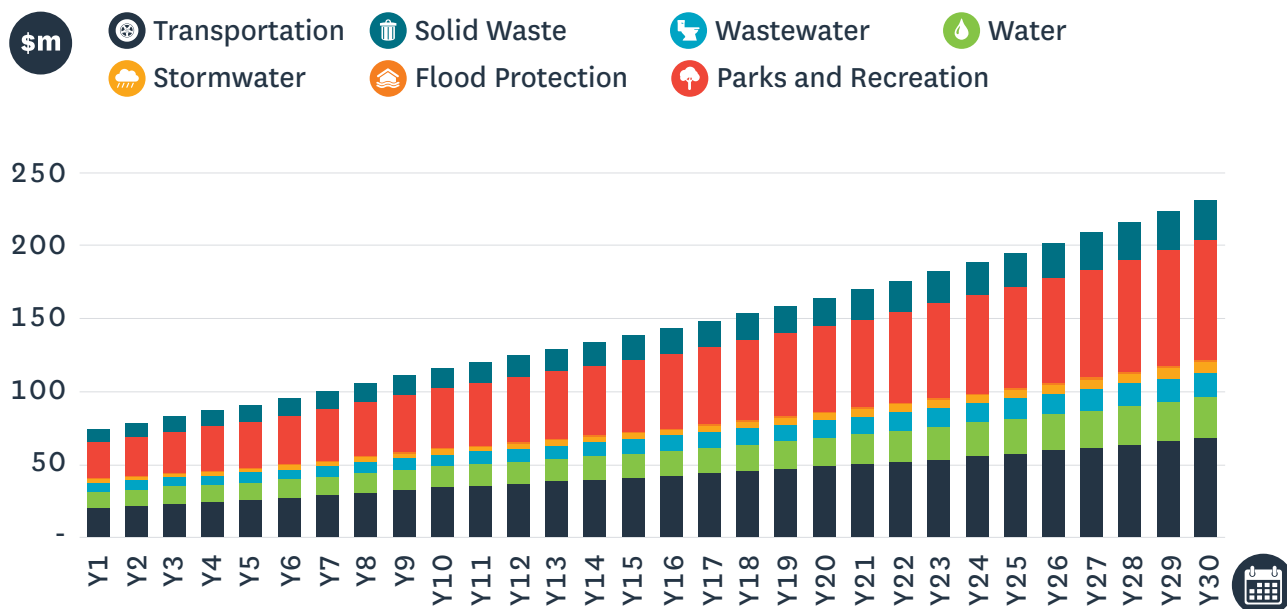
revaluations will be undertaken in 2022 and at this time depreciation rates will be reviewed. Changes resulting from this will be reflected in the next LTP.

Renewal expenditure to depreciation profile



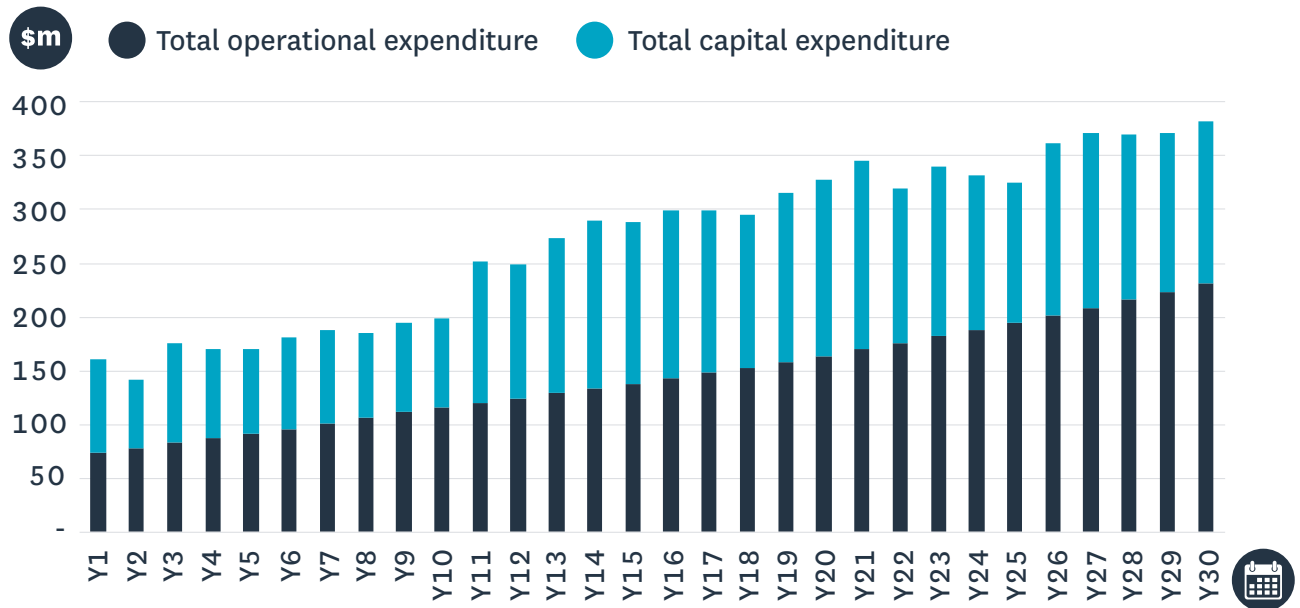
The opex (operational expenditure) trend over the 30-year period shows a corresponding increase in the funding available to maintain the assets that Council has, including consequential opex (opex that Council requires to fund and maintain assets from projects).

Operational expenditure



The following graph shows the relative levels of capital to operational funding over the next 30 years.

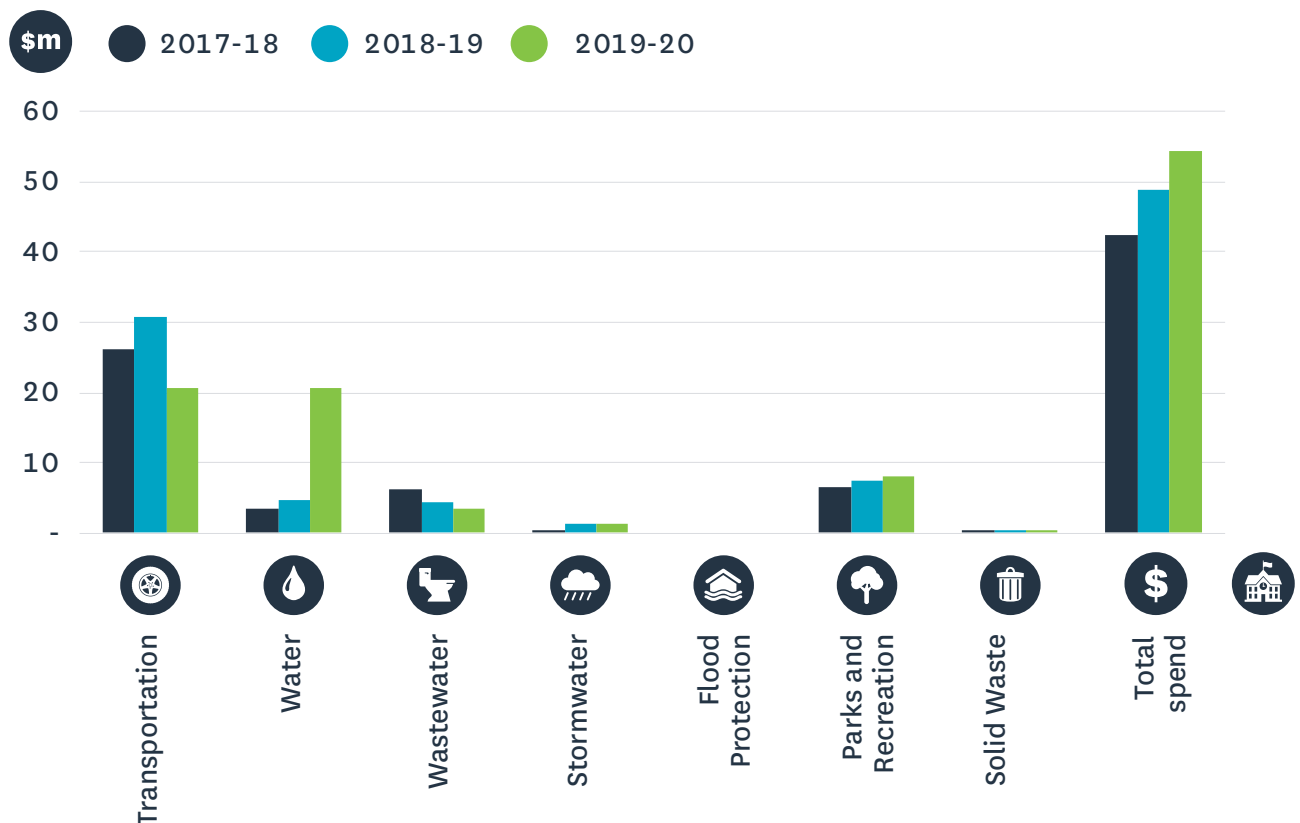
Operational to capital expenditure



Council has increased the total level of capital expenditure delivery. There is a range of funding mechanisms in place to equitably fund infrastructure. This is discussed in more detail within the Financial Strategy.

Resourcing and capacity constraints have been discussed throughout this document. This has impacted on our ability to deliver in some portfolios. In considering this risk, Council has compared the capex programme to expenditure in previous years and is showing year on year improvements in delivery capacity.

Project Capability



FUNDING ISSUES/OPPORTUNITIES

Over the past three years, Whangarei District Council has obtained additional project funding from various central government sources including the Provincial Growth Fund, Tourism Infrastructure Fund Crown Infrastructure Partners and the Three Water Services Reform Programme. This impacts the timing of larger projects, potentially bringing them forward in the programme. Councils focus on improving and funding early stages of project planning, means we have increased our ability to gain external funding.

Councils financial strategy contains details of targeted rates and the programme for funding.

Council will seek alternate opportunities to either collaborate or partner with other parties to deliver planned projects. This is an efficient way to increase our capacity to deliver our programmes of works.

Development contributions partly fund the growth portion of our capital budgets. The speed of growth has an impact on when expenditure is required. Rapid growth could result in a need to change the timing of critical projects. Projects are often a combination of growth and renewals. Where growth projects are rescheduled to service new development, this can result in renewals being brought forward before the end of their calculated useful life. This may affect the renewals and depreciation profiles. An example of this is the timing of the Ruakākā Ocean Outfall project.



REVENUE AND FINANCING POLICY

TE KAUPAPA WHIWHINGA TĀKE ME AHUMONI

Purpose

The Revenue and Financing Policy is a requirement of the Local Government Act 2002, and outlines Council's funding sources for operating and capital expenditure. The policy is supported by analysis of the funding of each activity group and recognises that the funding policy is more than just a device for raising revenue but is also one of the instruments that can be used to promote community wellbeing.

The Revenue and Financing Policy must demonstrate how Council has complied with the funding policy process under section 101(3) of the Local Government Act 2002. To achieve this, Council needs to review each individual activity and its funding in developing its Revenue and Financing Policy.

As part of that process, Council needs to consider the nature of the activity provided and the benefits and beneficiaries of the activity.

ACTIVITY GROUP

Council's work has been grouped into nine key activities in which we provide a service to the community. These are:



Governance and
Strategy



Wastewater



Solid Waste



Transportation



Stormwater



Planning and
Regulatory Services



Water



Flood Protection



Community Facilities
and Services

The activity groups are listed in the attachment.

Funding needs analysis

Each activity group is made up of operating activities that the Council delivers as services. Any one activity may have one or more operating projects which, when combined, provides the total level of service provided by the Council. The activities, within the activity groups, are listed in the attachment.

