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Waipā 2021-2051 Infrastructure Strategy

June 2021

CONTENTS

Part 1 - Part 1 Strategic context	10
1.1..Purpose of the Infrastructure Strategy.....	11
1.2..Council’s Strategic Framework.....	11
1.3..Infrastructure Challenges and Priorities	12
1.4..External Influences – Uncertainty and Assumptions.....	17
1.4.1 Population change.....	18
1.4.2 Climate Change.....	20
1.4.3 National Policy and Direction	21
1.4.4 Global Events	22
1.4.5 Natural Disasters.....	22
1.4.6 Water Demand and Revenue.....	23
1.4.7 Asset Lifecycle Assumptions	23
1.5..Key partners.....	24
1.5.1 Future Proof.....	24
1.5.2 Government.....	24
1.5.3 Tangata Whenua	24
1.5.4 Private Developers	25
1.5.5 Community and Non-Government Organisations	25
Part 2 - Managing Council’s infrastructure	26
2.1..Overview	26

2.1.1	Council’s assets	26
2.1.2	Scope of Strategy	26
2.2.	How Council Manages Infrastructure Assets	28
2.2.1	Activity Management Plans	28
2.2.2	Activity Management Maturity	28
2.2.3	Balancing Maintenance versus Renewal	28
2.2.4	Identifying and Prioritising Asset Renewal Projects	29
2.2.5	Unexpected Renewals	30
2.2.6	Financing assets	31
2.3.	Responding to Growth	37
2.3.1	Staged development of new assets	37
2.4.	Maintaining and Changing Levels of service	38
2.4.1	Defining Levels of Service	38
2.4.2	Challenges to Meeting Levels of Service	38
2.5.	Delivery of Capital Expenditure	40
2.6.	Resilience of Critical Infrastructure Assets to Natural Hazards.....	41
2.6.1	Physical Resilience	44
2.6.2	Financial Resilience	45
2.7.	Three Waters Review	45
2.8.	Other Significant Infrastructure Challenges.....	46
2.9.	Three Waters Master Plan	48
2.10	Key Assumptions	50
Part 3 -	Water Treatment and Supply.....	54

3.1..Overview of the Water Treatment and Supply Service	54
3.1.1 What council does	54
3.1.2 The Water Schemes	55
3.1.3 Overview of assets	56
3.2..Challenges and Proposed Actions	57
3.2.1 Current and Future Issues.....	57
3.2.2 Projects 2021 to 2051	58
3.2.3 Financial analysis.....	61
Part 4 - Wastewater Reticulation, Treatment, and Disposal	65
4.1..Overview of Wastewater Reticulation, Treatment, and Disposal	65
4.1.1 What council does	65
4.1.2 The Wastewater Schemes	65
4.1.3 Overview of assets	66
4.2..Challenges and Proposed Actions	66
4.2.1 Current and Future Issues.....	66
4.2.2 Projects 2021 to 2051	67
4.2.3 Financial analysis.....	69
Part 5 - Stormwater Management	73
5.1..Overview of Stormwater Management.....	73
5.1.1 What council does	73
5.1.2 The Stormwater Schemes.....	73
5.1.3 Overview of assets	74

5.2..Challenges and Proposed Actions	75
5.2.1 Current and Future Issues.....	75
5.2.2 Projects 2021 to 2051	76
5.2.3 Financial analysis.....	78
Part 6 - Transportation	82
6.1..Overview of Transportation.....	82
6.1.1 What council does	82
6.1.2 Transportation network.....	82
6.1.3 Overview of assets	83
6.2..Challenges and Proposed Actions	84
6.2.1 Current and Future Issues.....	84
6.2.2 Projects 2021 to 2051	85
6.2.3 Financial analysis.....	95
6.2.4 Service delivery mechanisms	98
Part 7 - Waste Management	99
7.1..Overview of Waste Management	99
7.1.1 What council does:	99
7.1.2 Our waste management scheme.....	99
7.1.3 Overview of assets	99
7.2..Challenges and Proposed Actions	100
7.2.1 Current and Future Issues.....	100
7.2.2 Projects 2021 to 2051	100

Part 8 - Community Facilities	101
8.1..Overview of Community Facilities	101
8.1.1 What council does	101
8.1.2 The community services networks	102
8.1.3 Overview of Assets.....	103
8.2..Challenges and Proposed Actions	104
8.2.1 Current and Future Issues.....	104
8.2.2 Projects 2021 to 2051	105
8.2.3 Financial analysis.....	107
8.2.4 Service delivery mechanisms	110
 Part 9 - Appendix 1 – LTP Performance Framework – Community Outcomes and External Strategic Priorities	
112	

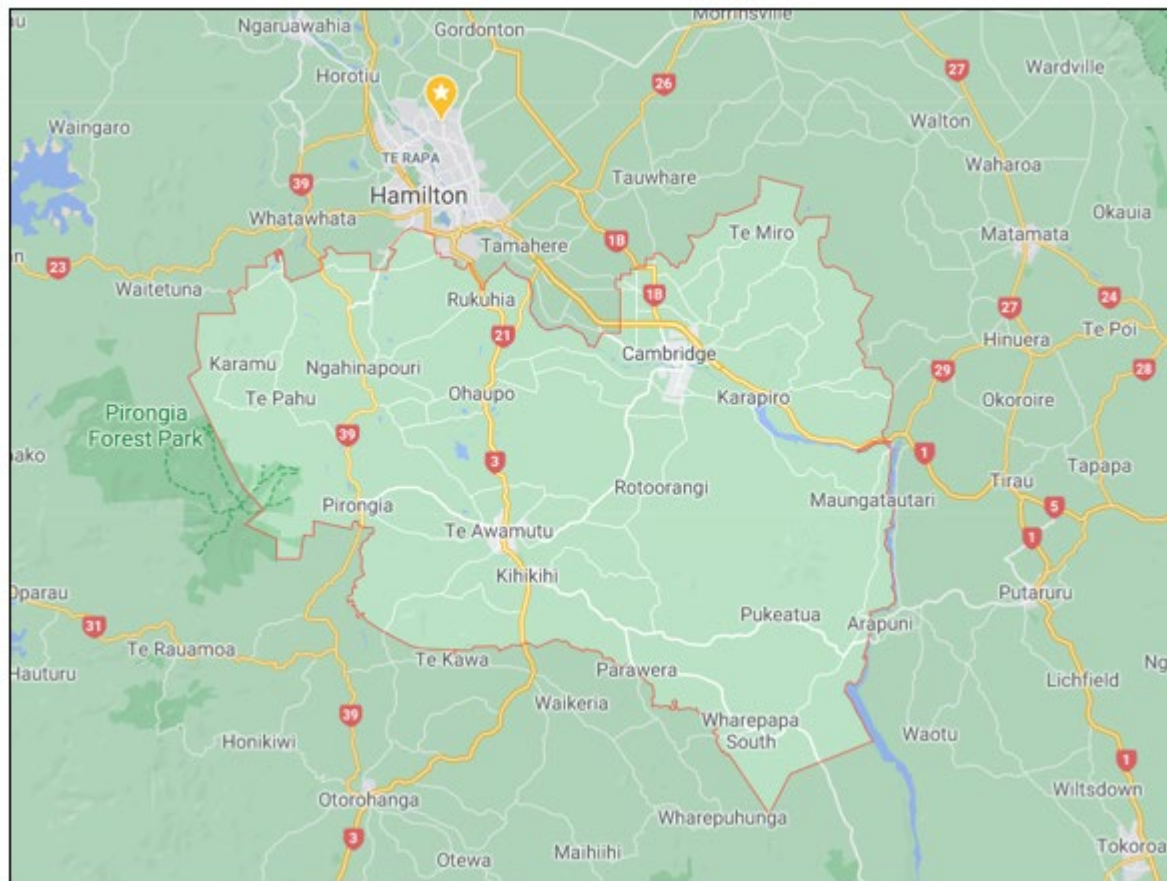
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PART 1 - PART 1 STRATEGIC CONTEXT

Waipā is geographically, one of the smaller districts in New Zealand at 1,473 square kilometres. Situated immediately south of Hamilton (see map 1 below) on the Waikato floodplain, the district is crossed by both the Waikato and Waipā Rivers and bounded by the remnant volcanic mountains of Pirongia, Maungatautari, Kakepuku, Maungakawa and Te Miro. Situated in the heart of the Waikato and on the boundary with King country, the district has a rich Māori cultural heritage (see Section 1.5.3).

Map 1. Waipā District Context



Waipā is fortunate in that 37% of the district comprises high class arable farmland (9% of New Zealand's total). The land supports an exceptionally productive rural dairy sector and a thriving rural and urban population of approximately 56,000 people (2020). While the rural communities are mainly spread across the district, the urban communities are found in one of the districts three towns, Cambridge, Te Awamutu and Kihikihi or its eight villages (see map 1 below).

1.1 Purpose of the Infrastructure Strategy

The Waipā Infrastructure Strategy (the Strategy) sets out how the Council intends managing its infrastructure assets and meeting the long-term (30-year) infrastructure needs and challenges to successfully deliver on its strategic community outcomes. The Strategy details what key infrastructure is required, when it is planned to be provided, and how much it is projected to cost.

The infrastructure that this strategy refers to comprises of key public infrastructure and community facilities managed by the Council.

Before detailing the Strategy in Part 3, the rest of this section provides an outline of Waipā's strategic framework, community outcomes, followed by a discussion of identified significant infrastructure challenges and options for addressing these challenges.

1.2 Council's Strategic Framework

The strategic framework is guided by Council's overall vision 'Waipā Home of Champions – Building Connected Communities.'

This strategic framework was confirmed by the elected members on 25 August 2020 for directing the Long Term Plan 2021-31. It follows an early round of community and stakeholder engagement carried out during February and March 2020.

The strategic framework is informed by four key community outcomes: socially resilient; cultural champions; environmental champions and economically progressive (see Figure 1).

Figure 1. Community Outcomes



These four outcomes provide strategic direction and context for the Strategy. It is important therefore, that there is good alignment between this outward-facing strategic direction and the internal decisions and investments Council makes regarding its identified infrastructure challenges and priorities. An outline of the linkages between the Community Outcomes and Council’s External Strategic Priorities performance measures is included as an appendix to this strategy.

1.2.1 Limitations of this Infrastructure Strategy

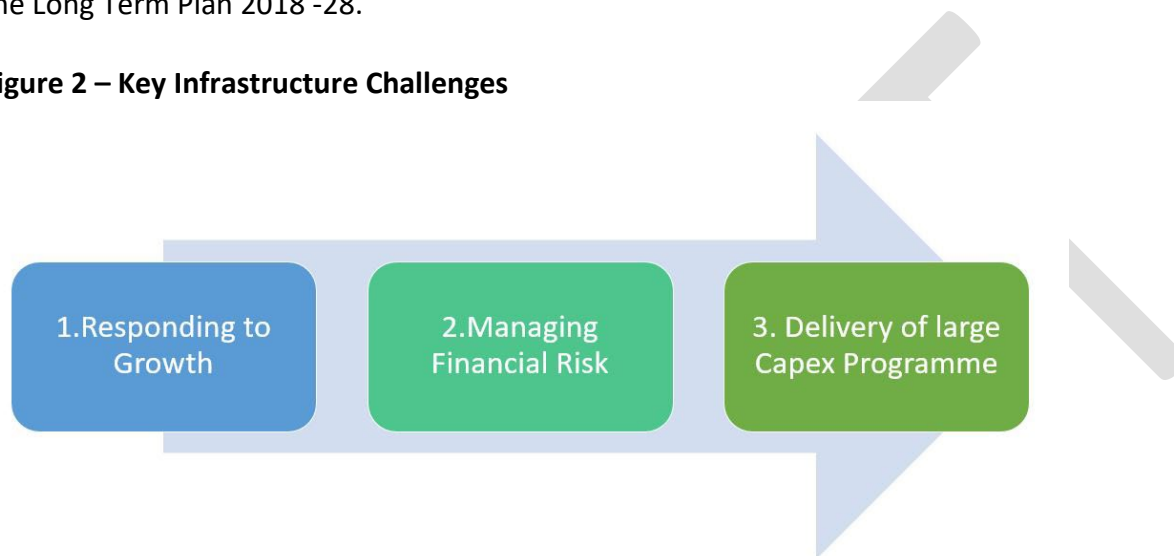
Noting we are embarking on an organisational improvement plan for 2021-2024 which we expect to significantly improve our next iteration of the Infrastructure Strategy. In the meantime, we are focussed on meeting our minimum requirements given current constraints.