STEP ONE

When assessing the funding for each activity the following need to be considered:

Community Outcomes

Which Community Outcome the activity primarily relates to and the rationale for doing it.



Efficient and resilient core services

- It is easy and safe for everyone to travel around the District
- There are opportunities to walk and cycle
- The District is well prepared for growth and can adapt to change
- Services are supplied in ways that benefit the environment.



Caring for the environment

- Communities work to keep the environment clean and healthy
- Access to the coast is protected
- Open spaces in parks and streets are places where nature thrives
- The District is positively adapting to climate change.



Positive about the future

- The District has productive land, people and a thriving City Centre
- There is a fair urban/rural balance
- Council has clear, simple documents and rules
- The District embraces new technology and opportunities.



Proud to be local

- The District is neat, tidy and looks attractive
- Public areas feel and are safe
- There is always something to do and see
- There are opportunities for people of all abilities, ages and life stages to be active
- All of our cultures are valued and celebrated

User/beneficiary pays principle – distribution of benefits between the community as a whole, identifiable groups within the community, and individuals i.e. private or public good principle.

Inter-generational principle – the period over which the benefits are expected to occur.

Exacerbator pays principle – the extent to which actions or inactions of individuals or groups contribute to the need to undertake the activity and the costs that occur as a result.

Costs and benefits of funding the activity – including consequences for transparency and accountability, of funding the activity distinctly from other activities. i.e. user pays or targeted rates.

STEP TWO

Consideration then needs to be given to the overall impact of any allocation of liability for revenue needs on current and future social, economic, environmental, and cultural well-being of the community. This may result in an alteration of the results of the first step, with the funding option or the level of funding from any source altered to ensure that there are no barriers or disincentives and that an inequitable burden is not placed on any particular community sector or group.

Some questions to ponder as part of this consideration are:

- how will the mix of funding impact on affordability, e.g. on the elderly or those on low incomes?
- will the policy impact on accessibility to some services?
- can we charge the amount required, or is it restricted by legislation?
- do we want to encourage or discourage a particular activity or behaviour?
- what is the effect on a particular sector of our community, community groups or businesses?
- How will this impact based on current economic conditions?

Funding sources

Section 103 of the Local Government Act (2002) requires a local authority to state the sources of funding for its operating expenses and its capital expenditure. The sources of funding for each category are set out below.

FUNDING SOURCES FOR OPERATING EXPENSES

Operating expenses are for the day-to-day spending by Council delivering ongoing services and for the maintenance of Council's assets. This includes contributions to the wear and tear on assets used (depreciation), interest charged on borrowing for capital projects and corporate overheads.

Council must consider the funding for each activity in a way that relates exclusively to that activity. Some activities may be best funded using user charges, others with targeted rates and others from general rates. Distinct funding enables ratepayers or payers of user charges to assess more readily whether the cost of the service provided to them either directly or indirectly represents good value. They can also more easily determine how much money is being raised for the service and spent on the service, which promotes transparency and accountability.

The different mechanisms available for funding operating expenses are:

General rates are used to fund those services where there is a benefit to the whole community (public benefit) or where there is no practical method for charging individual users. General rates fund a range of activities which are used by individual ratepayers to varying extents.

Rates are regarded as a tax, as there is no direct link between the activity or service provided and the individual ratepayer.

To maintain as simple rating as possible this council currently uses general rates to fund a broad range of activities, rather than a number of targeted rates. This makes it easier for ratepayers to understand how they are being rated and it is more cost effective to administer.

General rates are currently assessed based on a property's land value and as a uniform annual general charge.

Value-based general rates are assessed on land value and are differentiated by the category of land use or land zoning. The rating categories to be applied are:

- residential, including remissions for high value properties
- rural
- multi-unit
- commercial and industrial
- miscellaneous

Full details of the rating categories and differentials used may be found in the Funding Impact Statement.

A uniform annual general charge (UAGC) is applied to each separately used or inhabited part of each rating unit (SUIP). The UAGC is to be assessed by Council annually and set at a level considered to be reasonable. The UAGC is used to fund the same activities as the general rate and ensures every ratepayer contributes a base level of rates irrespective of property value or services used.

Targeted rates are used where an activity benefits an easily identifiable group of ratepayers and where it is appropriate that only this group be targeted to pay for some or all of a particular service. The funds collected are used for the purpose for which they are rated. Targeted rates are only used where Council considers it is an appropriate mechanism to fund that activity or where Council wishes to make clear the purpose for which the rate is collected. The revenue collected in any one year may result in a surplus, which is used to repay debt or to fund capital expenditure in future. A reserve is maintained to ensure any surplus or deficit is separately identified. This ensures targeted rates are used for the purpose in which they are collected.

User fees and charges are used where the beneficiaries can be identified and charged. They include consent fees, regulatory charges, parking revenue, licence fees, sales of goods, hire fees and service charges. When setting fees and charges, Council will consider any indirect benefit to the community, the distribution of those benefits and ability to pay. Some fees may be limited by legislation, meaning full recovery of costs is not possible.

Grants, subsidies and other income apply to some activities when income from external agencies is received to support that activity. Some items are unexpected and therefore unbudgeted (eg insurance proceeds, legal settlements, other reimbursements). Each year Council receives funding from the New Zealand Transport Agency (NZTA) as part of the overall roading programme for the city's roading infrastructure. Operational subsidies fund maintenance of roading infrastructure. Council recognises the funding as income in accordance with GAAP. Council expects to continue to receive substantial subsidies for road maintenance from government or its agencies. In the event that the availability of external funding is reduced, Council would consider alternative funding sources, and/or review its maintenance programme. Refer to Council's Financial Strategy for further information.

Borrowing is not generally used to fund operating expenses, but is used to smooth the inter-generational benefits of the capital expenditure programme. Council may use borrowing to give a capital grant to a community organisation to fund a community facility, or for addressing unexpected external events such as storm damage, pandemics, and changes in the availability of external funding (see below).

Interest from investments is used to reduce the requirement from general revenue and is used to fund activities in the same way that rates do.

Distributions and dividends

- Council receives distributions from its joint venture investment in Northland Regional Landfill Limited Partnership. These are directed to reduce the requirement from general revenue and is used to fund activities in the same way that rates do.
- Council currently receives dividends from LGFA which are used to reduce the requirement from general revenue and is used to fund activities in the same way that rates do. Any other dividends would be treated in the same way.

Rental income is generated from Council's various property types:

- from Council's pensioner housing is used to fund the expenses of operating and maintaining Council's pensioner housing stock. It can also be used to fund capital expenditure on pensioner housing. Pensioner housing is a ringfenced activity so if pensioner rental property income is not fully spent in a given year then it will be reserved and carried forward to the next year.
- from Council's investment properties is used to ensure the overall portfolio is maintained in terms of ongoing purchasing power and any excess income is used to initially fund the Governance and Strategy activity and if there is any residual funds after this then these are used to reduce the requirement from general revenue and is used to fund activities in the same way that rates do.
- from Council's community properties used to fund the expenses of operating and maintaining Council's community properties and any excess income is used to fund Council's other community operating expenses.

Enforcement fees are charged where possible. They are used to promote compliance rather than to raise revenue and may not recover the full cost depending on the level of compliance and the extent to which charges are limited by statute or the court. Any excess income from enforcement fees is used to reduce the requirement from general revenue and is used to fund activities in the same way that rates do.

OTHER SOURCES OF OPERATING EXPENSE FUNDING

Council also funds operating expenditure from other sources including:

Reserves

OTHER RESERVES AND RING-FENCED FUNDS

Restricted funds or special funds including the property reinvestment reserve, are those reserves within Council's equity that are subject to special conditions of use, whether under statute or accepted as binding by Council, that may not be revised without reference to the courts or a third party.

Subject to meeting any specified conditions associated with these reserves Council may expend money, of an operating or capital nature, from these reserves.

SPECIFIC RESERVING OF OPERATIONAL FUNDING

Where expenditure has been funded in a year for a specified purpose e.g. a grant to fund an external groups project and because of timing issues the conditions of the grant are not met in that year then the grant can be reserved at the end of the year to provide funding for the project in a future year once the conditions are met.

USE OF GENERAL SURPLUSES FROM PREVIOUS FINANCIAL PERIODS

Where Council has recorded an actual surplus in one financial period it may pass this benefit on to ratepayers in a subsequent financial period.

A surplus arises from the actual recognition of additional income or through savings in expenditure when compared to the budget for a given year. A surplus would only be finalised

once the Annual Report for the year was adopted and it is the net surplus that needs to be considered.

Council considers that passing this benefit on to ratepayers in future financial periods improves the principle of intergenerational equity, in that any financial benefit is passed on to those ratepayers who shared the rates-funding burden in the financial period that the surplus was generated.

The amount of any surplus carried forward from previous financial periods will be accounted for as an operating expense in the year the surplus is spent and the benefit passed on to ratepayers.

Only those factors that are operating in nature and cash in nature will be available for use in determining the level of surplus to be carried forward. Council will not carry forward surpluses in relation to:

- The sale of assets. Such surpluses shall be used for either the repayment of borrowings or in the case of investment properties transfer to the property reinvestment reserve.
- Trust and bequest revenue. Such surpluses shall be applied in accordance with the terms on which they are provided.
- Revenue received for capital purposes. Such surpluses shall be retained to fund the associated capital expenditure.
- Revenue received from targeted rates such as water and wastewater.
- Depreciation.
- Development and lump sum contributions.
- Unspent budgeted operating expenditure associated with a capital project that is being carried forward.
- Unrealised gains arising from fair value adjustments to assets and liabilities. These gains are unrealised accounting adjustments in the period in which they are recognised.
- Vested or found assets.

Trusts and bequests

Council is the recipient/holder of several trusts and bequests. These funds can only be used for the express purposes for which they were provided to Council. Each year, Council may expend money, of an operating or capital nature, from its trusts and bequests in accordance with the specified conditions of those funds. For the avoidance of doubt, Council does not fund the expenditure from its trusts and bequests from any of the sources of operating revenue.

If Council receives bequests in the future, then it will treat those in the same manner.

Overheads

There are some activities within council that provide support to specific cost centres or to the entire council but do not provide a direct benefit to the community. The costs of these activities are treated as overheads and are reallocated against activities that do provide a direct benefit to the community.

This concept is particularly important when analysing the costs of delivering services and arriving at the appropriate fees and charges for those services.

Storm damage

If because of storm damage, infrastructure assets need repair, an option for funding this (so as not to impact on the capital works programme for the year), is utilising debt, if there is projected headroom under the net debt cap for the year. This may result in an unbalanced budget in any given year. If it is determined that there is no headroom under the net debt cap, then council will look to defer operational and capital expenditure planned in the year to accommodate funding the repairs and renewals required.

COVID-19 Resurgence/Pandemic Response

The impacts of COVID-19 will be wide ranging and affect our community in different ways. The severity and duration of the impacts will also be varied. We are still in the early stages of understanding what these impacts might be and how they will impact our community.

With new cases continuing to occur, significant uncertainty and risk remains for the potential of restriction levels being imposed in the future. Council's May 2020 COVID-19 Response Strategy will assist Council's direction in the event that this, or any other pandemic occurs.

Proposed rates increases may be reduced and operational budget cuts imposed. To minimise the impacts on service delivery, an option for funding to replace lost revenue, is utilising debt, if there is projected headroom under the net debt cap for the year.

This may result in an unbalanced budget for the year. Any reduced rates increase in a particular year could be recovered throughout later years of the Plan by implementing an additional 'catch-up' increase similar to the additional rates increase in year one of the 2021-31 Long Term Plan. This approach provides us flexibility without changing our strategic direction.

If it is determined that there is no headroom under the net debt cap, then Council will look to defer operational and capital expenditure, and/or reduce service level delivery in order to operate within our financial parameters.

FUNDING SOURCES OF CAPITAL EXPENDITURE

For the purpose of this Policy capital expenditure represents expenditure on:

- property, plant and equipment,
- intangible assets, and
- property.

Property, plant and equipment are tangible assets that are held by Council for use in the provision of its goods and services (for example: infrastructure assets such as land, roads, bridges, parks, water treatment plants and non-infrastructure assets such as computer hardware and libraries), or for rental to others, or for administrative purposes.

Intangible assets are assets such as software that Council purchases or creates as part of a project with an economic benefit longer than a year.

Property includes Council's pensioner housing, Council's investment properties and Council's community properties. It can also include property purchased for strategic reasons, for instance where a future road is planned to be constructed.

As described in the Financial Strategy 2021-31, Council while managing its existing assets, also has a challenge to manage growth, affordable rates increases and debt and deliver as many of the communities desired projects as possible. To achieve the appropriate balance between these variables Council takes the following approach:

- Council sets the annual rates requirement
- the activity operating cash revenue and expenditure budgets are determined, within this constraint
- the net cash operating costs are determined
- this leaves a cash surplus that is available for capital costs. This largely represents rate funded depreciation but may include operating surpluses from some activities and accounting provisions not held in reserve funds – this is funding not held by an activity and available to fund any capital costs
- Council also sets the limit on debt, which determines the debt funding available for capital expenditure.

Consequently, despite the potential availability of the funding sources, this process results in the following funding available for capital costs:

General rates

Rates are primarily used to fund our everyday operating expenses, including depreciation and interest costs on debt, however general rates may be used to fund a portion of capital expenditure when it is considered appropriate to do so. This will be balanced against affordability for current ratepayers and the current and future needs of the community.

Targeted rates

Targeted rates are used to fund operating expenditure but can be used to fund a particular capital project benefiting a discrete and identifiable group of beneficiary ratepayers.

User contributions are typically paid in the form of a targeted rate by an identified group of direct beneficiaries. In many cases this group would have lobbied for the inclusion of the project during a consultation process.

Borrowing

This is an appropriate funding mechanism to enable the effect of peaks and troughs in capital expenditure to be smoothed and to ensure the costs of major developments are borne by those who ultimately benefit from the expenditure. It is not appropriate or sustainable for all capital expenditure to be funded from borrowings. In periods of low capital expenditure, borrowing will be reduced.

Proceeds from property sales

These will be invested in the property reinvestment reserve and the funds may be used to purchase other commercial properties in future. Any funds in the reserve may be used to fund capital expenditure in other activities, via internal borrowing, to smooth Council's overall cashflow requirements.

Proceeds from other asset sales

These may be used to fund capital works or to repay debt.

Depreciation

Depreciation is an indirect source of funding as depreciation reserves are not created. However, rates are set at a level that offsets the calculated non-cash depreciation cost. Operating surpluses (where available) are then used to fund renewal capital expenditure.

Development and financial contributions are used to fund the growth component of capital expenditure. The growth in our District drives a portion of our capital work requirement to maintain Levels of Service to a larger community. As the costs of growth are driven by development, Council considers it equitable that a development should contribute to the costs that are being imposed.

Council has a development contributions policy which sets out the level of contributions required to fund infrastructure requirements.

Financial contributions will be used to fund capital expenditure in accordance with the Resource Management Act 1991.

Lump sum contributions

When undertaking a major project Council has the option to seek lump sum contributions to the capital cost of the project. Lump sum contributions are provided for in the Local Government (Rating) Act 2020 and have requirements placed on how they are used. Where a lump sum payment option is proposed ratepayers can elect to pay the lump sum or not. If not, the rating unit will be liable to pay targeted rates

Council does not presently plan to seek lump sum contributions.

Grants and subsidies are used when they are available. NZTA provide capital subsidies (accounted for as operating revenue) to fund agreed roading capital projects. This funding source also includes other contributions for various capital projects.

Reserves including retained earnings from operating surpluses from previous years may be used to fund capital expenditure. Reserves for specific activities such as Water can be created.

The table below shows the primary funding sources for the different types of capital expenditure and each of the activity groups.

By expenditure type:	General rates*	Targeted rates*	Borrowings	Development Contributions	Subsidies, Grants and Other Revenue	Reserves	Property sales
Renewals		✓	✓		✓	✓	
Level of service		✓	✓		✓	✓	
Growth			✓	✓	✓	✓	
By activity group:							
Transportation	✓	✓	✓	✓	✓		
Water		✓	✓	✓	✓	✓	
Solid waste	✓		✓		✓	✓	
Wastewater		✓	✓	✓	✓	✓	
Stormwater	✓				✓		
Flood protection		✓				✓	
Community facilities and services	✓		✓	✓		✓	
Governance and strategy	✓		✓		✓		✓
Planning and regulatory services	✓		✓			✓	
Support Services	✓		✓			✓	

*General and targeted rates create cash surpluses by funding depreciation, which is non-cash. These surpluses are then used to fund renewal projects.







Review of funding sources and the funding bands

Having decided on:










- the activity groups
- activities within the activity groups.

Using the steps above, the funding sources and the funding bands from each source have been assessed for each activity to provide guidance for the Long Term Plan 2021-31. Suggested funding bands are set out in the attachment.

KEY:

Range name	% Range	Range name	% Range
- Unlikely	0%	 Moderate	40%-60%
 Minimal	0%-20%	 High	60%-80%
 Low	20%-40%	 Most	80%-100%
 Potential to be used			

Activity groups

 Governance and Strategy	 Wastewater	 Solid Waste
 Transportation	 Stormwater	 Planning and Regulatory Services
 Water	 Flood Protection	 Community Facilities and Services









































Operational expenditure funding sources

Activity/department	User Fees	Subsidies/ grants etc.	Other	Rental Income	Targeted Rates	General Rates
 Iwi Liaison	-	-	-	-	-	
 Strategy & Governance	-	-		-	-	
 Economic growth – District Development	-	-	-	-	-	
 Economic growth – Property *	-	-			-	-
 Economic growth – Marina Facilities	-	-	-		-	-
 Economic growth – Airport Facilities	-	-	-	-	-	

Operational expenditure funding sources

Activity/department	User Fees	Subsidies/ grants etc.	Other	Rental Income	Targeted Rates	General Rates
 Roding Network	-			-	-	
 Carparking		-	-		-	-
 Footpaths	-	-	-	-	-	
 Water			-	-		-
 Wastewater				-		-
 Stormwater	-		-	-	-	
 Flood Control (Hikurangi Swamp)	-	-	-			-
 Rubbish/Recycling Collection and Disposal				-		
 Litter Control			-	-	-	
 Resource Consents		-	-	-	-	
 RMA Compliance		-		-	-	
 Building Consents		-	-	-	-	
 Building and Environmental Monitoring	-	-	-	-	-	
 Food Premises		-	-	-	-	
 Health Act Registered Premises		-	-	-	-	
 Alcohol licensing		-	-	-	-	
 District Plan Development		-	-	-	-	
 Noise Management	-	-		-	-	
 Animal Management		-		-	-	
 Parking Enforcement	-	-		-	-	-
 Warrant of Fitness Enforcement	-	-		-	-	-
 Gambling Act		-	-	-	-	-
 Swimming/Spa Pool Barrier Inspections		-	-	-	-	
 Bylaws	-	-	-	-	-	
 Sport and Recreation Facilities		-	-	-	-	

Operational expenditure funding sources

Activity/department	User Fees	Subsidies/ grants etc.	Other	Rental Income	Targeted Rates	General Rates
 Parks Reserves and Natural Areas	-	-	-	-	-	
 Play areas, walking Trails, Coastal	-	-	-	-	-	
 Cemeteries and Crematorium		-	-		-	
 Libraries		-	-	-	-	
 Pensioner Housing	-	-	-		-	
 Community Safety	-	-	-	-	-	
 Community Development, Community buildings & spaces and Residential Strategic property	-	-	-		-	
 Community Funding	-			-	-	
 Venues and Events		-		-	-	
 Village Planning	-	-	-	-	-	
 Civil Defence	-	-	-	-	-	
 Visitor Information Services		-		-	-	
 Public Toilets	-	-	-	-	-	
 Customer Services		-	-	-	-	

* Investment property generates surplus revenue after allowing for investment property operating expenses. This investment property surplus is used to fund the Strategy & Governance Activity, and any residual surplus if any is used to fund overall operating expenses like general rates.

Note: Support Services is not shown as a separate activity because the costs of running Support Services which provides support to the organisation are allocated over the activities and departments delivering Council's external services.



ACCOUNTING POLICIES

NGĀ KAUPAPA MAHI KAUTE

REPORTING ENTITY

Whangarei District Council (Council) is a territorial local authority established under the Local Government Act 2002 (LGA) and is domiciled and operates in New Zealand. Council provides local infrastructure, local public services, and performs regulatory functions to the community.

The relevant legislation governing Council's operations includes the Local Government Act 2002 and the Local Government (Rating) Act 2002.

The Group financial statements provide the consolidated results of Council and its controlled entities (Springs Flat Contractors Limited, Whangārei Art Museum Trust, Northland Events Centre Trust¹, Whangārei Waste Limited and Whangārei Quarry Gardens Trust) and the equity accounted results of the joint venture entities in which the Council is a venturer (Whangārei District Airport and Northland Regional Landfill Limited Partnership).

Council's accounting policies include reference to Council and its controlled entities. The Long Term Plan is prepared only with respect to the parent, Whangarei District Council. Non-exempt Council controlled entities prepare a Statement of Intent which includes a three-year budget. Due to the immateriality of the controlled entities budgets they are not consolidated into Council's Long Term Plan.

For the purposes of complying with generally accepted accounting practice in New Zealand (NZ GAAP), the Council and Group are public benefit entities (PBEs).

BASIS OF PREPARATION

The financial statements have been prepared on a going concern basis and the accounting policies have been applied consistently throughout the period.

Statement of compliance

The financial statements of Council and the Group have been prepared in accordance with the requirements of the LGA and the Local Government (Financial Reporting and Prudence) Regulations 2014 (LG(FRP)R), which include the requirement to comply with generally accepted accounting practice in New Zealand (NZ GAAP).

¹ Northland Events Centre Trust will be replaced by a new Trust who will be responsible for the management and governance of the Northland Events Centre.

The financial statements have been prepared in accordance with and comply with PBE Standards.

Presentation currency and rounding

The functional currency of Council, each of its subsidiaries and each of the joint ventures in which Council is a venturer, is New Zealand dollars. The financial statements are presented in New Zealand dollars and all values are rounded to the nearest thousand dollars (\$'000).

Standards issued and not yet effective that have not been early adopted

PBE IPSAS 41 FINANCIAL INSTRUMENTS

PBE IPSAS 41 establishes requirements for the recognition and measurement of financial instruments by Tier 1 and Tier 2 public benefit entities. When applied, PBE IPSAS 41 supersedes most of PBE IPSAS 29 Financial Instruments: Recognition and Measurement. PBE IPSAS 41 also supersedes PBE IFRS 9 Financial Instruments, had an entity previously applied PBE IFRS 9. PBE IPSAS 41 is effective for financial years beginning on or after 1 January 2022, with early adoption permitted.

The main changes under the standard relevant to Council are:

- New financial asset classification requirements for determining whether an asset is measured at fair value or amortised
- New impairment model for financial assets based on expected losses, which may result in the earlier recognition of impairment losses
- New disclosures as required by amended PBE IPSAS 30 Financial Instruments: Disclosures

We have completed an initial assessment regarding the effect of the new standard PBE IPSAS 41 and do not expect any significant changes to Council's financial statements.