We are investing in learning more about our assets (in particular, our waters and community services assets) and using condition and performance data to inform our renewals programmes, balancing criticality, affordability and acceptable levels of risk such that we are demonstrating our commitment to being good stewards for our current and future communities.

1.3 Infrastructure Challenges and Priorities

Three key infrastructure challenges have been identified by the Council (see Figure 2) These comprise; responding to growth, managing financial risk and delivery of a large capex programme. These three major challenges have been carried over from the Long Term Plan 2018 -28.

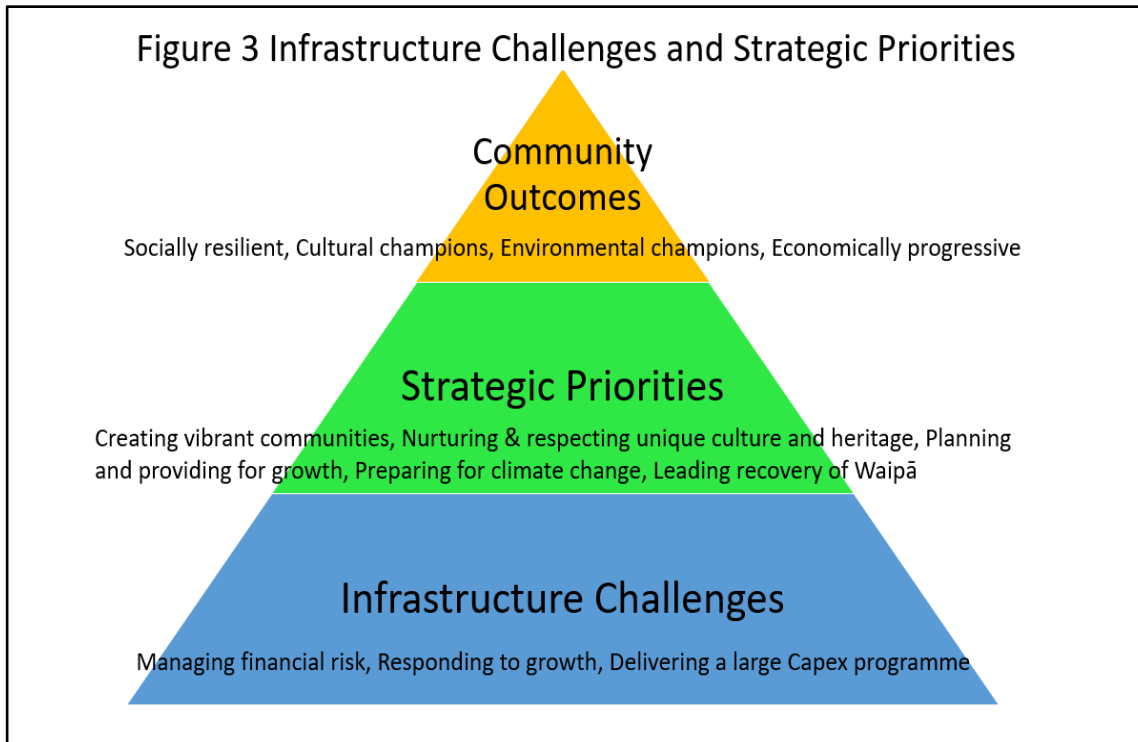
Figure 2 – Key Infrastructure Challenges



How these key infrastructure challenges are related to the Council’s strategic direction and priorities is illustrated in Figure 3. The interface between the infrastructure challenges and the aspirational community outcomes is captured in the five strategic priorities of the Council as confirmed in August 2020.

The strategic priorities are an important link between the Council’s vision and community outcomes in the Long Term Plan, and the key infrastructure challenges that need to be addressed in the Strategy. While each of the five strategic priorities links to one or more of the community outcomes, each will also link to one or more of the identified infrastructure challenges that is addressed in the Strategy.

Figure 3 shows the need for connection in the decision-making process for infrastructure investment and the strategic direction and of the Council for the district.



Council has a vision for implementing activity management planning at Waipa DC. This is:

To support Council's purpose of 'working together to achieve our communities' aspirations' through good asset management practices that ensure Council's assets and the services they provide are managed in a coordinated, cost effective, sustainable and well planned manner.

This vision guides how we strategically manage our infrastructure assets to address our key challenges, while ensuring that the services we deliver to our current and future communities are effective, resilient, and efficiently delivered.

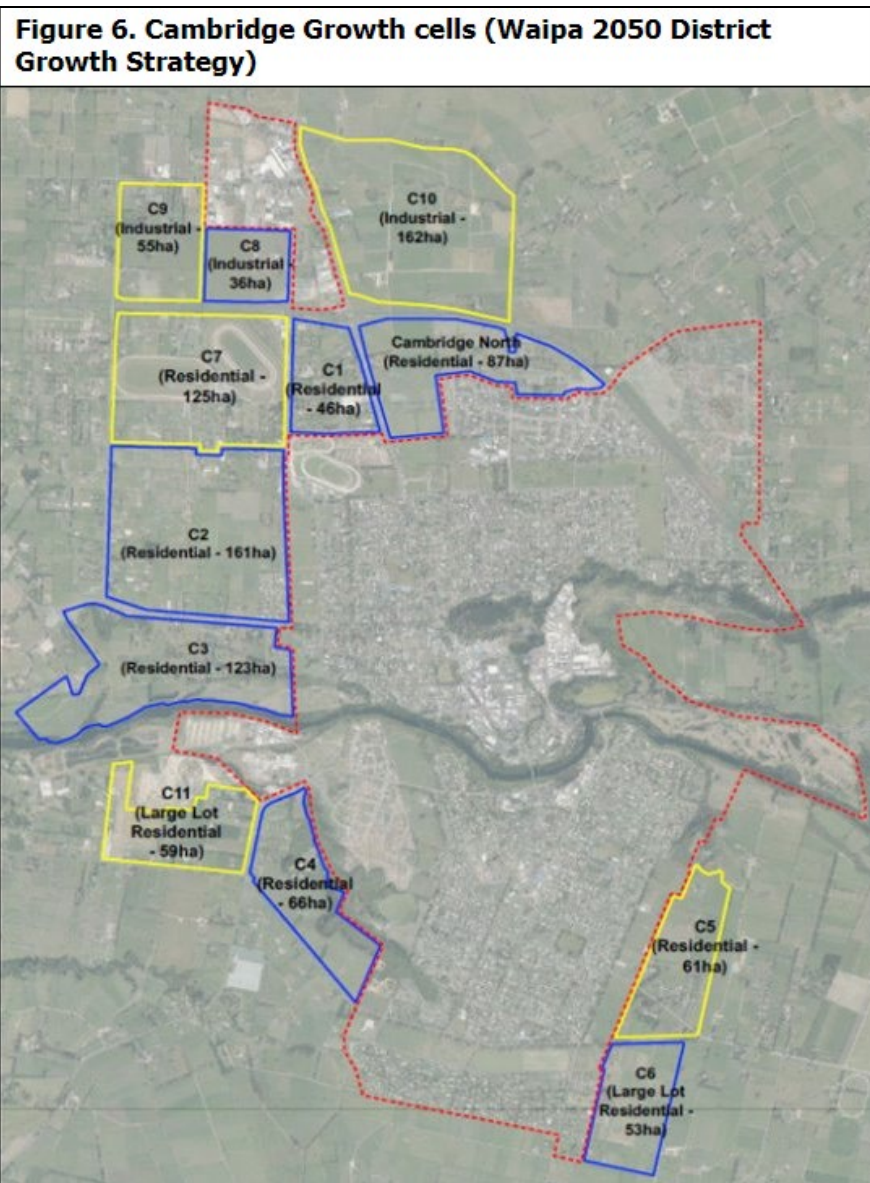
Limitations of this

1.3.1 Responding to Growth

At an overall district wide strategic level, the Council is guided by its Waipa 2050 Growth Strategy [Waipa 2050](#). This Growth Strategy was originally prepared in 2009 and updated in 2017. The Growth Strategy is important in providing a guide for the strategic urban development of Waipa, to the preparation of this Infrastructure Strategy, and in providing a level of certainty to residents, landowner and private sector developers.

By way of example, figure 6 below, shows the strategic growth development map for Cambridge with the growth cells identified for greenfield expansion of the town. These growth cells provide for the future urban development of the town in a planned for and phased manner, while simultaneously protecting the surrounding high-class farmland from ad-hoc development encroachment. The growth strategy has worked well with the district plan in helping the Council manage urban development in a planned for manner co-ordinated with the provision of key supporting infrastructure.

The Growth Strategy is also important in ensuring that the Council is providing sufficient development land capacity in line with the requirements of the National Policy Statement for Urban Development. As an identified high population growth area, the Council works with its Future Proof Partners in jointly ensuring the sub-region has a good strategic platform for meeting the demands of population growth in terms



land capacity for urban development along with the required supporting service infrastructure.

1.3.2 Financial risk

As Waipa DC is a high growth council, balancing our debt to revenue ratio across investment in renewals, level of service and growth projects is an ongoing challenge. Initially post the covid-19 lockdown, the economic forecasts indicated a likely reduction in revenue for council, and an affordability challenge within our communities, such that our investment may need to be further constrained to remove many projects which were considered discretionary. As further forecasts are received, the future appears to be more positive and optimistic, but this will need to be monitored closely.

The robust business cases used to develop project proposals has helped council to balance and prioritise its investment in future infrastructure. Significant assumptions around the Development Contributions revenue expected in the future are such that monitoring the revenue received in coming years will need greater oversight (currently the DC model shows that revenue is assumed to be recovered within ten years of investment in growth infrastructure).

Council is committed to ensuring that Council's services and infrastructure programmes are delivered to the right outcomes (for example treatment standards for waste water discharges which meet all stakeholder expectations) but are financially constrained in our ability to fund these without an excessive financial burden to our ratepayers. Balancing environmental outcomes with community affordability is an ongoing challenge.

Council is currently participating in a sub-regional detailed business case for the investigation of a possible shared waste water treatment plant with Hamilton City Council and Waikato District Council. This business case is using a 100-year horizon to fully assess the economic and environmental benefits, costs and risks to determine what is the most appropriate investment for our communities.

It is noted that the three waters reform agenda being promoted by the Department of Internal Affairs has identified that Water Entities in the future may have a much more enabled balance sheet (increasing the available loan headroom and debt to revenue ratio limits) to allow these challenges to be addressed. Council will again however, have to consider the costs and benefits of this option during upcoming consultation processes.

Notwithstanding this strategic forward planning for urban growth, challenges arise when the preparation of structure plans for the development of growth cells drive up land value expectations. Where council acquires land for required public

infrastructure, the final land price paid can be at a much higher cost than was estimated at the outset of the planning process. However, if council acquires the land earlier, when the value may not be as inflated, there is risk of the development not proceeding on a timely basis or in line with the agreed structure plan. Historically council has worked closely with developers to try and manage this risk, but the rate of property value increasing is exacerbating this challenge. This also impacts on the cost of development contribution levies being applied to the development area, as it is anticipated that at some point these may be a barrier to the take up of development opportunities, and therefore Council's ability to fund the loan repayments from development contributions.