Budget Figures

The budget figures have been prepared in accordance with NZ GAAP, using accounting policies that are consistent with those adopted by Council in preparing these financial statements.

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Critical accounting estimates and assumptions

In preparing these financial statements, estimates and assumptions have been made concerning the future. These estimates and assumptions may differ from the subsequent actual results. Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are:

- the assessed useful life of an item of property, plant and equipment impacts the carrying amount of that item and the amount of depreciation recognised in relation to that item

- assumptions and estimates are applied in determining the fair value of infrastructure assets
- the impairment assessment of non-financial assets requires the use of key assumptions and estimates
- the determination of the landfill aftercare provision requires the use of key assumptions and estimates
- council relies on the assumptions and estimates made by external valuers when performing the investment property revaluation.

Critical judgements in applying accounting policies

Management has exercised the following critical judgements in applying accounting policies for the budget figures:

- classification of property: Council owns a number of properties held to provide housing to pensioners. The receipt of market based rental from these properties is incidental to holding them. The properties are held for service delivery objectives as part of Council's social housing policy. The properties are therefore accounted for as property, plant, and equipment rather than as investment property
- revenue from exchange and non-exchange transactions: Council has exercised professional judgement when determining whether the substance of a transaction is that of non-exchange or exchange. Council has reviewed its revenue streams and referred to its Revenue and Financing Policy to identify activities partially funded by rates revenue. When this occurs, the revenue from that activity is treated as non-exchange. Council believes revenue recognition materially complies with the PBE accounting standards
- determine control/joint control: Council has determined in respect to associated entities its control or joint control when deciding inclusion or non-inclusion in Council and the Group's financials. Council considers various factors to determine control including: its capacity to control financing and operating policies, benefits obtained from the activities of the subsidiary, majority voting power on the governing body, trust deeds, as well as external advice.

See Significant Forecasting Assumptions on page 374 for additional assumptions applied to the prospective financial information.

REVENUE

Revenue comprises the fair value of the consideration received or receivable for the sale of goods and services, excluding Goods and Services Tax, rebates and discounts and after eliminating sales within the group.

Revenue may arise from exchange or non-exchange transactions. Exchange transactions are transactions in which one entity receives assets or services, or has liabilities extinguished, and directly gives approximately equal value (primarily in the form of cash, goods, services, or use of assets) to another entity in exchange. Non exchange transactions are transactions that are not exchange transactions. In a non-exchange transaction, an entity either receives value from another entity without directly giving approximately equal value in exchange, or gives value to another entity without directly receiving approximately equal value in exchange.

Where a non-exchange transaction stipulates that the Group must provide specified services in exchange for revenue, the Group determines whether that stipulation constitutes a restriction or a condition:

- a restriction specifies the services that must be performed, but does not require funds to be returned if they are not spent as stipulated. Revenue from a non-exchange transaction with restrictions is recognised when received, or when the Group becomes entitled to it
- a condition specifies the services that must be performed and requires funds to be returned if they are not spent as stipulated. Non exchange transactions with conditions are recognised as liabilities when received and revenue is recognised and the associated liability extinguished as the specified services are provided.

Revenue from non-exchange transactions that do not stipulate that the Group must provide specified services in exchange for revenue is recognised on receipt.

Pledges are not recognised as revenue as the Group is unable to control the access to the funds. They are disclosed as a contingent asset when the money is pledged and recognised as revenue when the pledged money is received.

Rates

The following policies for rates have been applied:

- General rates, targeted rates (excluding water-by-meter), and uniform annual general charges are recognised at the start of the financial year to which the rates resolution relates. They are recognised at the amounts due. Council considers that the effect of payment of rates by instalments is not sufficient to require discounting of rates receivables and subsequent recognition of interest revenue.
- Rates arising from late payment penalties are recognised as revenue when rates become overdue.
- Revenue from water-by-meter rates is recognised on an accrual basis based on usage. Unbilled usage, as a result of unread meters at year end, is accrued on an average usage basis.
- Rates remissions are recognised as a reduction of rates revenue when Council has received an application that satisfies its rates remission policy.
- Rates collected on behalf of Northland Regional Council (NRC) are not recognised in the financial statements, as Council is acting as an agent for NRC.

Development and financial contributions

Development and financial contributions are recognised as revenue when Council provides, or is able to provide, the service for which the contribution was charged. Otherwise, development and financial contributions are recognised as liabilities until such time as Council provides, or is able to provide, the service.

Subsidies and grants

Council receives funding assistance from Waka Kotahi New Zealand Transport Agency (NZTA), which subsidises part of the costs of maintenance and capital expenditure on the local roading infrastructure. The subsidies are recognised as revenue upon entitlement, as conditions pertaining to eligible expenditure have been fulfilled.

FEES AND CHARGES

Building and resource consent revenue

Fees and charges for building and resource consent services are recognised when complete.

Sale of goods

Revenue from the sale of goods is recognised when a product is sold to the customer.

INTEREST REVENUE AND FINANCE COSTS

Borrowing costs are expensed in the financial year in which they are incurred.

VESTED OR DONATED PHYSICAL ASSETS

For assets received for no or nominal consideration, the asset is recognised at its fair value when Council obtains control of the asset. The fair value of the asset is recognised as revenue.

The fair value of vested or donated assets is usually determined by reference to Council's most recent valuation rates and useful lives.

SUPERANNUATION SCHEMES – DEFINED CONTRIBUTION SCHEMES

Employer contributions to KiwiSaver, the Government Superannuation Fund and other defined contribution superannuation schemes are accounted for as defined contribution schemes and are recognised as an expense in the surplus or deficit when incurred.

GRANT EXPENDITURE

Non discretionary grants are those grants that are awarded if the grant application meets the specified criteria. They are recognised when an application that meets the specified criteria for the grant has been received.

Discretionary grants are those grants that are awarded at the discretion of Council. They are recognised when a grant has been approved by Council and that approval has been communicated to the applicant. Council's grants awarded have no substantive conditions attached.

OPERATING LEASES

An operating lease is a lease that does not transfer substantially all the risks and rewards incidental to ownership of an asset. Lease payments under an operating lease are recognised as an expense on a straight-line basis over the lease term. Lease incentives received are recognised in the surplus or deficit as a reduction of rental expense over the lease term.

INCOME TAX

Council is not subject to income tax except for revenue derived from Council Controlled Organisations (Northland Regional Landfill Limited Partnership and Whangārei District Airport).

Income tax expense includes components relating to both current tax and deferred tax.

Current tax is the amount of income tax payable based on the taxable profit for the current year, plus any adjustments to income tax payable in respect of prior years.

Deferred tax is the amount of income tax payable or recoverable in future periods in respect of temporary differences and unused tax losses. Temporary differences are differences between the carrying amount of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit.

Deferred tax liabilities are generally recognised for all taxable temporary differences.

Deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which the deductible temporary differences or tax losses can be utilised.

Deferred tax is not recognised if the temporary difference arises from the initial recognition of goodwill or from the initial recognition of an asset or liability in a transaction that affects neither accounting profit nor taxable profit.

Current tax and deferred tax are measured using tax rates (and tax laws) that have been enacted or substantively enacted at balance date.

Current and deferred tax is recognised against the surplus or deficit for the period, except to the extent that it relates to items recognised in other comprehensive revenue and expense or directly in equity.

CASH AND CASH EQUIVALENTS

Cash and cash equivalents includes cash on hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less, and bank overdrafts.

Bank overdrafts are shown within borrowings in current liabilities in the statement of financial position.

The carrying value of cash at bank and short-term deposits with maturities less than three months approximates their fair value.

DEBTORS AND RECEIVABLES

Short-term receivables are recorded at the amount due, less any provision for uncollectability.

A receivable is considered to be uncollectable when there is evidence that the amount due will not be fully collected. The amount that is uncollectable is the difference between the amount due and the present value of the amount expected to be collected.

OTHER FINANCIAL ASSETS

The Group classifies its financial assets in the following categories: financial assets at fair value through surplus or deficit, loans and receivables, held to maturity financial assets and financial assets at fair value through the statement of comprehensive revenue and expense. The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of its investments at initial recognition and re-evaluates this designation at every reporting date.

Financial assets at fair value through surplus or deficit

This category has two sub categories: financial assets held for trading and those designated at fair value through profit or loss at inception. A financial asset is classified in this category if acquired principally for the purpose of selling in the short term or if so designated by management. Derivatives are also categorised as held for trading unless they are designated as hedges. Assets in this category are classified as current assets if they are either held for trading or are expected to be realised within 12 months of balance date.

The Group's financial assets at fair value through surplus or deficit comprise in the money derivatives (principally interest rate swaps).

Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They arise when the Group provides money, goods or services directly to a debtor with no intention of selling the receivable. They are included in current assets, except for those with maturities greater than 12 months after balance date, which are included in non-current assets.

The Group's loans and receivables comprise cash and cash equivalents, trade and other receivables, loans to community organisations and related party loans.

Loans to community organisations at nil or below market interest rates are initially recognised at the present value of their expected future cash flows, discounted at the current market rate of return for a similar financial instrument. The difference between the face value and present value of expected future cash flows of the loan is recognised in surplus or deficit as a grant.

Held to maturity investments

Held to maturity investments are non-derivative financial assets with fixed or determinable payments and fixed maturities that management has the positive intention and ability to hold to maturity.

The Group currently has no financial assets classified as held to maturity.

Financial assets at fair value through the statement of comprehensive revenue and expense

Financial assets at fair value through the statement of comprehensive revenue and expense are non-derivatives that are either designated in this category or not classified in any of the other categories. They are included in non-current assets unless management intends to dispose of the investment within 12 months of balance date.

The Group's shares in public companies are included in this category as they are not classified in any other category. These are held for strategic purposes and there is no intention to sell.

MEASUREMENT

Purchases and sales of financial assets are recognised on trade date (which is the date on which the Group commits to purchase or sell the asset). Financial assets are initially measured at fair value plus transaction costs unless they are carried at fair value through surplus or deficit, in which case they are recognised at fair value and the transaction costs are expensed.

After initial recognition, all financial assets are measured at fair value. Council uses a variety of methods to determine fair value of financial assets. Some of these include quoted market prices and estimated discounted cashflows. Realised and unrealised gains and losses arising from changes in the fair value of financial assets are included in surplus or deficit in the period in which they arise.

The Group assesses at each balance date whether there is objective evidence that a financial asset or a group of financial assets is impaired. Impairment is recognised in surplus or deficit.

DE-RECOGNITION

Financial assets are de recognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership.

NON-CURRENT ASSETS HELD FOR SALE

Non-current assets are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. They are measured at the lower of their carrying amount and fair value less costs to sell.

Any impairment losses for write-downs are recognised in the surplus or deficit.

Any increases in fair value (less costs to sell) are recognised up to the level of any impairment losses that have been previously recognised.

Non-current assets are not depreciated or amortised while they are classified as held for sale.

INVESTMENT PROPERTIES

Investment properties are properties which are held either to earn rental revenue or for capital appreciation or for both and generate cash flows largely independent of other assets held by the entity.

An investment property is measured initially at its cost, including transaction costs. After initial recognition, investment property is measured at fair value at each reporting date. Gains or losses arising from a change in the fair value of investment property are recognised in surplus or deficit.

Investment properties do not include property held primarily for strategic purposes or to provide a social service (such as pensioner housing), even though such property may earn

rentals or appreciate in value. Such properties are instead classified as items of property, plant and equipment.

When the use of a property changes from investment property to owner occupied property, the property is reclassified as owner occupied property and recorded at its fair value at the date of transfer.

FORESTRY ASSETS

Standing forestry assets are independently revalued to fair value less estimated costs to sell for one growth cycle.