1.3.3 Delivering a large Capex programme:

Council's ability to plan and carry out the proposed programme of infrastructure capital works will impact the overall delivery of infrastructure to maintain levels of service, support growth, and achieve asset renewal and development.

Council understands and appreciates the challenge of completing a large complex capital works programme where there may be capacity constraints on internal and/or external resources, and uncertainties in the delivery supply chain. Risks have been identified with regard to specialist role shortages, capacity gaps and market constraints. Through this Strategy, Council has placed more emphasis on building internal capacity so that appropriate management disciplines and reporting are in place to manage capital programme risks and deliver projects within planned timeframes.

Council will actively plan across financial years to provide greater certainty of resource requirements. Clear capital programme governance structures will be established to support best practice project delivery.

1.4 External Influences – Uncertainty and Assumptions

There are a number of external factors that have a substantial effect on the district and the Council's infrastructure assets. For most of these factors, the Council has little influence except in how it responds. This section provides a brief overview of these factors.

External factors comprise of: population change, climate change, national policy and direction, regional and sub-regional planning, and major global events such as the COVID-19 pandemic.

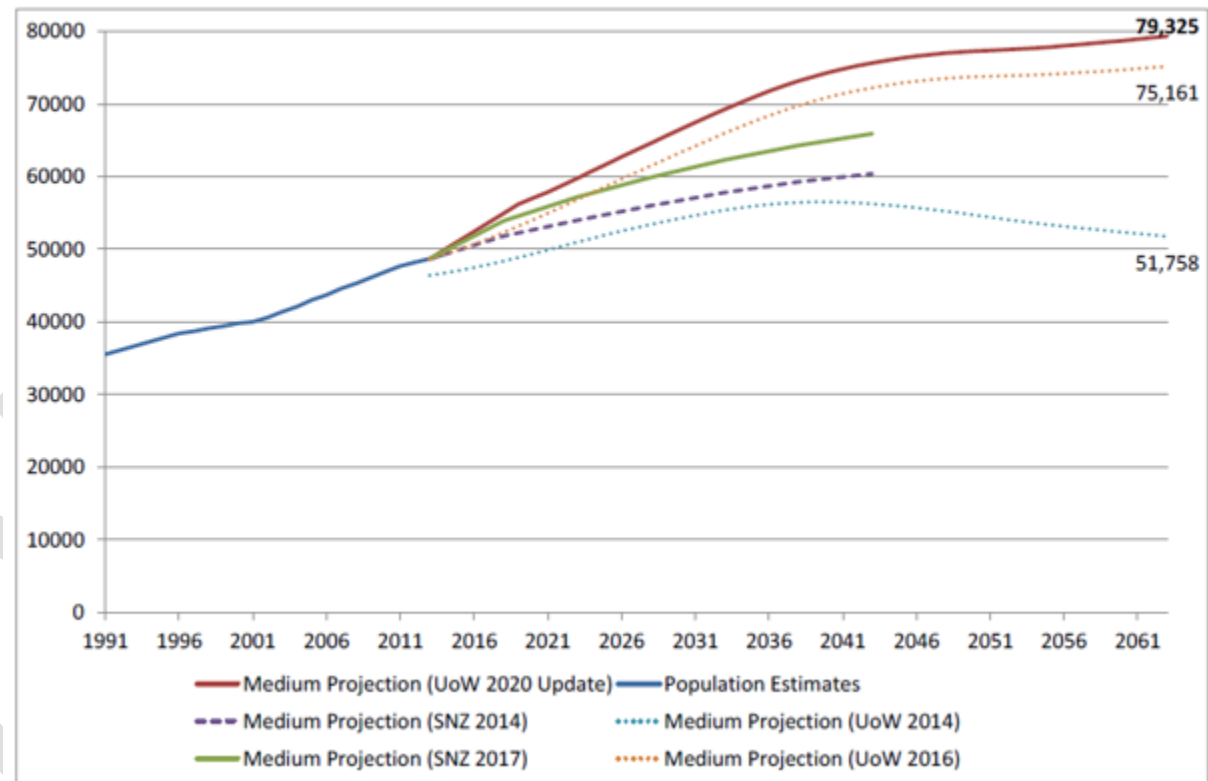
As there is considerable uncertainty around the impact of these factors, the Council must make a number of assumptions about how it proposes to respond to the anticipated effects.

1.4.1 Population change

There are two aspects of population change that are anticipated to have long-term effects on the Waipā district and the Council. The first is enduring population growth. Population projections now indicate that the district is likely to continue to experience a net in-migration of people for the next 30 years at least. They also anticipate that the effects of the current COVID-19 pandemic will be short-term and unlikely to have a marked impact on the long-term projected population growth (see Figure 4).

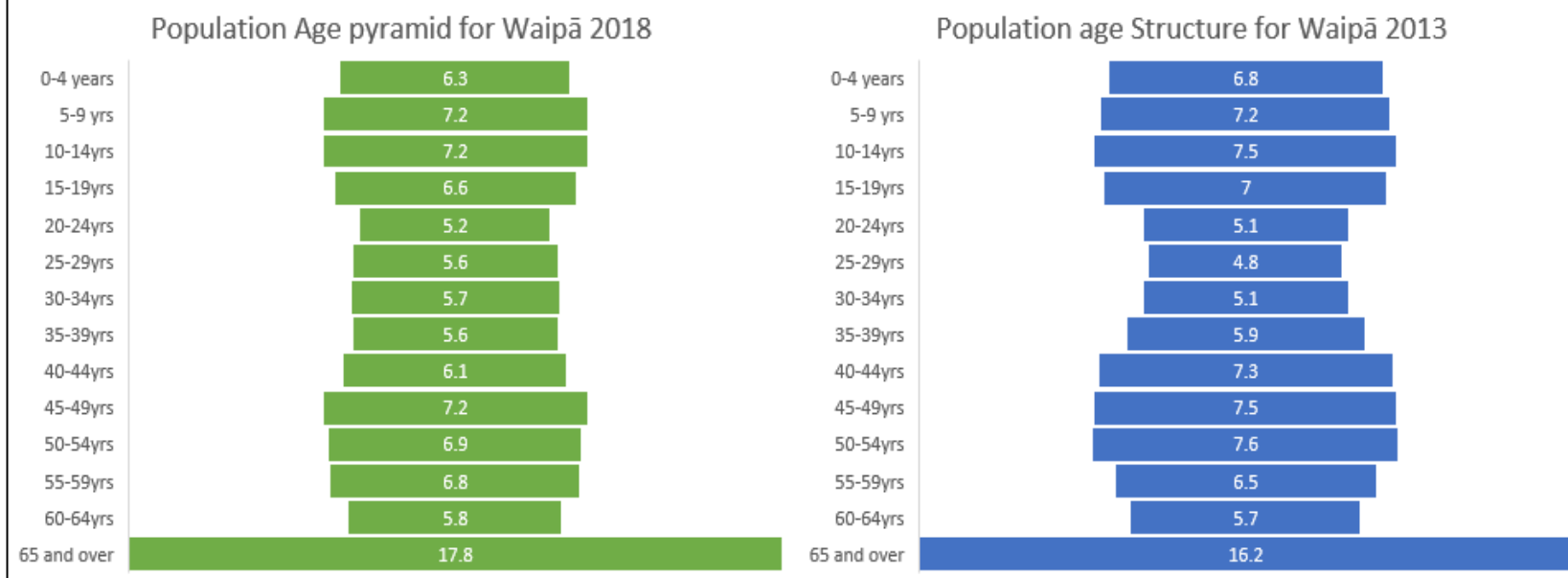
Figure 4 also illustrates how population projections since 2014 have successively elevated the population growth expected in the District.

Figure 4 Population Growth Projections for Waipā District (medium rate projection) Source: NIDEA University of Waikato 2020



The other change is population ageing. This trend is widely apparent through the developed world and is already evident in the Waipā district. Ageing is expected to become more evident over time. The proportion of the district’s population aged 60+ years is anticipated to continue growing the fastest (see Figure 5). As shown in Figure 5, the proportion of the Waipā population aged 60+ years grew from 21.9 per cent in 2013 to 23.6 per cent in 2018. This age group already comprises of almost a quarter of the overall district population.

Figure 5 The Demographic Structure of Waipā’s Population (source Infometrics 2020 – District Profile)



The Council commissions regular updates from NIDEA (National Institute of Demographic and Economic Analysis at the University of Waikato) along with its Future Proof partners to maintain a good understanding of population growth and ageing trends and changes due to migration into and from the Waipā district. More recently, this work also serves to maintain compliance with the information and monitoring requirements of the National Policy Statement on Urban Development (NPS-UD), formerly the National Policy Statement on Urban Development Capacity (NPS-UDC).

Delays in the release of the 2018 Census information by Stats NZ has meant that the Council's current population change projections are still based on the 2013 Census. Once NIDEA has the final 2018 Census information, these projections will be updated.

1.4.2 **Climate Change**

Climate change is an ongoing reality and already an important aspect of all infrastructure asset management, planning and design. It is increasingly important in the Three Waters infrastructure area, and in particular with regard to water and stormwater infrastructure resilience and sustainability.

The major identified climate risks for the district are that the district can expect warmer temperatures and more frequent extreme weather events (drought and heavy rainfall) with little change in the average annual rainfall. Greater emphasis is now placed on an integrated approach to planning for, and the provision of, key public infrastructure. There is still a high level of uncertainty around the impacts of climate change, so Council has committed to taking steps to reduce Council's greenhouse gas emissions profile and identify the risks and opportunities arising from climate change; and to continue to ensure, where appropriate, that infrastructure design includes allowance for climate change as required by legislation.

The impacts of climate change which have been considered for Waipa's infrastructure assets include:

- the anticipated increase in deformation of our peat roads (during drought the underlying peat subgrades shrink unevenly causing the road surface to deform) which will drive lower useful lives of these assets (increasing investment need in both capital and operating funding)
- stormwater asset renewals including an allowance for upsizing to cope with increased flows (as design storms include higher intensity/shorter duration events)
- consideration of other alternative measures to address water allocation both within Waipa but also regionally as drought impacts on the availability of water for municipal use
- drought events impacting on the economy of Waipa due to the high level of dairying in our district which could lead to community affordability issues.

Council is updating its information on flooding risks for its urban areas of Te Awamutu, Kihikihi and Cambridge and their future growth areas. This information is important for underpinning Council's planning of future urban development to avoid flood-prone areas.

1.4.3 National Policy and Direction

In recent years, Government has released a considerable volume of policy and directives that all local government must comply with (including national planning standards, urban development, protection of valuable farmland and water management reform). In addition, high-growth areas like Waipā have additional requirements to meet such as assessments of urban development capacity and the monitoring of this capacity and its uptake over time.

In the near future requirements to meet with the impending replacement of the Resource Management Act will exist, with two new pieces of legislation governing resource management (Natural and Built Environments Act), and regionally collaborative strategic planning (Strategic Planning Act), which will complement recent legislation informing climate change adaptation (Climate Change Response Act). Other looming legislation is the three Waters Reform (Taumata Arowai, Water Services Bill, and Water Entity formation) which will significantly impact on Council's activities in delivering waters infrastructure.

For Council there is a significant level of uncertainty regarding the impacts of these new policy and directives on its long-term planning. Notwithstanding this uncertainty, there is generally an acceptance that the changes carry greater costs and resourcing commitments for Council, although the Waters Reform may provide balance sheet head room for greater investment in other community assets; this will need to be assessed against the possible loss of governance in the provision of waters assets for our growing communities.

Over the last decade there has been a move by the Government to allow larger trucks to carry freight more efficiently on the New Zealand transport network. The expectation was that this would in fact reduce the number of trucks on the roads, thereby negating the overall possible increased in accelerated deterioration of the road pavements which could be expected.

It is now evident that the volume of freight being moved is such that we both have greater mass being carried by trucks, and an increase in numbers of trucks. This increase carries the risk of reducing asset expected lives and increasing renewal investment needed. Council has engaged services to monitor road asset condition (pavements and bridges) via a regional collaboration to ensure that the latest technology (cracking of surfacings via automated video capture) is utilised to monitor this.

1.4.4 Global Events

The COVID-19 pandemic is currently having a profound global impact, resulting in an almost overwhelming level of universal uncertainty as countries like New Zealand grapple with how to manage the ongoing and changing effects of the pandemic on communities, health systems and economies.

The pandemic is widely described as a one-in-100year event that is likely to result in a rewriting of economic understanding, urban and transport planning as well as work and health practices. At a local district level, the current viewpoints of the Council's expert economic advisors (Infometrics) and demographic advisors, (National Institute for Demographic and Economic Analysis of the University of Waikato) are that the impact of the pandemic on the district's economic and population growth projections will be largely short-term. The Council's advisors have drawn comparative evidence from previous global crises such as Financial Crisis of 2008, the Great Depression of the 1930s and the Spanish Flu pandemic of 1919. They anticipate that following two-to-three years of economic recession and limited people migration, there is a strong likelihood that the district will return to projected long-term economic and population growth.

Since the outbreak of the COVID-19 pandemic Council has been able to sustain its momentum procuring and delivering its current large programme of infrastructure capital works. Despite the pandemic impact on the regional economy Council has retained specialist internal resources and maintained access to healthy competitive resources in the supplier market. This has been assisted by Council communicating its "pipeline of work" from the 2018-2028 LTP, and by the stable procurement practices and relationships Council maintains with key suppliers in the district.

Council also has the opportunity and ability to work with and through the Waikato Local Authority Shared Services if supplier resources were more severely constrained by any unforeseen adverse event and threatened the programmed delivery of the capital work programme.

1.4.5 Natural Disasters

One of council's significant assumptions for the current LTP is that there will be no significant emergency events (natural disasters) affecting our district that cannot be funded out of the budgetary provisions or met by insurance arrangements. For our infrastructure council takes the following actions to mitigate the risk posed if this assumption is incorrect:

Ensure that we have adequate insurance to cover the district's assets against such events.

Ensure that the commercial insurances are at a level to cover the district's assets against such events when taking into consideration central government's role in disaster recovery and restoration.

Continue to give focus and attention to our involvement with sub-regional emergency management activities, and local emergency management and business continuity planning. In the event of an emergency, Council's response will be immediate, with appropriate resources redirected for that purpose.

Additionally, a committed cash advance facility of \$5 million is available to be called upon in the event of a natural disaster, and short-term lending opportunities exist with the Local Government Funding Agency.

1.4.6 Water Demand and Revenue

A key assumption in the supply of water to our communities is that we will be successful in supporting the message that our water is a limited resource, and whilst residents now pay for their water by meter (volumetric charging), this does not remove the need for careful management to ensure we have sufficient water for all. Council does have an active water demand management aimed at reducing the amount of water used per household in Cambridge and Te Awamutu from 250 litres per person per day to 190 litres.

If the water demand objectives are not achieved, the financial implications would result in significant investment in capital works to commence earlier than planned. This will also result in additional depreciation and loan interest costs as a result of bringing forward this capital work.

1.4.7 Asset Lifecycle Assumptions

Council's current asset management practices includes that the useful lives of assets are revised as part of the cyclical revaluation process for each asset class (where infrastructural assets are normally revalued two-yearly). Council has a medium level of uncertainty for the assumed lives of our underground water supply, wastewater, and storm water infrastructural assets due to the limited extent of the networks covered by condition assessments. For our other infrastructure assets the uncertainty level is low.

1.5 Key partners

1.5.1 Future Proof

Waipa District Council is a partner council in the Future Proof alliance along with Hamilton City Council, Waikato District Council, Waikato Regional Council, Iwi and Waka Kotahi NZ Transport Agency. Recently, this alliance has broadened to include key social infrastructure providing agencies such as the Waikato District Health Board and government departments like Ministry of Education and Ministry of Housing and Urban Development. There is also improved liaison with Auckland Council and its agencies regarding cross-boundary planning and infrastructure issues.

Working with these alliance partners since 2008 has led to a more integrated approach to strategic urban settlement planning, major road infrastructure planning and some social infrastructure. More recently, this integrated approach has been widened to include the planning and funding for the provision of major new wastewater and water infrastructure required to support the ongoing population growth and urban development of the sub-region.

1.5.2 Government

Working largely through the Future Proof partnership, central government has worked with the sub-regional councils in delivering major road infrastructure such as the Waikato Expressway and improvements to other state highways in the area. More recently, through initiatives such as Hamilton to Auckland Corridor Plan project and the Hamilton-Waikato Metropolitan Spatial Plan, the scope has widened to include public transport, Three Waters infrastructure, urban form and residential development.

1.5.3 Tangata Whenua

Māori are partners to the Council in decision-making processes under its Treaty of Waitangi obligations, the Local Government Act 2002 and a number of other Acts. Council has entered into Joint Management Agreements (JMAs) with Waikato Tainui, Raukawa and Ngāti Maniapoto. The JMAs outline processes and responsibilities to ensure that Council activities support Te Ture Whaimana, the Vision and Strategy for the Waikato River.

Council also has co-management responsibilities for some reserves with Ngāti Hauā and Ngāti Korokī Kahukura under the Ngāti Hauā Claims Settlement Act 2014 and the Ngāti Korokī Kahukura Claims Settlement Act 2014.

Council seeks to engage iwi at the earliest stages on in its decision-making and policy review processes and prior to general public consultation.

In 2020, the Council added a Māori representative to each of its four key committees. These representatives are known as 'Te Kanohi'. In addition, the Iwi Consultative Committee, a standing Committee of Council with membership that includes representatives of iwi and Hapū, considers significant matters of Council policy and operations with treaty implications.

Ngā Iwi Toopū O Waipā (NITOW), is an independent body which represents most hapū in Waipā considers resource consents and other issues.

At a sub-regional level, iwi are represented as governance partners on both Future Proof and the Hamilton-Waikato Metropolitan Spatial Plan.

1.5.4 **Private Developers**

The delivery of most development is done by private developers. They work jointly with the Council and other service providers regarding the provision of the supporting road, Three Waters and community infrastructure. While the Council undertakes the strategic level forward planning of key bulk infrastructure required to support urban development, much of the local-level infrastructure is undertaken by private developers working in partnership under Development Agreements with the Council. The timing of almost all development is driven by private developers.

1.5.5 **Community and Non-Government Organisations**

Some of the district's major social infrastructure has been developed through the work of community, specific interest groups and philanthropists in partnership with the Council. The Avantidrome cycling track at St Peters School as well as the Sir Don Rowlands multi-function Centre at Lake Karāpiro, are good examples of this approach.

PART 2 - MANAGING COUNCIL'S INFRASTRUCTURE

2.1 Overview

2.1.1 Council's assets

Council's assets are its created or purchased resources that have long-term financial value. Typically, they are maintained to ensure they reach or exceed their intended useful life at the end of which they are renewed or replaced.

2.1.2 Scope of Strategy

The following infrastructure areas are covered by this strategy:

- (a) Water treatment, reticulation and supply
- (b) Wastewater reticulation, treatment, and disposal
- (c) Stormwater management
- (d) Transportation
- (e) Waste management services
- (f) Community facilities

Under the Local Government Act 2002, flood protection and control works are also considered infrastructure assets. Responsibility for managing flood protection infrastructure generally rests with the Waikato Regional Council (with Council recently taking over responsibility for maintaining some rural drains), therefore this activity is not included in the Strategy.

Council also manages assets associated with the services listed below; those assets are not covered in the Strategy unless they are key to Council managing strategic issues over the next 30 years.

- (a) Mighty River Domain (on Lake Karāpiro)
- (b) Museums and heritage
- (c) Community halls
- (d) Housing for the elderly
- (e) Emergency management

Another excluded category are public swimming pools. Although these properties are owned by the Council they are operated and managed by the Waipa Community Facilities Trust on behalf of Council.

2.2 How Council Manages Infrastructure Assets

2.2.1 Activity Management Plans

Council has 10 principal documents for managing our assets, called Activity Management Plans (AMPs). The AMPs identify the activities, asset development, renewals and upgrades, and how they are delivered to achieve Council's objectives as set in its strategic documents.

2.2.2 Activity Management Maturity

Council assesses its quality of activity management against the maturity scale set within the IIMM¹ and ISO55000. Our objective is for each service area to reach either the core or intermediate maturity level depending upon the level of risk associated with the service. Currently all areas are operating below the desired level. To reach the desired maturity levels the following is required:

- (a) enhancements in governance effectiveness
- (b) reduction in resource shortages and staff churn
- (c) introduction of a documented asset management framework
- (d) consistency in approach across teams to improve efficiency and effectiveness, and generate consistent outcomes.

In late 2019, KPMG carried out an internal audit of Council's asset management planning frameworks and systems. Overall, Council was rated as "developing". A number of actions were suggested to improve asset management and better embed it into our activities. These include: executive group leadership, a single point of accountability and a documented asset management framework and system. To address the report's findings, an Activity Management Planning: Organisational Improvement Project Control Group (PCG) has been established. The intention is for this PCG to drive necessary improvements.

2.2.3 Balancing Maintenance versus Renewal

Maintenance helps ensure the assets continue to deliver the required Level Of Service (LOS) and reach their expected life. Asset renewals cover the progressive replacement of existing assets as they reach the end of their useful life.

¹ International Infrastructure Management Manual 2020

The optimum balance between maintaining and renewing assets varies across assets. For example, to maintain LOS, a highly critical asset will be proactively maintained and then towards the end of its life, renewed before actual failure, whereas a minor asset will be reactively maintained and renewed once it fails.

Overall, the level of maintenance and rate of renewal should maintain the overall condition of the asset system at a standard that ensures the community's investment in infrastructure is maintained. Failure to do so will reduce the ability of the service to deliver the required levels of service and/or increase risk of full service failure.

2.2.4 Identifying and Prioritising Asset Renewal Projects

A mix of the following criteria are used to identify the need for and priority of renewal projects:

- (a) Asset age, condition, performance, and criticality
- (b) Risk of asset failure
- (c) Alignment of renewals with work to increase asset capacity to address pressures from district growth
- (d) Opportunities to align projects from different service areas to:
 - (i) Achieve efficiencies in time and cost
 - (ii) Address multiple issues within one project
 - (iii) need to for both renewals and increases in asset capacity.

Since 2017 asset condition data has been used in adjusting remaining useful life for a number of asset classes when undertaking asset valuations. Base lives are regularly reviewed for depreciating assets where no condition data is available. These reviews are guiding council's investment in assets condition and performance data sets. Council considers that it's asset knowledge and completeness of data sets to be generally good. Each year there is a reducing amount of "found assets" added to the various inventories.

It is noted that the asset information known about Waters Above Ground Assets is lower than ideal, and collecting this data is a key focus in coming years. Replacement costs for these assets are therefore derived on a more aggregated basis (ie replacement of treatment plant as a whole rather than the components which make up the plant).

2.2.5 Unexpected Renewals

Council may face additional renewal expenditure beyond that which has been allowed for in the Long Term Plan. This may result from condition assessments highlighting previously unidentified issues or early failure of assets. Should this occur, Council will evaluate the options available to continue to manage the asset and maintain service to the community. A combination of strategies is possible based on the following options:

- (a) The first option will be to review planned renewals (initially within the same asset class and then within the same activity) to identify which low criticality/low risk renewals can be deferred so that the funding can be used on unexpected renewals. This is the preferred option as it has the lowest risk of negatively impacting the service levels received by the community.
- (b) Review of the levels of service, particular focus on critical vs. non-critical assets, and possible impacts on the customer through reduced services.
- (c) Increased capital expenditure to accelerate renewals and hence debt servicing costs impact on customers.
- (d) Increase operational costs to defer capital expenditure, and again having a direct impact on the customer.