Gains or losses arising on initial recognition of forestry assets at fair value less estimated costs to sell and from a change in fair value less estimated costs to sell are recognised in the surplus or deficit when incurred.

Forestry maintenance costs are recognised in the surplus or deficit when incurred.

PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment is initially recognised at cost.

The cost of an item of property, plant and equipment includes its purchase/construction price and costs directly attributable to bringing it to the location and condition necessary for it to operate as intended. In the case of landfills, post closure costs and restoring the site on which it is located are included.

Where an item of property, plant and equipment is self constructed, its construction cost includes the cost of materials and direct labour and an appropriate proportion of production overheads. Costs are recognised as work in progress and are transferred to the relevant asset class only when construction is complete.

Where an item of property, plant and equipment is donated or received at a subsidised amount, it is initially recognised at fair value. This applies to some infrastructure assets and land which has been vested to the Group and as part of the subdivision consent process:

- the vested reserve land has been recognised at the time of transfer at market value, which is recognised as vested asset revenue and deemed to be its initial cost
- vested infrastructure assets have been valued on initial recognition based on the actual quantities of infrastructure components vested and the current 'in the ground' cost of providing identical services.

Revaluation

Property, plant and equipment that is carried under the revaluation model is revalued with sufficient regularity to ensure that the carrying amount does not materially differ from fair value. All revalued property, plant and equipment is revalued at least every three years, except for roading which is revalued annually, and pensioner housing, which is revalued every five years. The valuation method employed is optimised depreciated replacement cost, except pensioner housing which is valued at market value.

Revaluations are accounted for on a class of asset basis.

An increase in carrying amount is recognised in an asset revaluation reserve in equity, except to the extent that it reverses a revaluation decrement for the same asset class previously recognised in surplus or deficit, in which case the increment is recognised in surplus or deficit. Decreases that offset previous increases of the same asset class are recognised in the asset revaluation reserve in equity; all other decreases are recognised in surplus or deficit. Any accumulated depreciation as at the revaluation date is eliminated against the gross carrying amount of the asset and the net amount is restated to the revalued amount of the asset.

Additions

The cost of an item of property, plant, and equipment is recognised as an asset if and only if, it is probable that future economic benefits or service potential associated with the item will flow to Council and Group and the cost of the item can be measured reliably.

Work in progress is recognised at cost less impairment and is not depreciated.

In most instances, an item of property, plant, and equipment is initially recognised at its cost. Where an asset is acquired through a non-exchange transaction, it is recognised at its fair value as at the date of acquisition.

Costs incurred subsequent to initial acquisition are recognised when the recognition criteria above is met. All other repair and maintenance costs are recognised in surplus or deficit as incurred.

The costs of day-to-day servicing of property, plant and equipment are recognised in the surplus or deficit as they are incurred.

Disposals

Gains and losses on disposals are determined by comparing the disposal proceeds with the carrying amount of the asset. Gains and losses on disposals are reported net in the surplus or deficit. When revalued assets are sold, the amounts included in asset revaluation reserves in respect of those assets are transferred to accumulated funds.

Subsequent measurement

Subsequent to initial recognition, items of property, plant and equipment are carried under either the cost model (cost less accumulated depreciation and accumulated impairment) or the revaluation model (fair value at the date of the revaluation, less any subsequent accumulated depreciation and subsequent accumulated impairment losses).

When the use of a property changes from owner-occupied to investment property, the property is reclassified as an investment property at its carrying value at the date of the transfer, and then revalued annually in line with the investment property accounting policy.

Depreciation

Depreciation is provided on a straight-line basis on all property, plant, and equipment (excluding land and work in progress), at rates that will write-off the cost (or valuation) of the assets to their estimated residual values over their useful lives. Where material parts of an item of property, plant and equipment have different useful lives, or where significant parts of an item of property, plant and equipment are required to be replaced at intervals, they are accounted for as separate items of property, plant and equipment.

The useful lives and associated depreciation rates of major classes of assets have been estimated as follows:

Class of PP&E	Estimated useful life	Class of PP&E	Estimated useful life
Operating assets		Street and road signs	15
Land	Indefinite	Traffic services	15-40
Buildings	10-100	Water	
Strategic land	Indefinite	Pipes	50-107
Strategic buildings	35-50	Plant and equipment	5-80
Pensioner housing – land	Indefinite	Treatment plant	60
Pensioner housing – buildings	14-80	Wastewater	
Library books	10	Pipes	30-101
Motor vehicles	5	Pumps and pump stations	20-100
Office furniture and fittings	3-20	Manholes	80-101
Plant and equipment	3-80	Treatment plant	15-100
Infrastructure assets		Stormwater	
Land for roads*	Indefinite	Pipes	11-125
Roading network		Manholes	11-100
Bridges	15-100	Parks and Recreation	
Carriageways	4-70	Walkways, reserves and sportsfields	10-100
Formation	Indefinite	Restricted assets	
Culverts	35-80	Heritage assets**	Indefinite
Footpaths	10-55	Parks and reserve land	Indefinite
Kerbs and channels	60	Marina structures***	25-44

The residual value and useful life of an asset is reviewed, and adjusted if applicable, at each financial year end.

*Land under roads was valued based on fair value of adjacent land, effective 30 June 2005. On transition to NZ IFRS Council elected to use the fair value of land under roads as at 30 June 2007 as deemed cost. Land under roads is no longer revalued.

** Valued at the estimated current market value as at 30 June 2002 by the Art Museum Curator. Subsequent additions are recorded at cost or market value. Donated assets do not form part of the cyclical valuation.

*** Historical assets situated at Whangārei Marina and Tutukākā Marina (under the management of the Whangārei Harbour Marina Trust and the Tutukākā Marina Management Trust respectively).

Impairment of property, plant and equipment

Property, plant and equipment that have a finite useful life are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. The Group conducts an annual review of asset values, which is used as a source of information to assess for any indicators of impairment.

An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and its value in use.

If an asset's carrying amount exceeds its recoverable amount, the asset is regarded as impaired and the carrying amount is written-down to the recoverable amount. Impairment losses for revalued items are recognised in the same manner as revaluation decrements. Impairment losses for items carried at cost are recognised in the surplus or deficit.

VALUE IN USE FOR NON-CASH-GENERATING ASSETS

Non-cash-generating assets are those assets that are not held with the primary objective of generating a commercial return.

For non-cash-generating assets, value in use is determined as the present value of the asset's remaining service potential, which is the depreciated replacement cost of the asset.

VALUE IN USE FOR CASH-GENERATING ASSETS

Cash-generating assets are those assets that are held with the primary objective of generating a commercial return.

The value in use for cash-generating assets is the estimated present value of expected future cashflows.

INTANGIBLE ASSETS

Computer software

Acquired computer software licences are capitalised based on the costs incurred to acquire and prepare the software for use.

Costs directly associated with the development of identifiable and unique software products, where the criteria for capitalisation have been met, are recognised as an asset.

Staff training costs are recognised in the surplus or deficit when incurred.

Computer software assets are amortised using the straight line method over their estimated useful lives (three to ten years).

Easements

Easements are recognised at cost, being the costs directly attributable to bringing the asset to its intended use. Easements have an indefinite useful life and are not amortised, but are instead tested for impairment annually.

Carbon credits

The Group participates in the New Zealand Emission Trading Scheme (ETS). Purchased New Zealand Units (NZU's) are recognised at cost on acquisition, and NZU's which represent carbon credits received from the Government are recognised at fair value as at the date of transfer. NZU's have an indefinite useful life and consequently aren't amortised, but are tested for impairment annually.

After initial acquisition, NZU's are recorded at the NZU spot rate at 30 June. This is considered to be fair value.

Amortisation

The carrying value of an intangible asset with a finite life is amortised on a straight-line basis over its useful life. Amortisation begins when the asset is available for use and ceases at the date that the asset is derecognised. The amortisation charge for each financial year is recognised in the surplus or deficit.

The useful lives and associated amortisation rates of major classes of intangible assets have been estimated as follows:

Class of intangible asset	Estimated useful life (years)
Computer software	3-10

Impairment of intangible assets

Intangible assets that have an indefinite useful life, or are not yet available for use, are not subject to amortisation and are tested annually for impairment.

For further details, refer to the policy for impairment of property, plant and equipment. The same approach applies to the impairment of intangible assets.

DERIVATIVE FINANCIAL INSTRUMENTS

The Group uses derivative financial instruments (principally interest rate swaps) to hedge various risks (principally those associated with borrowing at variable interest rates).

Derivatives are initially recognised at fair value on the date a derivative contract is entered into. Any associated transaction costs are expensed.

Derivatives are subsequently carried at fair value. In the money derivatives are classified as financial assets at fair value through surplus or deficit and out of the money derivatives are classified as financial liabilities at fair value through surplus or deficit.

The method of recognising changes in fair value depends on whether the derivative is designated as a hedging instrument and if so, the nature of the item being hedged. None of the Group's derivatives is designated as a hedging instrument. All changes in the fair value of the Group's derivatives are recognised in surplus or deficit and fair value is assessed annually.

PAYABLES AND DEFERRED REVENUE

Short-term creditors and other payables are recorded at their face value.

PROVISIONS

A provision is recognised for future expenditure of uncertain amount or timing when:

- there is a present obligation (either legal or constructive) as a result of a past event;
- it is probable that an outflow of future economic benefits will be required to settle the obligation; and
- a reliable estimate can be made of the amount of the obligation.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to the passage of time is recognised as an interest expense and is included in 'finance costs'.

BORROWINGS

Borrowings are initially recognised at their fair value plus transaction costs. After initial recognition, all borrowings are measured at amortised cost using the effective interest method.

Borrowings are classified as current liabilities unless Council or the Group has an unconditional right to defer settlement of the liability for at least 12 months after balance date.

EMPLOYEE ENTITLEMENTS

Short-term employee entitlements

Employee benefits that are due to be settled within 12 months after the end of the year in which the employee provides the related service are measured based on accrued entitlements at current rates of pay. These include salaries and wages accrued up to balance date and annual leave earned to, but not yet taken at balance date.

Long-term employee entitlements

Employee benefits that are due to be settled beyond 12 months after the end of the year which the employee provides the related service, such as long service leave, have been calculated on an actuarial basis.

Loyalty and performance bonuses are one off payments to staff members who have provided ten or more years of service to Council and have attained the prerequisite performance achievements over the preceding three years of service. The liability is assessed using current rates of pay taking into account years of service, years to entitlement and likelihood that staff will reach the point of entitlement and achieve the targeted performance level. These estimated amounts are discounted to their present value using an appropriate discount rate.

Defined contribution schemes

Obligations for contributions to KiwiSaver are accounted for as defined contribution superannuation schemes and are recognised as an expense in the surplus or deficit when incurred.

EQUITY

Equity is the community's interest in Council and is measured as the difference between total assets and total liabilities. Equity is disaggregated and classified into the following components:

- accumulated funds
- reserves and special funds
- asset revaluation reserve.

Reserves and special funds

These reserves and funds are a component of equity generally representing a particular use to which various parts of equity have been assigned. Reserves may be legally restricted or created by Council.

Some reserves and special funds are subject to specific conditions accepted as binding by Council and which may not be revised by Council without reference to the courts or a third party. Transfers to and from these reserves may be made only for specified purposes or when specified conditions are met.

Also included in reserves and special funds are reserves restricted by Council decision. Council may alter them without reference to any third party or the courts. Transfers to and from these reserves are at the discretion of Council.

Asset revaluation reserves

This reserve relates to the revaluation of property, plant and equipment to fair value.

CAPITAL COMMITMENTS AND OPERATING LEASES

Operating leases

An operating lease is a lease that does not transfer substantially all the risks and rewards incidental to ownership of an asset to the lessee.