2.2.6 Financing assets

Asset renewals are funded from the depreciation reserves. Those reserves are generated from the asset depreciation charge within Council rates. The amount is calculated annually and is based on the value of Council assets and the estimated life left. Fund levels within the depreciation reserves levels are relatively low, with the majority of the annual depreciation charge funding that year's renewals.

Operational expenditure and renewals for roads and cycleways are on average funded 49% by Council and 51% by Waka Kotahi NZ Transport Agency (NZTA). Exceptions are footpaths, bus stops, shelters and carparks, for which no NZTA funding is available.

Council's debt level is set to rise substantially, peaking in year seven (refer to the debt profile in the Finance Strategy) in order to finance the infrastructure development required to enable the forecast residential and industrial growth. The Financial Strategy sets out how debt remains within prudent limits. Debt associated with growth projects is paid down as development contributions are received (including the debt's interest component), so effectively "growth generally pays for growth".

The maximum debt term for capital spend associated with maintaining or improving levels of service is 30 years, the same timescale as the Strategy. This recognises the long-term planning involved and the intergenerational benefits of the assets being created by this debt and the need for all those who benefit from them to contribute to their costs. Council's Financial Strategy provides more details on how Council manages asset finances.

2.2.7 Service Delivery Approach

Activities	Key Services	Delivery Model
Stormwater	Collection and reticulation, retention, treatment and discharge	<ul style="list-style-type: none"> ▪ The service are delivered through a mix of in house, shared services and external contractor resources. ▪ Most operational, compliance and project management work is completed in house. ▪ Water sampling and laboratory services are carried out by a shared services arrangement with Waikato LASS. ▪ External contractors are brought in to fill gaps in expertise or resourcing, and also where physical construction works are outside the capabilities or capacity of our internal crews.
Wastewater	Collection and reticulation, treatment, and discharge	
Water Supply	Source, treatment and reticulation	
Transportation	Roads, Footpaths, and Cycleways including associated structures and facilities	<ul style="list-style-type: none"> ▪ General & specialist maintenance contracts ▪ Bridge management professional services and data collection through the Regional Asset Technical Accord (RATA) ▪ Specific tendered contracts for major repairs ▪ Joint management contract with Waka Kotahi (NZTA), Hamilton and Waikato Councils for signals and separate CCTV management contract. ▪ In-house enforcement staff
	Passenger Transport	<ul style="list-style-type: none"> ▪ 9 year bus service contract administered by Waikato Regional Council ▪ Taxi provider contracts administered by Waikato Regional Council
Community Facilities	Libraries	<ul style="list-style-type: none"> ▪ Delivered through in-house resources
	Cemeteries	<ul style="list-style-type: none"> ▪ Delivered through in-house resources
	Public Toilets	<ul style="list-style-type: none"> ▪ Public toilets are cleaned and maintained through a contract with an external supplier. ▪ Renewals, upgrades and new facilities are identified, programmed and managed inhouse with the physical works are undertaken by external contractors.
	Parks	<ul style="list-style-type: none"> ▪ Urban sites are maintained using in-house resources ▪ Rural sites are maintained under an external contract

Activities	Key Services	Delivery Model
		<ul style="list-style-type: none"> Renewals, upgrades and new facilities are identified, programmed and managed inhouse with the physical works are undertaken by external contractors. Street trees are managed in-house with the physical work undertaken by external contractor

2.2.8 Demand Changes and Management Strategies

Activities	Key Demand Changes	Key Demand Driven Issues	Key Demand Management Strategies
Stormwater	<ul style="list-style-type: none"> Population growth leading to housing development and a consequential increase in demands on infrastructure Increasing customer expectations Legislation: tighter regulatory requirements Climate change: increased temperatures, frequency of intense rainfall events Demographic changes: new large industrial areas in Cambridge, Hamilton Airport and Te Awamutu 	<ul style="list-style-type: none"> Growth will require additional infrastructure as well as putting increasing pressure on the existing system The design capacity of stormwater assets may need to be altered 	<ul style="list-style-type: none"> Promotion of on-site disposal and water re-use District Plan: development rules and guidelines Education, awareness and regulation of community responsibilities for stormwater quality
Wastewater	<ul style="list-style-type: none"> Population growth leading to housing development and a consequential increase in demands on infrastructure Increasing customer expectations Legislation: tighter regulatory requirements Climate change: increased rainfall events which increases the volume of water in the wastewater network 	<ul style="list-style-type: none"> Current network capacity is insufficient to cope with growth, requiring additional infrastructure Current treatment plants are insufficient or inappropriate to ensure compliance with potential changes in Resource Consents conditions 	<ul style="list-style-type: none"> Reduced demand for water should also have a beneficial impact upon demand for wastewater services. Inflow and Infiltration: infiltration reduction programme will help reduce inflow and infiltration allowing capacity for growth Trade Waste: Trade waste customers can have an impact on network condition and compliance of WWTPs discharges, managed via the Trade Waste Bylaw and

Activities	Key Demand Changes	Key Demand Driven Issues	Key Demand Management Strategies
	<p>and more frequent droughts increase the risk of odour</p> <ul style="list-style-type: none"> ▪ Demographic changes: New large industrial areas in Cambridge, Hamilton Airport and Te Awamutu 		<p>a proactive management programme for monitoring and managing trade waste discharges.</p> <ul style="list-style-type: none"> ▪ Support education programmes such as 'wet wipes'
Water Supply	<ul style="list-style-type: none"> ▪ Population growth leading to development ▪ Increasing customer expectations ▪ Legislation: tighter regulatory requirements ▪ Climate change: increased temperatures frequency of droughts and intense rainfall events ▪ Demographic changes: new large industrial areas in Cambridge, Hamilton Airport and Te Awamutu 	<ul style="list-style-type: none"> ▪ Capacity of current infrastructure is insufficient to supply new growth areas and new growth will manifest as reduced LOS in some areas as pressure levels drop. ▪ Increased pressure on water resources and stream ecology from very low river and stream flows. ▪ Increase in peak demand for stock watering, irrigation and domestic use. Increases in peak demand will bring forward the requirement for more storage capacity. 	<ul style="list-style-type: none"> ▪ Water Metering: Universal water metering and volumetric pricing was implemented across the District in 2018 to reduce residential demand across the supply areas. ▪ Smart Water: This programme aims to change the way people think and use water ▪ Network Leakage reduction: Repair leaks reactively and undertake active leak detection surveys. Leakage reduction is a priority for Cambridge Water Supply Scheme
Transportation	<ul style="list-style-type: none"> ▪ Population Growth ▪ Climate Change ▪ Employment Growth ▪ Demographic Change (particularly an aging population) ▪ Customer Expectations ▪ State Highway Network Change ▪ Mode Change ▪ Legislative Change 	<ul style="list-style-type: none"> ▪ Higher traffic volumes are creating greater road user risks ▪ Employment growth is leading to increased traffic on certain roads. ▪ Parking demand is increasing in urban areas ▪ Increased demand for passenger transport services ▪ Extent of footpath networks in urban areas is below customer expectations ▪ Extent to which footpaths connect rural residential streets close to towns is below customer expectations ▪ Current culvert sizes may be insufficient to handle higher rainfall intensities 	<ul style="list-style-type: none"> ▪ Effective land use planning, growth around existing nodes and towns, structure plans including a range of transport options and town centre plans ▪ Provision of transport options to reduce congestion and demand for more infrastructure such as, bike, bus, pedestrian networks, disability access. ▪ Network optimisation to make best use of existing infrastructure, safety improvements, optimised service levels and protection of transport routes including rail. ▪ Provision of additional infrastructure to meet demand

Activities	Key Demand Changes	Key Demand Driven Issues	Key Demand Management Strategies
		<ul style="list-style-type: none"> Some infrastructure is vulnerable to damage from high intensity rainfall events The footpath network does not provide the required level of smoothness, width and accessibility required for an aging population, and cycle and mobility usage 	

Activities	Facilities	Key Demand Changes	Key Demand Driven Issues	Key Demand Management Strategies
Community Facilities	Libraries	<ul style="list-style-type: none"> Population Growth Population and social demographics Customer Expectations Legislation Climate Change Technology Affordability 	<ul style="list-style-type: none"> Stock levels insufficient to maintain LOS as population grows Demand for lifelong learning services will exceed capacity Current adult book issues expected to continue to decrease under current fee policy Staffing, space and resources will be insufficient to meet increased demand for increased number and variety of programmes Anticipated increase in demand for eResources and digital services will exceed the ability of current staff and resource levels to meet the demand. Demand for longer hours from customers will exceed the ability of current staffing levels. 	<ul style="list-style-type: none"> Given the nature of the library service is to maximise people's use of the library service and its resources demand strategies will need to focus on meeting changing demand while minimising the negative impacts of doing so

Activities	Facilities	Key Demand Changes	Key Demand Driven Issues	Key Demand Management Strategies
	Cemeteries	<ul style="list-style-type: none"> Population Growth Climate Change Increasing Customer Expectations Demographic Change Legislation: Tighter Regulator Requirements 	<ul style="list-style-type: none"> Cemeteries in Hautapu and Te Awamutu will reach capacity within 15-20 years The increase in the aged population will use existing capacity quicker. Current resourcing levels are insufficient to cope with an increase in internments. Natural burials, which include trees to be planted on top of the grave, will use up available space quicker than traditional burials. 	<ul style="list-style-type: none"> Possibility of encouraging a trend towards cremation services which would ease congestion in our Cemeteries as cremations take considerably less space than casket burials
	Public Toilets	<ul style="list-style-type: none"> Population Growth Environmental Impact Requirements Customer Expectations Demographic Change Legislation: Tighter Regulator Requirements Changes to Tourism Industry 	<ul style="list-style-type: none"> Current provision is no longer sufficient, both in capacity and degree of coverage, to meet the increasing usage levels The current provision does not provide adequate coverage of the proposed district cycleway network and to meet increased demand from tourism Current provision does not provide for the specific needs of an aging and ethnically diverse population. 	<ul style="list-style-type: none"> The only demand driver which could potentially be influenced would be customer expectations, though this would be challenging to influence as customers will typically expect the same standards as neighbouring (and nationwide) councils. At this time Council are not planning any work to attempt to influence expectations.
	Parks	<ul style="list-style-type: none"> Population Growth Demographic Change Increasing Customer Expectations 	<ul style="list-style-type: none"> Asset usage levels are now above intended levels leading to quicker deterioration and early asset failures 	<ul style="list-style-type: none"> The key demand management strategy for Community Services will be focused on encouraging multiple usage of sites to maximise utilisation

Activities	Facilities	Key Demand Changes	Key Demand Driven Issues	Key Demand Management Strategies
		<ul style="list-style-type: none"> ▪ Changes in population ethnicity ▪ Legislation ▪ Sporting Expectations ▪ Climate Change ▪ Council Direction and Goals 	<ul style="list-style-type: none"> ▪ Residents travelling further to parks ▪ New parks in growth areas placing pressure on already stretched maintenance resources ▪ Gaps in play provision in certain areas of the district. ▪ Sport field provision is insufficient to meet growth in existing sport codes or provide for new sport codes. ▪ Access and site facilities at our conservation reserves are insufficient to meet increased demand 	

2.3 Responding to Growth

2.3.1 Staged development of new assets

Council needs to provide additional core infrastructure to enable forecasted growth. Following expansion, a degree of redundancy will exist within a network until growth results in full utilisation of that service. However, enlarging networks too far and too quickly risks the costs of development being incurred many years before those costs can be recovered, leading to issues relating to servicing the debt. Additionally, if the forecast growth fails to materialise, it will leave Council with reduced development contribution revenue to service its debt.

To manage this risk, Council will, wherever possible, try to develop new infrastructure capacity in a staged or modular fashion: adding just enough new capacity to cater for medium-term, rather than long-term growth. This is reasonably straightforward for reticulated systems, but less so for treatment plants or reservoirs where a single upgrade may offer a more efficient solution to frequent modular development.