THE GROUP AS A LESSEE

The Group is a lessee in operating leases. Lease payments under an operating lease are recognised on a straight-line basis over the term.

THE GROUP AS A LESSOR

The Group is a lessor in operating leases. Receipts from operating leases (net of incentives provided to lessees) are recognised on a straight line basis over the term of the lease.

Capital commitments

Capital commitments represent capital expenditure contracted for at balance date but not yet incurred.

GOODS AND SERVICES TAX

Items in the financial statements are stated exclusive of goods and services tax (GST), except for receivables and payables, which are presented on a GST inclusive basis. Where GST is not recoverable as input tax, it is recognised as part of the related asset or expense.

The net amount of GST recoverable from or payable to Inland Revenue is included as part of receivables or payables in the statement of financial position.

The net GST paid to or received from Inland Revenue, including the GST relating to investing and financing activities, is classified as an operating cash flow in the Cash Flow Statement.

Commitments and contingencies are disclosed exclusive of GST.

PUBLIC BENEFIT ENTITY FINANCIAL REPORTING STANDARD 42 PROSPECTIVE FINANCIAL STATEMENTS (PBE FRS 42)

Council has complied with PBE FRS 42 in the preparation of these prospective financial statements. The following information is included to satisfy the requirements of PBE FRS 42:

- i) Description of the nature of the entity's current operation and its principal activities:
Whangarei District Council is a territorial local authority, as defined in the Local Government Act 2002. Council's principal activities are outlined within this Long Term Plan.
- ii) Purpose for which the prospective financial statements are prepared: It is a requirement of the Local Government Act 2002 to present prospective financial statements that span ten years and include them in the Long Term Plan. This allows ratepayers and residents the opportunity to review Council's projected financial results and position. Information included in these prospective financial statements may not be appropriate for other purposes. Prospective financial statements are revised every year to reflect updated assumptions and costs.
- iii) Bases for assumptions, risks and uncertainties: The financial information has been prepared based on best estimate assumptions as to the future events which Council expect to take place. Council has considered factors that may lead to a material difference between information in the prospective financial statements and actual results. See Significant Forecasting Assumptions on page 374 for additional assumptions applied to the prospective financial information.
- iv) Cautionary note: The financial information is prospective. Actual financial results are likely to vary from the information presented and these variations may be material.
- v) Other disclosures: These prospective financial statements were adopted as part of the 2021-31 Long Term Plan for Whangarei District Council on 24 June 2021. Council is responsible for the prospective financial statements presented, including the assumptions underlying the prospective financial statements and all other disclosures. The Long Term Plan is prospective and as such contains no actual operating results.



SIGNIFICANT FORECASTING ASSUMPTIONS

HE TINO MĀTĀPONO MATAKITE

	Financial risk	Impact for high financial risk assumptions	Level of uncertainty	Financial impact for assumptions with high level of uncertainty
General assumptions				
<p>District growth: the number of residential ratepayers is expected to grow each year as more dwellings are built or properties divided – details of expected areas of growth are outlined in Council’s Growth Strategy which can be viewed on Council’s website.</p> <p>Development contributions: the value of development contributions collected is dependent on the number of subdivision lots developed and on the level of new service connections taking place. Development contributions (DC’s) are forecast based on historical data and financial modelling assumes a consistent level of DC revenue which may vary from the growth model. Council has assumed no significant or material changes to the current DC policy.</p>	High	The level of subdivision and development activity is difficult to forecast and carries a high level of uncertainty.	High	Every 1% of Development Contribution revenue not achieved will lead to a reduction in income of approximately \$71k to \$88k across each of the 10 years, reducing available funding for Council activity.

	Financial risk	Impact for high financial risk assumptions	Level of uncertainty	Financial impact for assumptions with high level of uncertainty
<p>Rates Increase: the following rates increases have been applied:</p> <ul style="list-style-type: none"> • Year 1 general rates: a 2% increase, plus a 2% COVID-19 reset, plus a 0.5% increase to respond to community submissions, plus growth* plus LGCI • Years 2-10 general rates: a 2% increase, plus growth* plus LGCI • Flood Protection targeted rates: increase of LGCI only • Water targeted rates: increase by growth* and LGCI • Wastewater targeted rates: Year 1 a 2% increase, plus a 2% COVID-19 reset, plus growth* plus LGCI Years 2-3 a 2% increase, plus growth* plus LGCI Years 4-10 growth* plus LGCI • Transport targeted rates: new rate to contribute towards cost of new sealing, refer to Rating FIS on page 178 of Volume One. <p>*A growth component is factored into the rates revenue budget to reflect the increase in rateable properties in our District over the 10 years. Growth for water and wastewater is set at 80% of the general rates growth as not every new rateable property connects to water and wastewater.</p>	Low	Not applicable	Low	Not applicable

	Financial risk	Impact for high financial risk assumptions	Level of uncertainty	Financial impact for assumptions with high level of uncertainty
<p>Inflation: the impact of inflation has been factored into producing the prospective financial statements. Business and Economic Research Limited (BERL) constructed the forecast increases for Local Authorities in September 2020.</p> <p>Council has elected to follow the BERL mid-scenario adjustor which is considered to be the likely outcome relevant to most regions of New Zealand.</p> <p>Council has averaged the annual mid-scenario price level adjustors over the 10 years of the LTP (see page 384). These adjustors will be updated for each year covered in the current LTP during subsequent Annual Plan and LTP processes using updated, annual BERL data to mitigate any risk.</p> <p>The main financial risk for Council is that operating and capital expenditure items rise faster than revenue items. Due to the uncertainty of ongoing COVID-19 impacts, the inflation risk is considered to be medium.</p>	Medium	Not applicable	Medium	Not applicable
<p>COVID-19 Impacts: modelling follows the BERL assumptions that New Zealand avoids a widespread outbreak and is at Alert Level 1 in 2021, stringent border restrictions remain in place until the end of 2021 and the New Zealand economy gradually recovers from the September 2020 quarter.</p>	High	The impact of COVID-19 is difficult to budget and carries a high level of uncertainty.	High	The impact of COVID-19 is uncertain and may result in variances against budget for the LTP, especially in the earlier years.

	Financial risk	Impact for high financial risk assumptions	Level of uncertainty	Financial impact for assumptions with high level of uncertainty
<p>Water reforms: this LTP assumes that Council will continue to deliver water services over the life of the 10 year Plan. There is a high degree of uncertainty around this assumption given the current water reforms. Currently there is no fully developed proposal to model, however all impacts of the proposal will be assessed by Council when the proposal is received. If the water reforms are progressed before the next LTP, Council anticipate there will be a LTP amendment.</p> <p>Council has budgeted for three waters tranche 1 funding and the associated projects in year 1 of this LTP.</p>	High	There is a high risk that water reforms will result in water assets and the associated income and expense streams being transferred to a separate entity.	High	The Funding Impact Statements for Water, Wastewater and Stormwater are on pages 42-49, 62-65 and 72-75 of Volume One respectively.
<p>Future for Local Government Review: In April 2021 the Minister of Local Government announced a Ministerial Inquiry into the Future for Local Government. A draft report with recommendations to be issued for public consultation is planned for September 2022 with the final report due on 30 April 2023.</p> <p>While the review could recommend significant change to what local government is and does, there is no information available on the likely direction for the review at this time.</p> <p>Council considers it unlikely that any recommendations could take effect before 1 July 2024 – particularly for changes to roles or functions. Any changes that are made will be incorporated in the 2024-34 LTP.</p> <p>This LTP assumes that Council will continue its existing role and functions over the life of the 10 year plan.</p>	Low	Not applicable	Medium	Not applicable
<p>Property Transactions: Council have budgeted for commercial property purchases of \$10.5m with no sales in this LTP.</p>	Low	Not applicable	Low	Not applicable
<p>Metered water: increased charges are based on growth plus LGCI.</p>	Medium	Not applicable	Medium	Not applicable

	Financial risk	Impact for high financial risk assumptions	Level of uncertainty	Financial impact for assumptions with high level of uncertainty
User fees: the majority of user fees have increased by inflation. These increases are assumed to be sufficient for funding purposes and will be reviewed annually to ensure compliance with Council's Revenue and Financing Policy.	Medium	Not applicable	Medium	Not applicable
Rental Income: Council has assumed rental increases will be based on the anticipated increases, timed to coincide with rental lease renewals.	Low	Not applicable	Low	Not applicable
Crown Infrastructure Partners (CIP) and Tourism Infrastructure Fund (TIF): Council applied and were approved for Government funding for projects through the COVID-19 CIP programme and TIF. These projects and the funding have been included in the LTP.	Medium	Not applicable	High	Council may need to adjust the timing of projects to incorporate those where other funding is available (i.e. delivering some projects in future years of the Long Term Plan).
<p>Climate change: Council adopted a Corporate Sustainability Strategy in 2018 with the aim of becoming carbon neutral.</p> <p>In 2019 Council declared a Climate Emergency and have since developed a draft Climate Action Plan which includes mitigation and adaptation actions for both Council and the community. Funding to resource both mitigation and adaptation has been prioritised through the LTP process.</p> <p>At a regional level Council has been working with Climate Adaptation Taitokerau (CATT) to develop a regional wide consistent and collaborative approach for adapting to the impacts of climate change across Northland. This work includes a draft climate change strategy for Northland and an associated 10 year work programme that identifies and addresses priority issues at key locations at both a regional and district level.</p> <p>These plans and strategies will assist Council with determining the impact from climate change on Council activities and assets.</p>	Low	Not applicable	Medium	Not applicable

	Financial risk	Impact for high financial risk assumptions	Level of uncertainty	Financial impact for assumptions with high level of uncertainty
Expenditure assumptions				
Interest rates: Council uses a forecast annual rate to calculate interest expense. The average rate over the 10 years of the LTP has been assumed to be 3.73% for existing and new debt. This is based on the weighted average cost of capital calculated across the period of the LTP. Projected future interest rates are calculated by using interest and debt forecasting models provided by external Treasury advisers. Council has a comprehensive interest rate hedging program which protects against interest rate rises through the life of the plan.	Low	Not applicable	Low	Not applicable
Staff costs: staff costs are expected to increase by an average of 2% pa over the 10 years, in line with the average of the BERL mid-scenario rates for staff costs. Various additional roles have been included in the LTP in line with expected population growth.	Medium	Not applicable	Medium	Not applicable
Depreciation funding: capital expenditure to replace assets ("renewals") will be funded by rates collected to cover the cost of depreciation. Any surplus depreciation component will be used to repay borrowings. Any shortfall in funding requirements will be met through subsidies, operating surplus or increased debt. Further information can be found in the Revenue and Financing Policy, the Financial Strategy and the Infrastructure Strategy.	Medium	Not applicable	Medium	Not applicable
Unfunded depreciation: Council does not fund depreciation on transportation assets to the extent that NZTA funds renewals, and this replacement capital expenditure is based on current NZTA funding rates.	Low	Not applicable	Low	Not applicable
Capital expenditure: for the purposes of modelling debt, an adjustment has been made to allow for estimated projects not completed in a particular financial year and carried forward. Actual results may vary to this estimate.	Medium	Not applicable	Medium	Not applicable

	Financial risk	Impact for high financial risk assumptions	Level of uncertainty	Financial impact for assumptions with high level of uncertainty
Asset assumptions				
<p>Subsidies: Waka Kotahi New Zealand Transport Agency (NZTA) subsidies have been included based on Central Government contributions to certain capital expenditure – subsidies average 53% for this LTP. All subsidies are disclosed within operating revenue and are contingent on the applicable capital projects taking place. Council has assumed there are no changes to the subsidy rates in this LTP. The granting of subsidies for specific programmes are contingent on being approved by NZTA. Council will not know whether projects for which they have applied for funding from NZTA are approved until after the LTP is adopted.</p>	High	If a planned significant capital project that has a capital subsidy associated with it is not approved by NZTA, Council will not receive the budgeted capital subsidy income.	High	<p>NZTA subsidies not approved will reduce capital subsidy income, and operating surplus. This would impact Council's Financial Prudence Balanced Budget Benchmark result and could cause an existing balanced budget in a given year to become unbalanced unless compensating adjustments are made.</p> <p>The timing of completion of the relevant capital projects may also differ to the plan.</p>
<p>Depreciation: depreciation rates for each asset group have been calculated using rates included in the Accounting Policies. Depreciation rates on infrastructure assets are based on the 2019 revaluation rate average for each activity except for Roothing which is based on the 2020 revaluation.</p>	Low	Not applicable	Medium	Not applicable

	Financial risk	Impact for high financial risk assumptions	Level of uncertainty	Financial impact for assumptions with high level of uncertainty
Asset revaluations: <ul style="list-style-type: none"> • Infrastructure assets: an assumption has been made that revaluation of infrastructure assets will occur every three years, with the next revaluation due 30 June 2022. • Roothing Assets: revaluation of roading assets will occur yearly. • Pensioner Housing: the revaluation of pensioner housing will remain at five-year intervals. • Investment properties: no movement in the value of investment properties has been budgeted given the difficulty of predicting future values. Any valuation change does not impact cash requirements. • Biological assets and derivative financial assets: no movement in the value of biological assets and derivative financial assets has been budgeted given the difficulty of predicting future values. Any movements in these assets would have no cash impact on the Plan. • Other financial assets: no movement in the value of shares held in Civic Assurance Limited and the New Zealand Local Government Funding Agency has been assumed in the budget 	Medium	Not applicable	Medium	Not applicable
Useful lives: useful lives for each asset group have been listed in the Accounting Policies (see page 166).	Low	Not applicable	Low	Not applicable
Vested assets: vested asset income is inconsistent from year to year and as a consequence is difficult to forecast. It has therefore been reflected at a flat rate of \$8.0m plus inflation in the Plan. Vested asset income has no cash impact therefore any financial risk is low.	Low	Not applicable	Low	Not applicable
Funding sources: future replacement of significant assets is assumed to be funded in line with the Revenue and Financing Policy.	Low	Not applicable	Low	Not Applicable

	Financial risk	Impact for high financial risk assumptions	Level of uncertainty	Financial impact for assumptions with high level of uncertainty
Liability assumptions				
Interest: interest calculated on debt is based on historical average monthly movements and the impact of current and forecasted interest rate hedging.	Low	Not applicable	Low	Not applicable
Borrowings: it is assumed that Council will have the facilities to secure funding as required.	Low	Not applicable	Low	Not applicable
Derivative Financial Liabilities: no movement in the value of derivative financial liabilities has been reflected in the Plan due to difficulty in forecasting future values. Any movements in these assets would have no cash impact on the Plan.	Low	Not applicable	Low	Not applicable
Strategic assumptions				
Resource Consents: the necessary resource consents required for capital projects will be applied for in due course to align with the planned project timeframes. We assume conditions for resource consents will not alter budgeted project costs significantly.	Medium	Not applicable	Low	Not applicable
Other Assumptions				
Strategic assets: Council has not planned for the ownership of any strategic assets to be transferred to another party. Council receives vested assets in satisfaction of various development contribution charges.	Low	Not applicable	Low	Not applicable
Currency Movement: Council does not have any significant exposure to currency movements and consequently has not specifically taken them into account.	Low	Not applicable	Low	Not applicable
Flood and Storm Damage: Council does not budget for storm events, as referred to in the 2021-51 Infrastructure Strategy. Lack of funding provision for emergency works may result in reduced renewals as renewal funding gets diverted to fund flood damage repairs.	Medium	Not applicable	Medium	Not applicable

	Financial risk	Impact for high financial risk assumptions	Level of uncertainty	Financial impact for assumptions with high level of uncertainty
Subsidiary assumptions				
Northern Regional Landfill Limited Partnership (NRLLP): it is assumed that Council will receive annual distributions from NRLLP throughout the 10 years of this plan.	Low	Not applicable	Low	Not applicable
Northern Transportation Alliance (NTA): a shared services agreement between four Northland councils (Kaipara District Council, Far North District Council, Northern Regional Council, Whangarei District Council) and Waka Kotahi New Zealand Transport Agency (NZTA) was established on 1 July 2016. The activities of the NTA attract subsidy on subsidised projects. Council has made provision for gaining subsidy on the NTA activities for these subsidised projects.	Low	Not applicable	Low	Not applicable



PRICE LEVEL ADJUSTERS

TE WHAKARITE O TE UTU

	Source ¹	Year 1 2021-22	Year 2 2022-23	Year 3 2023-24
Capital and general operating	BERL mid-scenario LGCI total ²	2.50%	2.50%	2.50%
Specific operating				
Growth - general rates (rateable properties)	Growth model	1.00%	1.00%	1.00%
General rates	BERL mid-scenario LGCI + increase ³ + growth	8.00%	5.50%	5.50%
Wastewater rates	BERL mid-scenario LGCI + increase ⁴ + growth ⁵	7.30%	5.30%	5.30%
Metered water	BERL mid-scenario LGCI + growth ⁵	3.30%	3.30%	3.30%
Flood protection rates	BERL mid-scenario LGCI	2.50%	2.50%	2.50%

¹ Rates increases are applied to the total revenue from each rate type, not the amount per individual ratepayer.

² Council has elected to follow the BERL mid-scenario adjustor and has averaged this adjustor over the 10 years of the LTP to provide consistency to our ratepayers. This averaged adjustor is referred to as LGCI throughout the LTP document.

³ General rates increase is 4.5% in Year 1 (due to an additional 2% COVID-19 reset and a 0.5% increase to respond to community submissions) and then 2% for the remainder of the LTP.

⁴ Wastewater rates increase is 4% in Year 1 (due to an additional 2% COVID-19 reset), 2% in Years 2 and 3 and then 0% for the remainder of the LTP.

⁵ Wastewater and metered water growth is forecast at 80% of the general rates growth as not every new rateable property connects to wastewater and water.

Year 4 2024-25	Year 5 2025-26	Year 6 2026-27	Year 7 2027-28	Year 8 2028-29	Year 9 2029-30	Year 10 2030-31
2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
3.30%	3.30%	3.30%	3.30%	3.30%	3.30%	3.30%
3.30%	3.30%	3.30%	3.30%	3.30%	3.30%	3.30%
2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%

SOURCES

Business and Economic Research Ltd (BERL) Local Government Cost Adjustor Forecasts,
Three scenarios, 2020

Whangarei District Council Growth Model 2020



SIGNIFICANCE AND ENGAGEMENT POLICY

**TE KAUPAPA HERE MŌ NGĀ TAKE
HIRAHIRA ME ŌNA TIKANGA
WHAKAPĀPĀ**



Engaging our communities

The purpose of local government includes enabling democratic local decision-making and action by, and on behalf of, communities.

Sometimes the way we engage with you is set by legislation, and there are many steps to follow. Sometimes we can choose.

Our policy:

- guides how we engage with communities about important Council decisions
- enables us to identify the significance that we place on decisions about issues, proposals, assets, and services
- provides clarity about how and when communities can expect to be engaged in decisions made by Council.

COMMUNITY ENGAGEMENT IS...

- a process
- that involves all or some of the public
- focusing on decision making or problem solving

Engagement can occur at many levels depending on the significance, circumstances and nature of an issue.

Literal Greek translation of democracy = power belongs to the people.



This policy outlines how we involve our community in our decision making.



Engaging with our community and getting your feedback is an essential part of our work.

For every decision that Council makes we need to work out how important, or significant, it is for our community. We have criteria to help us to do this. Even if we determine that consultation is not required, we will still consider your views and preferences in the decision-making process.

HOW COMMUNITIES WANT TO ENGAGE

Partnership with Māori

Whangārei District Council has obligations and commitments to Māori and is committed to enabling genuine participation in decision making. In Whangārei, Te Kārearea Strategic Partnership Forum was formed late in 2012 between Te Huinga (which advocates for the hapū of Whangārei) and Whangārei District Council. A Strategic Relationship Agreement developed in 2014 formed the basis for discussions between the partners. In September 2020, a Standing Committee of Council was established to further strengthen Māori participation in decision making.

Expectations of community engagement

Through feedback provided, for example via submissions, conversations with Council's Advisory Groups, and through elected members, we know that communities expect the following:

- opportunities for early and meaningful input into significant decisions
- visibility of upcoming consultations
- involvement of a cross section of the community demographics, for example, young people, older people, people experiencing disabilities, multi-cultural groups
- innovative solutions for community engagement that work for the audience with feedback tools that are easy to use
- face to face engagement to enable human connection, and interactive discussions, combined with online engagement to give people time to think about their responses
- for online engagement, posts that have a real life connection through local content, with good use of images and video, are more likely to be 'clicked on'
- involving our communities in activities with purpose rather than presenting our opinions
- going where the people are by tapping into existing events across the district
- for youth, taking the opportunity where there is a captive audience
- using influencers in the community to get to hard to reach communities
- making sure information is available at the places people go to on an ordinary day.



Our policy

WHY WE NEED A POLICY

The Significance and Engagement Policy (“the policy”) has been developed in response to the requirements set out in the Local Government Act 2002 (LGA). The LGA requires every local authority to have a policy on significance and engagement.

The purpose of the policy is to make sure Council takes a consistent and transparent approach in determining the significance of a decision and the appropriate level of engagement for that decision.

Appendix 1 defines some of the words we use in this policy.

THE AUDIENCE

The policy is prepared for the Whangārei community so they can understand how Council will determine the significance of proposals and decisions, and what level of engagement they can expect.

It also assists Council staff to assess the significance of issues, proposals, decisions, and matters to determine what type of engagement, if any, is required.

OUR COMMITMENT TO THE COMMUNITY

It is essential we understand the views and preferences of people likely to be affected by, or who have an interest in, a decision. Under section 78 of the LGA, local authorities must consider these views and preferences when making decisions.

We will consider significance and engagement in the early stages of a proposal before decision-making occurs. If appropriate, we will reconsider it as a proposal develops.

We are committed to the principles for local authorities in section 14 of the LGA including:

- conducting our business in an open, transparent and democratically accountable manner
- making ourselves aware of, and having regard to, the views of all communities
- when making decisions, taking account of diversity of the community, the interests across the district, the interests of the future as well as current communities, and the likely impact of any decisions on these interests
- providing an opportunity for Māori to contribute to our decision making process.



We see engagement as an opportunity to strengthen relationships with our communities.



We aim to improve our engagement so that we reach people who would not normally engage with Council.

DETERMINING SIGNIFICANCE

- On every issue requiring a decision, the degree of significance will be considered using this policy.
- To determine the degree of significance of a decision, we apply the five criteria set out below. A decision is typically considered significant if two or more of these criteria and measures are triggered.

CRITERIA	MEASURE
Impact on Council's direction	Major and long-term
Change in Council's current level of service	Major and long-term
Level of public impact and/or interest	Major and district-wide, or Major for an identified community of interest
Impact on Council's capability (non-cost)	Major and long-term
Net financial cost/revenue of implementation, excluding any financial impact already included in a Long-Term Plan / Annual Plan	Net capital expenditure >10% of total rates in year commenced, and/or Net operating expenditure >2.5% of total rates in year commenced

CONSIDERATION OF ENGAGEMENT AND CONSULTATION

Council will consider, on a case-by-case basis, whether some form of engagement or consultation on a decision is appropriate. In general, the more significant a decision, the greater the likelihood of community engagement. There will, however, be some decisions where it is not appropriate to carry out any form of engagement or consultation, eg emergency works.