2.4 Maintaining and Changing Levels of service

2.4.1 Defining Levels of Service

Levels of Service (LOS) are the parameters or combination of parameters that reflect social, political, economic and environmental outcomes that the organisation delivers. LOS statements describe the outputs or objectives an organisation or activity intends to deliver to customers. As the LOS statements, measures, and targets for the first 10 years of the Strategy, are covered in detail in the main body of the Long Term Plan, they are not repeated here.

There are no significant changes to LOS currently planned. There will be LOS changes driven by legislative change, however. The full impact of those mandated LOS changes on the service will be determined as and when those legislative changes occur. This does raise the risk of expenditure requirements over and above those currently planned.

2.4.2 Challenges to Meeting Levels of Service

The key factors that will challenge Council's ability to deliver the desired Levels of Service (LOS) while avoiding unsustainable debt and other problems for future ratepayers are:

- (a) Population growth – maintaining LOS for all while expanding volume and coverage of services.
- (b) Ageing population – understanding and adapting to changing LOS requirements resulting from more people aged 60+ years within the community.
- (c) Technology change – digital technology changes faster than the Council can often afford to adopt and adapt to in its LOS.

- (d) Consent compliance - compliance needs to be maintained, and in some cases raised, while simultaneously expanding service coverage and associated infrastructure.
- (e) Increasingly restrictive consent conditions – consent conditions are expected to become more stringent as environmental standards are raised.
- (f) Climate change – how does Council plan for an uncertain size and frequency of weather events and still maintain LOS and cost-effectiveness?
- (g) Increasing number of stormwater ponds and swales required as part of Council’s climate change and stormwater management response, more detention ponds and swales require more upkeep to maintain the LOS.
- (h) Uncertainty around demand – within the Community Service area, particularly park and reserves, there is limited information to support analysis and forecasting of demand levels and its implications for LOS.

2.5 Delivery of Capital Expenditure

Council's ability to plan and carry out the proposed programme of infrastructure capital works will impact the overall delivery of infrastructure to maintain levels of service, support growth, and achieve asset renewal and development.

Council understands and appreciates the challenge of completing a large complex capital works programme where there may be capacity constraints on internal and/or external resources, and uncertainties in the delivery supply chain. Risks have been identified with specialist role shortages, capacity gaps and market constraints. Through this Strategy Council has placed more emphasis on building internal capacity so that appropriate management disciplines and reporting are in place to manage capital programme risks and deliver projects within planned timeframes.

Council will actively plan across financial years to provide greater certainty of resource requirements. Clear capital programme governance structures will be established to support best practice project delivery.

Council has developed a Project Management Framework which will be implemented across the organisation. This will enable Council to better monitor and support all projects including maintaining financial controls, procurement, asset and risk management, and achieving project objectives. Therefore, Council will have a consistent project management approach across the organisation with clear objectives that:

- projects are effectively managed within the scope, quality, time, budget, risk and benefits;
- appropriate governance and control are established;
- appropriate authorisation and approval are established throughout the life of a project;
- stakeholder communication is inclusive;
- post implementation reviews are conducted and used for continuous improvement; and,
- project deliverables are identified, managed and objectives are met.

Council has recently established a specialised Project Delivery team within its organisation, which is primarily responsible for the planning and execution of the capital works infrastructure programme. This team can be scaled to meet the needs of the Council's medium and long-term horizon.

Council will also explore regional procurement initiatives or arrangements through the Waikato Local Authority Shared Services (WLASS) for infrastructure services or supplies, such as the recently established Professional Services Panel that assists Council to identify the best cost-effective resources for its programme requirements.

2.6 Critical Assets

Activity Area	Critical Assets		Condition Knowledge of Higher Criticality Assets
Stormwater	<ul style="list-style-type: none"> Pipes 	<ul style="list-style-type: none"> 1.2% of network (by length) deemed to be of High or Very High criticality 	<ul style="list-style-type: none"> While condition assessment focuses on higher criticality assets not all High or Very High criticality pipes have been assessed. Currently there is limited condition information held for these asset types at all criticality levels The implementation action of performance and condition assessment schedules is planned for 2021/22 and is expected to include inspection of manholes, structures, and more refined inspection of gravity pipes
	<ul style="list-style-type: none"> Manholes 	<ul style="list-style-type: none"> Manhole criticality is linked to the pipe assets in most cases. 	
	<ul style="list-style-type: none"> Ponds 	<ul style="list-style-type: none"> These structures are all deemed critical as they are required to protect our streams and the Waikato River from the effects of pollution from urbanisation 	
	<ul style="list-style-type: none"> Wetlands 		
	<ul style="list-style-type: none"> Treatment Devices 		
Wastewater	<ul style="list-style-type: none"> Pipes 	<ul style="list-style-type: none"> 24% of network (by length) deemed to be of High or Very High criticality 	<ul style="list-style-type: none"> While condition assessment will focus on higher criticality assets not all High or Very High criticality pipes have been assessed. Currently there is limited condition information held for these asset types at all criticality levels The implementation of a condition assessment schedule is planned for 2021/22 and is expected to include inspection of manholes, critical rising mains, structures, plant and PS assets.
	<ul style="list-style-type: none"> Manholes 	<ul style="list-style-type: none"> Manhole criticality is linked to the pipe assets in most cases. 	
	<ul style="list-style-type: none"> Key Connections 	<ul style="list-style-type: none"> These provide a service to our key customers who provide a district wide service i.e. medical centres, schools 	
	<ul style="list-style-type: none"> Pump Stations 	<ul style="list-style-type: none"> These are considered to be critical as they are located in the low point of our network and therefore are at a high risk of wastewater spills and odour. Currently in the asset information management system, all assets within pump 	

Activity Area	Critical Assets		Condition Knowledge of Higher Criticality Assets
		stations are high critical, assignment of different criticality for each component is recommended.	
	<ul style="list-style-type: none"> ▪ Treatment Plants 	<ul style="list-style-type: none"> ▪ The wastewater treatment plants are considered to be critical as they are our main form of treatment. Currently in the asset information management system, all assets within treatment plants are high critical, assignment of different criticality for each component is recommended. 	
Water Supply	<ul style="list-style-type: none"> ▪ Pipes & valves 	<ul style="list-style-type: none"> ▪ Pipes that provide water to significant customers such as medical centres and high use commercial customers are considered to be critical. 	<ul style="list-style-type: none"> ▪ While condition assessment will focus on higher criticality assets not all High or Very High criticality pipes have been assessed.
	<ul style="list-style-type: none"> ▪ Trunk mains & valves 	<ul style="list-style-type: none"> ▪ Our trunk/bulk and ring main feeds reservoirs and the network, if these were to fail interruptions to supply or reduction in pressure would be felt by customers 	
	<ul style="list-style-type: none"> ▪ Treatment Plants 	<ul style="list-style-type: none"> ▪ These assets are critical to our ability supply water and to ensuring that water is meeting New Zealand drinking water standards. Currently in the asset information management system, all assets within treatment plants are high critical, assignment of different criticality for each component is recommended. 	<ul style="list-style-type: none"> ▪ Currently there is limited condition information held for these asset types at all criticality levels ▪ The implementation of a condition assessment schedules is planned for 2021/22 and is expected to include inspection of structures, plant assets, and more proactive inspection of critical pipes
	<ul style="list-style-type: none"> ▪ Reservoirs 	<ul style="list-style-type: none"> ▪ These assets are critical to our ability supply water and to ensuring that water is meeting New Zealand drinking water standards. Currently in the asset information management system, all assets within reservoirs are high critical, assignment of 	

Activity Area	Critical Assets		Condition Knowledge of Higher Criticality Assets
		different criticality for each component is recommended.	
	<ul style="list-style-type: none"> ▪ Pumps Stations 	<ul style="list-style-type: none"> ▪ These assets are critical as pump failure would be felt by customers through disruption to supply or reduction in pressure 	
	<ul style="list-style-type: none"> ▪ Fire Hydrants 	<ul style="list-style-type: none"> ▪ Fire hydrants must be operational at all times to ensure that they are available for fire fighting 	
Transportation	<ul style="list-style-type: none"> ▪ Bridges 	<ul style="list-style-type: none"> ▪ Significant detours for local traffic, significant traffic congestion likely, important freight route and supports critical water supply, gas and communication utilities. Important access for emergency services in an event. ▪ Supports critical water supply, gas and communication utilities. Important access for emergency services in an event. 	<ul style="list-style-type: none"> ▪ Condition assessed 2 yearly at a higher level with detailed assessment every 6-12 years based on risk
	<ul style="list-style-type: none"> ▪ Urban and Rural Arterial Roads (5% of road network) 	<ul style="list-style-type: none"> ▪ These roads provide high capacity and connectivity across our district and to the highway network. They are the principal routes used by freight and passenger transport. These routes would be first priority for repair in an emergency response 	<ul style="list-style-type: none"> ▪ Condition assessed annually for high volume roads, all others done biannually
Community Facilities	<ul style="list-style-type: none"> ▪ Parks 	<ul style="list-style-type: none"> ▪ Structures ▪ Playground Equipment 	<ul style="list-style-type: none"> ▪ All Parks, Playground and Walking/Cycling Assets were condition assessed in 2019.
	<ul style="list-style-type: none"> ▪ Cemeteries 	<ul style="list-style-type: none"> ▪ Structures 	<ul style="list-style-type: none"> ▪ All Cemetery assets were conditioned assessed in 2019
	<ul style="list-style-type: none"> ▪ Public Toilets 	<ul style="list-style-type: none"> ▪ All public toilets are deemed to be highly critical 	<ul style="list-style-type: none"> ▪ Public Toilets have not been recently condition assessed, what data is held from ad-hoc staff feedback. ▪ Development and implement an appropriate methodology for capturing appropriate levels of condition data for

Activity Area	Critical Assets		Condition Knowledge of Higher Criticality Assets
			public toilets schedules is planned for 2021/22.
	<ul style="list-style-type: none"> ▪ Libraries 	<ul style="list-style-type: none"> ▪ Library buildings 	<ul style="list-style-type: none"> ▪ Limited condition data is currently held on the buildings. Property have identified actions to deliver a more structured approach to assessing and recording building condition

2.7 Resilience of Critical Infrastructure Assets to Natural Hazards

2.7.1 Physical Resilience

Where physically and financially practicable Council's infrastructure networks are designed to ensure a degree of resilience to natural events.

Transportation

For almost all properties there is a secondary route should a bridge on the primary route become compromised.

Wastewater Reticulation, Treatment, and Disposal

The wastewater networks have some built-in operational flexibility and ability to respond to natural hazards. Planned network resilience improvements include additional storage at key pump stations, replacement of pipes with more resilient materials. The overall resilience of the wastewater treatment plants will be increased during planned upgrades.

Water Treatment and Supply

The water supply networks are configured to utilise multiple sources. In 2021, the Te Awamutu water supply will be connected to the Pukerimu water supply. There is also potential for the Pukerimu water supply to be connected to service Cambridge in the future. An earthquake resilience study of the existing reservoirs has found that seismic strengthening (or renewal) is required. Additional storage of treated water is also proposed. Several treatment plants have been recently upgraded which have incorporated increased resilience to natural hazards.

Stormwater Management

There is currently little understanding of the seismic resilience of critical stormwater assets, work is planned to address this.

Waste management services.

The resilience of this service is directly linked to the resilience of Council's roading network; isolation of part(s) of the district due to road network failures will significantly impact this service.

Community Facilities

Unlike lifeline services such as roads and Three Waters, community facilities (except those identified welfare facilities needed in an emergency) are not as critical. There is therefore, a reduced urgency to reinstate services following a significant event compared to lifelines services. They do however provide a sense of 'normality' meaning services do need to be restored. At this time, most community facility assets have not been assessed for resilience.