In considering engagement (if it will occur and, if so, what form it will take), the Council will consider the Council's available resources, and the significance, nature, and particular circumstances of the decision.

In some situations, we must formally consult with you using a form of consultation set out in legislation. For example, the Special Consultative Procedure (SCP) must be used for bylaws, and statutory planning documents like the Long Term Plan (LTP). The process for SCP is set by the LGA, which governs everything we do.

Find out more about engagement and consultation in our Community Engagement Guide in [Appendix 2](#).

STRATEGIC ASSETS

Strategic assets are those assets owned or otherwise controlled by the Council which are vital for delivering services to Whangārei. [Appendix 3](#) lists the Council's strategic assets.



Implementation



If a decision is **determined to be significant** (ie to have a high degree of significance):

- a report to Council will include an assessment of significance of the issue, the degree of engagement proposed, an engagement plan and a staff member recommendation.
- the final decision will be made by Council.



If a decision is **determined not to be significant**:

- the decision will be made by Council or a committee, elected member or staff member with delegated authority
- where the decision is made by Council or a committee, the report will include an assessment of significance of the issue, and note any engagement proposed. Council will still consider the views and preferences of the community in the decision making process and where the matter is considered in public will at a minimum inform the community of the issue
- where the decision is made by an elected member or staff member acting under delegated authority, it is not necessary to formally document the assessment of significance or engagement, as these matters are likely to be of low significance.

Under section 80 of the LGA, if Council makes a decision that is significantly inconsistent with this policy, it must clearly identify the inconsistency, the reasons for the inconsistency, and any intention to amend the policy to accommodate the decision.

CONSULTATION PRINCIPLES

If we determine that consultation is required, we will carry out consultation in a way that meets the principles in section 82 of the LGA.

PRINCIPLE	WHAT THIS MEANS
Clarity	Council will provide clear information about the purpose of consultation, and the scope of the decision Council will make after considering the community views.
Accessibility	Council will provide access to relevant information, in a form people can understand. This means we need to engage in ways that show we understand the makeup of our communities, respecting cultural and individual differences.
Encouragement	Council will encourage people to present their views.
Opportunity	Council will provide reasonable opportunity for people to present their views in a way that suits those people's needs and preferences.
Commitment to Māori	Council will make sure processes are in place when consulting with Māori.
Open mindedness and fairness	Council will receive community views with an open mind and give due consideration to those views when making decisions.
Transparency	Council will provide access to a clear record of decisions made and available explanatory materials.

ENGAGEMENT

Even if consultation is not required, we may determine that some other form of engagement is appropriate.

There is a wide range of tools for engagement. Differing levels of engagement may be required during different stages of decision-making on an issue. Levels of engagement may also be different for different stakeholders.



Appendix 1 – Definitions

Community

A group of people living in the same place or having a particular characteristic in common.

Consultation

TALKING TO YOU AND GETTING YOUR FEEDBACK IN A FORMAL WAY

A process of informing the community and seeking information or feedback to inform and assist decision-making. Consultation is a formal type of engagement and is often prescribed by legislation and time bound.

Decisions

Refers to all of the decisions made by or on behalf of Council including those made by staff under delegation.

Emergency Works

Work undertaken to repair and restore Council infrastructure and services following natural events or disasters.

Engagement

TALKING TO YOU AND GETTING YOUR FEEDBACK

Engagement is a process which involves all or some of the community and is focused on better understanding views and preferences relevant to Council's decision-making or problem-solving. There is a continuum of engagement.

Significance

HOW IMPORTANT IS IT?

Legislatively defined by the Local Government Act 2002 (LGA)

“means the degree of importance of the issue, proposal, decision, or matter, as assessed by the local authority, in terms of its likely impact on, and likely consequences for —

- a) the district or region
- b) any persons who are likely to be particularly affected by, or interested in, the issue, proposal, decision, or matter
- c) the capacity of the local authority to perform its role, and the financial and other costs of doing so.”

Strategic Asset

ASSETS THAT ARE ESSENTIAL TO OUR COMMUNITY WELL-BEING

“means an asset or group of assets that the local authority needs to retain if it is to maintain its capacity to achieve or promote any outcome that it determines to be important to the current or future well-being of the community; and includes—

- d) any asset or group of assets listed in accordance with section 76 AA (3) by the local authority
- e) any land or building owned by the local authority and required to maintain the local authority's capacity to provide affordable housing as part of its social policy
- f) any equity securities held by the local authority in—
- g) a port company within the meaning of the Port Companies Act 1988:
- h) an airport company within the meaning of the Airport Authorities Act 1966”.



Appendix 2 – Community Engagement Guide

There are many ways that Council can engage communities in its decision making.

This section goes into more detail about the legislative requirements that Council must follow in some situations.

It also describes Council's approach to carrying out engagement, which is based on the International Association of Public Participation framework.

In some cases, the law says that Council must use a more formal process for engagement requiring specific procedures to be followed. This is known as a Special Consultative Procedure.

SPECIAL CONSULTATIVE PROCEDURE

Legislation requires us to use a Special Consultative Procedure (SCP) for consultation on certain decisions, including:

- adoption or amendment of a Long-Term Plan (in accordance with section 93A of the LGA, which requires use of a special consultation document)
- unless already explicitly provided for in the LTP and having been the subject of consultation that complies with section 93E of the LGA, a decision to:
 - alter significantly the intended level of service provision for any significant activity undertaken by or on behalf of Council, including commencing or ceasing such an activity, or
 - transfer the ownership or control of a strategic asset (as listed in [Appendix 2](#))
- adoption, amendment, or revocation of bylaws, if required under section 156(1)(a) of the LGA
- adoption, amendment, or revocation of a Local Alcohol Policy
- adoption of a Local Approved Products (Psychoactive Substances) Policy
- adoption of a Class 4 Venue Policy under the Gambling Act 2003
- preparation, amendment, or revocation of a waste management and minimisation plan
- adoption of fees and charges where specifically required to use a SCP under relevant legislation (for example, fees and charges under the Resource Management Act 1991).

A SCP requires Council to:

- prepare and adopt a statement of proposal
- make sure the information is publicly available for at least one calendar month

- provide an opportunity for people to present their views to Council and consider submissions with an open mind.

For this type of consultation, we need to follow the principles of consultation in section 82 of the LGA. How we apply these principles (clarity, accessibility, encouragement, opportunity, commitment to Māori, open mindedness and fairness, and transparency) is described earlier in our policy.

LESS FORMAL CONSULTATION

For consultation that does not require a SCP, we still need to follow the principles in section 82 of the LGA. A statement of proposal is not required, nor is there a minimum time period for making the information publicly available. We do however need to provide an opportunity for people to present their views to Council and consider submissions with an open mind.

Certain instances of non-SCP consultation must comply not just with section 82 of the LGA, but also section 82A. This requires Council to prepare and provide a proposal-type document as part of the consultation.

We will consult with you in a way that complies with both sections 82 and 82A for the following types of decision:

- adopting or amending the annual plan if required under section 95 of the LGA (if there are significant or material differences from the year of the Long Term Plan to which the Annual Plan relates)
- adopting, amending, or revoking a bylaw if required under section 156(1)(b) of the LGA
- transferring responsibilities to another local authority under section 17 of the LGA
- establishing or becoming a shareholder in a council-controlled organisation
- adopting or amending a Significance and Engagement Policy where Council considers that it does not have sufficient information about community interests and preferences to enable the purpose of the policy to be achieved
- adopting or amending a Revenue and Financing Policy, Development Contributions Policy, Financial Contributions Policy, Rates Remission Policy, Rates Postponement Policy, or a Policy on the Remission or Postponement of Rates on Māori Freehold Land.

OTHER FORMS OF ENGAGEMENT

Council engages with the community on many levels. This can be by way of consultation as described above, or to communicate or seek feedback in a more informal way.

The table on the next page describes the types of engagement Council might undertake for different types of issues.

The majority of decisions that Council make fall into the inform and consult categories, whilst involve, collaborate and empower are most often used to meet specific legislative requirements.

For any individual project or decision, Council may engage at many levels, at different times.

Responding to community preferences is important to Council.

We also try and schedule our engagement so that the community does not become overwhelmed with requests for feedback. We call this 'consultation fatigue'.

NO ENGAGEMENT OR CONSULTATION

There are some things that we will not typically carry out any form of engagement for:

- emergency management activities during a state of emergency
- decisions to act where it is necessary to:
 - comply with the law
 - save or protect life, health or amenity
 - prevent serious damage to property
 - avoid, remedy or mitigate an adverse effect on the environment
 - protect the integrity of existing and future infrastructure and amenity
- decisions that are public excluded, for example, the awarding of sensitive contracts
- any decisions that are within the delegations of our staff, for example, regulatory and enforcement activities
- organisational decisions, for example, staff changes and operational matters that do not materially reduce a level of service.

	TYPE OF ENGAGEMENT				
	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
Goal	To provide the public with balanced and objective information to assist them in understanding the problems, alternatives, opportunities and/or solutions.	To obtain feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public (or stakeholders) in each aspect of the decision, including the development of alternatives and the identification of the preferred solution.	To place final decision-making in the hands of the public.
Types of issues we might use this for	Water restrictions Flood and storm warnings Emergency works Annual Plan*	Council strategies Long Term Plan Annual Plan*	District Plan	Joint Management Plans	Electoral voting system (FPP or STV) Introduction of Maori Wards
Examples of communication and engagement tools	Website Public notices Newspaper Media releases Social media Radio Face to face presentations Community events				
		Formal submissions and hearings Focus or advisory groups Surveys Public meetings Inviting feedback through website and social media	Focus or advisory groups Workshops Surveys Public meetings Inviting feedback through website and social media	Focus or advisory groups External working groups with expert advice	Binding referendum Local body elections
When the community can expect to be involved	We would generally advise the community once a decision is made, or when milestones are achieved.	We would advise the community once a draft decision is made and generally provide the community at least 4 weeks to participate and respond.	We would generally provide the community with a greater lead in time to allow them time to be involved in the process.	We would generally involve the community at the start to scope the issue, again after information has been collected and again when options are being considered.	We would provide the community with a greater lead in time to allow them time to be involved in the process, working to statutory timeframes in most cases.

*Under section 95(2A) of the LGA, consultation is not required if the Annual Plan does not include significant or material differences from the content of the Long Term Plan for the financial year to which the proposed Annual Plan relates



Appendix 3 – Strategic assets

Section 76AA(3) of the LGA requires this policy to list the assets which Council considers to be strategic assets. Our strategic assets are those vital for delivering services to Whangārei.

We consider strategic assets as whole networks because it is the group of assets as a whole that delivers the service. Therefore, we will treat a group of assets as a strategic asset only where a decision affects the whole of the assets in the particular group, or if it would materially alter the nature of that group. For instance, the sale and purchase of particular parcels of land for development of the transportation and traffic network is unlikely to be a decision that affects the whole of that network or materially alters the nature of the network.

The LGA deems shares in a port or airport company, and assets required to provide affordable housing as part of Council's social policy, to be strategic assets.

The following is our list of strategic assets:

- Council's interest in a joint venture with the Crown for the Whangārei District Airport
- 50% interest in the Northland Regional Landfill Limited Partnership
- Pensioner housing
- Transportation and traffic network, including roads, footpaths, cycleways and shared paths, street lighting and parking
- Wastewater network and treatment plant(s)
- Water treatment, storage and supply network
- Stormwater network
- Reserves, sports fields and facilities (including Okara Park)
- Forum North complex
- Hikurangi Swamp drainage scheme
- Libraries.



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