2.7.2 Financial Resilience

For smaller events, the assumption is that costs will be met by existing budgetary provisions or through insurance arrangements. For significant events the assumption is that 60 per cent of the costs associated with damage to Councils underground infrastructure assets will be provided by the government for the portion of the cost exceeding \$10 million.

2.8 Three Waters Review

The Government is reviewing how to improve the regulation and supply arrangements of drinking water, wastewater and stormwater (Three Waters) to better support New Zealand's prosperity, health, safety and environment. Most Three Waters assets and services, but not all, are owned and delivered by local councils.

The Three Waters Reform is a cross-agency initiative led by the Minister of Local Government. Other involved agencies and portfolios include: Health, Environment, Finance, Business Innovation and Employment, Commerce and Consumer Affairs, Primary Industries, Climate Change, Infrastructure, Civil Defence and Emergency Management, Housing and Urban Development, Transport, Conservation, and Rural Communities.

As of July 2020, the Government approved a suite of regulatory reforms to help ensure safe drinking water, and deliver improved environmental outcomes from New Zealand's wastewater and stormwater systems.

A new dedicated water regulator (Taumata Arowai) has been established to oversee the regulatory regime (Taumata Arowai—the Water Services Regulator Act 2020 enacted 22 July 2020). The regulator has a range of responsibilities and functions, including sector leadership; standards setting; compliance, monitoring and enforcement; capability building; information, advice and education; and performance reporting.

The Water Services Bill is a companion piece of legislation to the Taumata Arowai—the Water Services Regulator Act. It was first introduced to Parliament in July 2020 and it proposes to provide the tools and framework for Taumata Arowai to operate. At this stage the Bill applies to drinking water rather than stormwater and wastewater.

In July 2020, the Government announced a funding package to support the delivery of Three Waters Services in response to the COVID-19 pandemic and also plans to transform the industry to large scale service providers over the next three years.

It is likely that the delivery of water and wastewater services (stormwater services are to be confirmed) will be transferred from Council to a new larger utility (covering a wider geographical area) in the next three years. For the purpose of the Strategy, projects and costs are based on the current delivery mechanism.

2.9 Other Significant Infrastructure Challenges

Aside from growth planning, council is facing two significant infrastructure challenges in responding to community, stakeholder, and iwi expectations. These are described below:

Cambridge Waste Water Treatment Plant (WWTP)

Council is currently participating in a sub-regional detailed business case for the investigation of a possible shared waste water treatment plant with Hamilton City Council and Waikato District Council near the Airport. This business case is using a 100-year horizon to fully assess the economic and environmental benefits, costs and risks to determine what is the most appropriate investment for our communities.

Council and the community need to assess the benefits arising from a new sub-regional plant (a larger scale plant provides resource recovery opportunities and the ability to support “wet-industry”) against the much higher cost for this option (including an approximate \$50M conveyancing cost to take effluent from Cambridge to the airport location).

Council has included the costs associated with a major upgrade to the current WWTP on its current site, in the current LTP. This investment (\$100.2M in the LTP) will need to be assessed against what investment the Council and our sub-regional business case partners, would need to make in the next 30 to 100 years for a new large sub-regional plant near the airport. A decision on this is likely to be made in 2021.

Cambridge River Crossings

There is currently a level of concern within the community that insufficient planning has been undertaken in providing sufficient river crossing capacity in Cambridge given the town's recent high growth in population. A review of Council's integrated transport strategy is currently underway which will provide technical evidence as to what transport network is needed for Cambridge, and when further river crossing capacity is required.

It is also noted that the Government direction for transport is to further encourage a move away from the use of private cars, and instead greater use of public transport, walking and cycling (including scooters etc). There is

Te Awamutu Western Arterial

Council current has a designation in place for a ring road to the west of Te Awamutu. This designation has required council to acquire land holdings affected by the designation as the property owners wished to sell. In the transport strategy review currently underway the form and function of designated western arterial will be reconsidered and it is considered that the future cost of construction could be significantly reduced (2012 estimate \$38M).

Provision, Maintenance and Management of Future Stormwater Infrastructure

In 2022/23 Council will be seeking a new comprehensive stormwater discharge consent for Waipa's urban stormwater system management. It is anticipated that this will drive a much higher level of discharge quality requirements, and require higher levels of capital and operating investment. As these impacts are not yet fully understood, no provision for this investment has yet been included in this strategy, beyond what is required to cater for growth areas where individual consents provide clear guidance on what is needed.

2.10 Three Waters Master Plan

Council has prepared a master plan for its water, wastewater and stormwater (Three Waters) activities to inform the 2021 Activity Management Plans (AMPs), Long Term Plan (LTP) and the Strategy. The master plan considers projected growth, resilience, levels of service (LOS) and key influences affecting these activities.

The master plan reviews the current and future technical performance requirements of Three Waters activities and provides a 30-year programme to maintain LOS. The recommended master plan approach to achieve this is outlined below:



During consideration of the master plan it was determined that the full renewals sum required (\$144M between 2021 and 2031) was unaffordable. The sum was significantly higher than the depreciation revenue expected for that period (approx. \$89M) and the residual value would need to be loan funded. This additional loan funding would have required Council to exceed its debt to revenue ratio.

A review of the assumptions in the programme (reducing the contingency risk values and reducing renewal investment on low risk asset categories) meant that the revised investment in three waters renewals for the 10-year LTP period was \$85M (un-inflated value). This compares with the investment in the 2018-2028 LTP of \$59M (un-inflated value) being signalled.

This strategic response in balancing asset risk with affordability will required a strong monitoring framework to ensure that it does not impact on the resulting levels of service delivered to our community. Another risk management response is to continue to invest in asset condition and performance data to understand asset criticality better, since this was used as a key criteria in the decision to reduce the renewal investment levels.

Consenting considerations

The Three Waters Masterplan takes into account the water take and water discharge consenting requirements of the Waikato Regional Council. This consenting regime has been mapped into the future planning for the Council’s three waters along with assumptions regarding meeting more stringent environmental standards for waste water and storm water discharges.

2.11 Key Assumptions

The following are considered key assumptions and uncertainties identified and considered in delivering the Infrastructure Strategy.

Assumption	Uncertainty	Significance & Mitigation
Climate Change will impact the district through more severe storm events and more frequent droughts.	High	High significance. Storms and droughts could have a very significant impact on the district’s infrastructure and its failure to meet the need of residents. Council has an ongoing programme of work to improve

Assumption	Uncertainty	Significance & Mitigation
		the resilience and its water supplies, waste water treatment plants, reticulation networks as well stormwater capacity and road surfacing. It is also improving network resilience through establishing alternative water supply connections as well as having alternative road and bridge transport routes
Population growth of the district's towns will continue to be high.	Medium	High significance. Growth and development capacity will monitored annually and be assessed every three years. Key supporting infrastructure is required to support future development. Council is preparing a strategic spatial plan to better coordinate forward planning of growth and the infrastructure required to support it.
Government legislative and policy requirements	Medium	High significance. Recent national policy statements have added a significant compliance and cost burden on local authorities, particularly those like Waipa that are identified being in high growth areas. It is expected that quality requirements for the provision of water and treatment and discharge of treated wastewater will continue to be raised. Council has prepared a three waters

Assumption	Uncertainty	Significance & Mitigation
		masterplan to guide its decision making for water infrastructure.
Economic change	medium	High significance. The economy of the district is directly affected by the economic wellbeing of New Zealand and more immediately by Waikato and Auckland and Hamilton. It is also impacted by agricultural wellbeing. A growing local economy underpins population growth, construction and the need for growth related infrastructure to be provided. Similarly, any downturn in the economy reduces the need for expanding support infrastructure. The Council has regular economic monitoring done and commissions economic outlook forecasts to guide its forward planning.
Consenting requirements		It is expected that consenting requirements for the provision and treatment of water as well as the discharge of treated wastewater will become more stringent over time. Council has prepared its three waters masterplan to guide its decision making for water infrastructure.

New building standards in relation to earthquake protection will have a financial implication on above ground assets, such as treatment plant buildings, reservoirs etc. in order to meet standards Assessment on earthquake resilience for current assets yet to be complete. Level of uncertainty = High Legislation requires 'priority' Council buildings to be brought up to earthquake

standard by 2029 and other buildings by 2041. There is time to allocate funding as part of the next 10-Year plan in 2021 once assessment has been complete. Projected debt levels will allow room to fund once quantum is assessed. Potential Impact = Medium

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PART 3 - WATER TREATMENT AND SUPPLY

3.1 Overview of the Water Treatment and Supply Service

3.1.1 What council does

- (a) Collection, treatment, and supply of potable water
 - (i) Collection and treatment (bores, river intake, treatment plants)
 - (ii) Storage and distribution (reservoirs, pump stations, pipelines)
- (b) Encourage water use efficiency through water meters, leak reduction and public awareness and support.
- (c) Provide water supply through four schemes: Cambridge (includes Leamington, Karāpiro and Maungatautari), Te Awamutu & Pirongia, Kihikihi and Pukerimu.

3.1.2 The Water Schemes

- (a) Cambridge
 - (i) Three main networks; Karāpiro Village, Cambridge North and Cambridge South.
 - (ii) Water is supplied on an unrestricted basis to the urban residential areas of Cambridge and Karāpiro Village.
 - (iii) Sourced from: Lake Karāpiro and Waikato River
 - (iv) Treatment: Karāpiro Water Treatment Plant (WTP) and Alpha St WTP
- (b) Te Awamutu and Pirongia
 - (i) Two reticulation zones; Te Awamutu and Pirongia
 - (ii) Sourced from: Mangauika Stream and Frontier Road Bore
 - (iii) Treatment: Te Tahi WTP and Frontier Road WTP
- (c) Kihikihi
 - (i) Consists only of the Kihikihi township
 - (ii) Sourced from: Hall St and Church St bores
 - (iii) Treatment: Rolleston St WTP
- (d) Pukerimu
 - (i) Services the Ōhaupō township and the Pukerimu rural area
 - (ii) Unrestricted to Ōhaupō
 - (iii) Restricted basis to rural properties, boundary of Mystery Creek events centre, and Hamilton Airport
 - (iv) Sourced from: Waikato River
 - (v) Treatment: Parallel Road WTP

3.1.3 Overview of assets

Summary of Water Treatment & Supply Assets (30 June 2019)

Type of Water Supply Asset	Quantity	Gross Replacement Cost	Optimised Depreciated Replacement Cost
Treatment Plants	6	\$37,919,575	\$22,050,060
Reservoirs	17	\$16,246,471	\$10,150,034
Watermains	607km	\$139,816,879	\$75,394,858
Valves and Hydrants	6,101	\$12,612,873	\$6,086,046
Number of Connections	15,586	\$22,635,012	\$15,081,804
Totals		\$229,230,810	\$128,762,802

3.2 Challenges and Proposed Actions

3.2.1 Current and Future Issues

- (a) Storage - sufficient reservoir capacity is currently available. Reservoir condition or performance is poor for some assets, with risks identified with respect to contamination, seismic resilience and operability. Insufficient future capacity is forecast as a result of growth in demand.
- (b) Treatment capacity - there is sufficient water treatment capacity available within each scheme once the Parallel Road WTP upgrade and pipeline to Te Awamutu is commissioned (mid 2021). Further treatment capacity is required for all schemes to service growth over the next 30 years.
- (c) Water quality – Kihikihi experiences issues with aesthetic water quality related to manganese in the groundwater source. During summer algal blooms can cause taste and odour issues in the Te Tahi supply (although this supply will be significantly reduced from mid-2021).
- (d) Climate change - the potential implications of climate change on the supply/ demand balance are not well understood. Potential future effects include increased demand due to warmer weather and population growth, combined with reduced water availability as a result of source restrictions.
- (e) Energy efficiency - energy efficiency/carbon footprint of new treatment plants and pump stations are and will be considered for improved sustainability.
- (f) Consent allocation - the reduction in the Te Tahi consent from 2030 will reduce the amount of water allocation available for Te Awamutu and Pirongia. However this is offset by the transfer of water from Parallel Rd WTP (which will be completed in mid-2021). Additional water supply is likely to be required around 2040.
- (g) Pressure - some areas of Cambridge and Te Awamutu currently suffer from low pressure which could be exacerbated with future population growth.

3.2.2 Projects 2021 to 2051

These projects have been included in the Infrastructure Strategy due to their significant level of investment and community impact if they are not implemented.

Note: where no alternative to the most likely scenario has been provided, the only other option so far identified is to do nothing and retain the status quo. In all cases this is likely to result in failure to comply with regulatory requirements, and/or loss of water supplies, hindered growth and reduced LOS to current and new customers, or maintained LOS at a higher cost or longer timescale.

Project WS1: Alpha Street Water Treatment Plant		Area: Cambridge
<p>Most likely scenario: Upgrade the Alpha Street water treatment plant to meet drinking-water standards, levels of service and comply with resource consent conditions providing increased connectivity between water supply schemes across the district.</p> <p>This will increase the capacity of the Alpha Street treatment plant (currently 2.8ML/d) up to current abstraction consent levels (6.5ML/d) to help meet water demand projections.</p>		
<p>Alternative scenario 1: Address local water supply issues locally with no connectivity between schemes. Upgrades to water sources and treatment plants occur in isolation.</p>		
<p>Alternative scenario 2: Connectivity between schemes with all upgrades concentrated at Parallel Road; able to meet growth in demand across the district from this additional supply.</p>		
<p>Anticipated project date:</p> <p>2023 to 2027</p>	<p>Estimated costs (including inflation):</p> <p>\$6.3 million</p>	<p>Funding Source</p> <p>Growth</p>

Project WS2: District-wide Reservoir Renewals and Capacity Upgrades

Area: District

Most likely scenario: Provide asset renewals for existing assets with capacity upgrades to meet growth demand. There are 17 reservoirs across the district providing approx. 24hrs storage. Four reservoirs require short term repairs and strengthening to achieve their asset life. Nine reservoirs have reached their useful asset life (during the LTP term) and require complete renewals with some increase in capacity for growth.

To meet current water-use rates and projected population increases as well as increasing the availability of water for major emergencies.

Anticipated project date:

2021 to 2031

2031 to 2051

Estimated costs (including inflation):

\$33 million

\$7.1 million

Funding Source

Growth, Levels of Service and Renewal

Project WS3: Reticulation expansion and upgrades for Growth in Cambridge and surrounds

Area: Cambridge

Most likely scenario: Provide water to Cambridge growth cells: C1, C2, C3, C4, Cambridge North to Hautapu pipeline & C10. Beyond 2031, as per Waipa 2050 Growth Strategy.

Significant current and future growth will place significant stress on existing water assets. New and upgraded infrastructure is also needed to support new developments.

Project date:

2021 to 2031

Estimated costs (including inflation):

\$9.5 million

Funding Source

Growth, Levels of Service and Renewal

Project WS4: District-wide Water main and Meter Renewals**Area:** District

Most likely scenario: Replacement and prioritised renewal of water supply pipelines and pump stations and associated assets i.e. mains, valves, hydrants, connections, rider mains and water meters, predicted for renewal within the Asset Management System

Alternative scenario: Do less resulting in fewer renewals. This increases the risk of asset failure. No renewal and capital development will result in loss of supply, hindered growth. LOS will not be met.

Project date:	Estimated costs (including inflation):	Funding Source
2021 to 2031	\$33.8 million	Renewals
2031 to 2051	\$79.2 million	

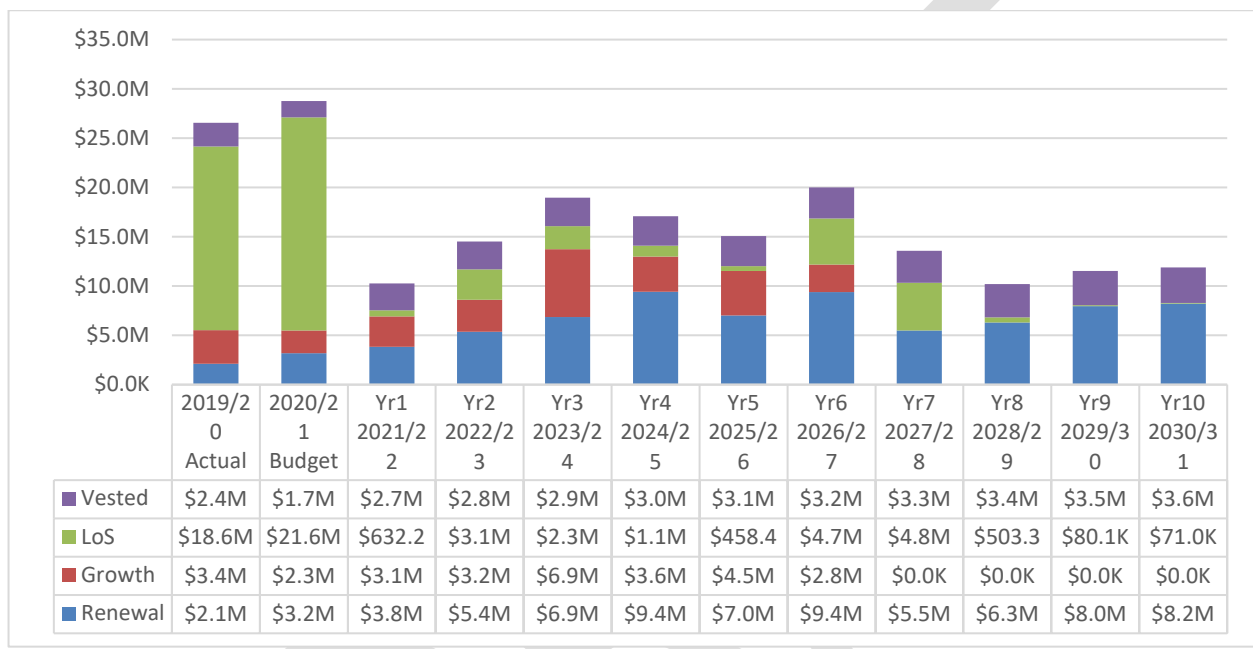
Project WS6: Pukerimu Water upgrade to Airport and Ōhaupō**Area:** Pukerimu, Ōhaupō, and Airport

Most likely scenario: Current and future growth will place significant stress on existing water assets. This project will ensure a consistent, safe and adequate water supply to our communities, meet our LOS agreements, reduce disruption from unplanned service outages and promote community development.

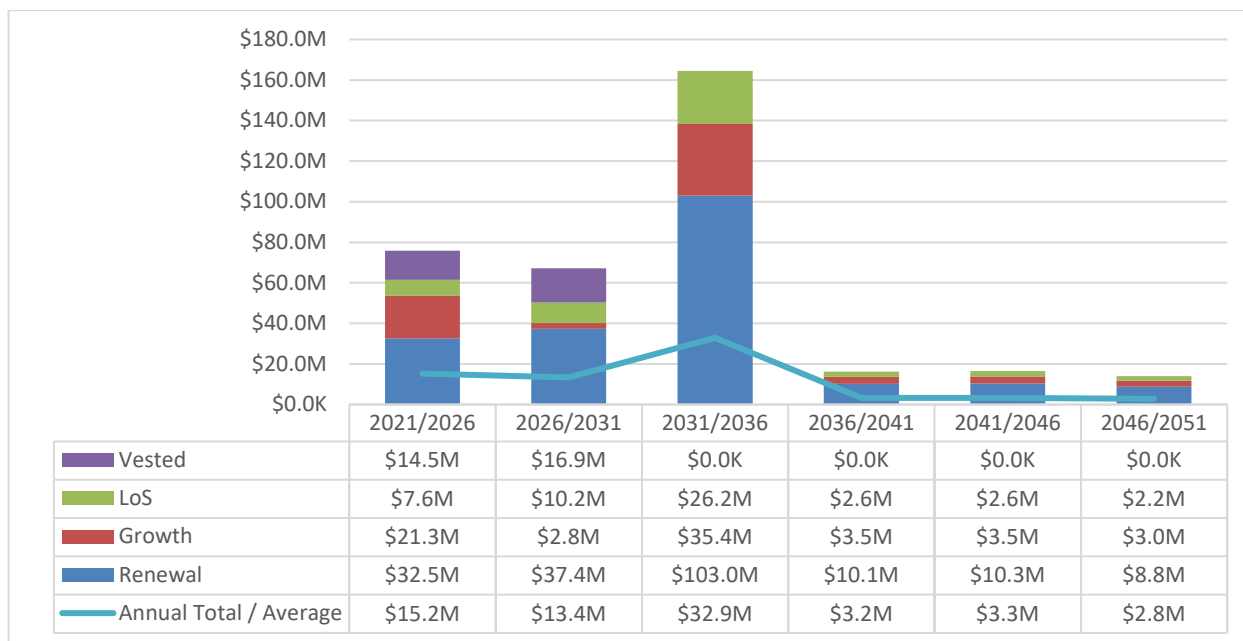
Anticipated project date:	Estimated costs (including inflation):	Funding Source
2023 to 2031	\$13.7 million	Growth and Levels of Service

3.2.3 Financial analysis

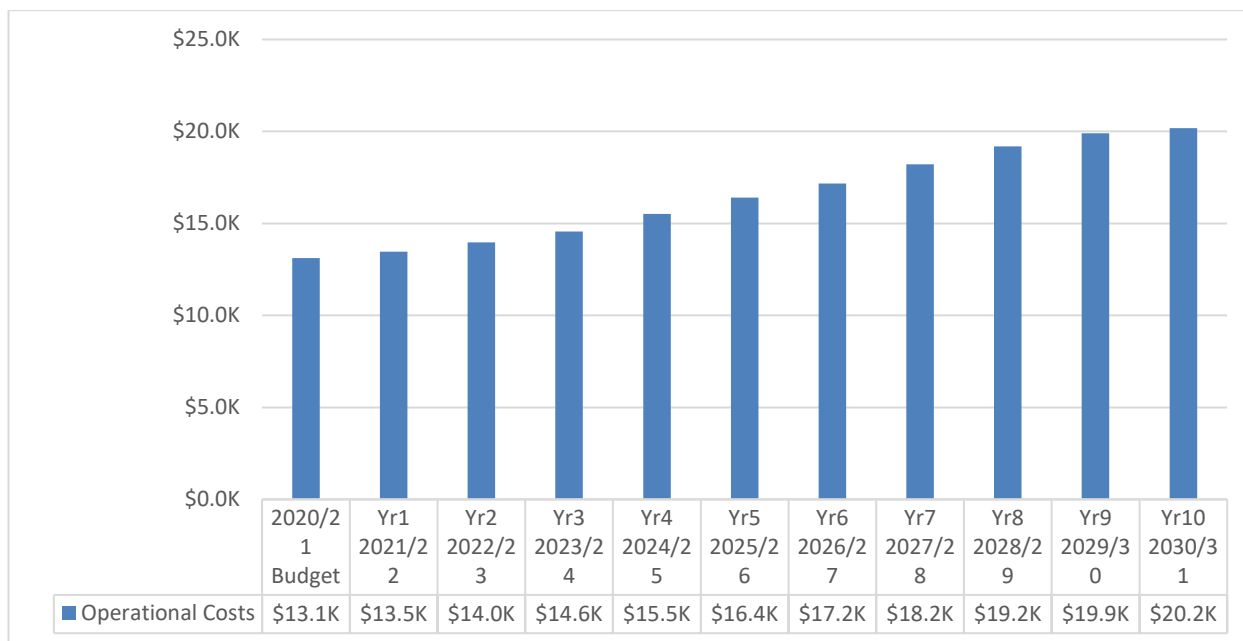
Capital works programme 1 to 10 Years



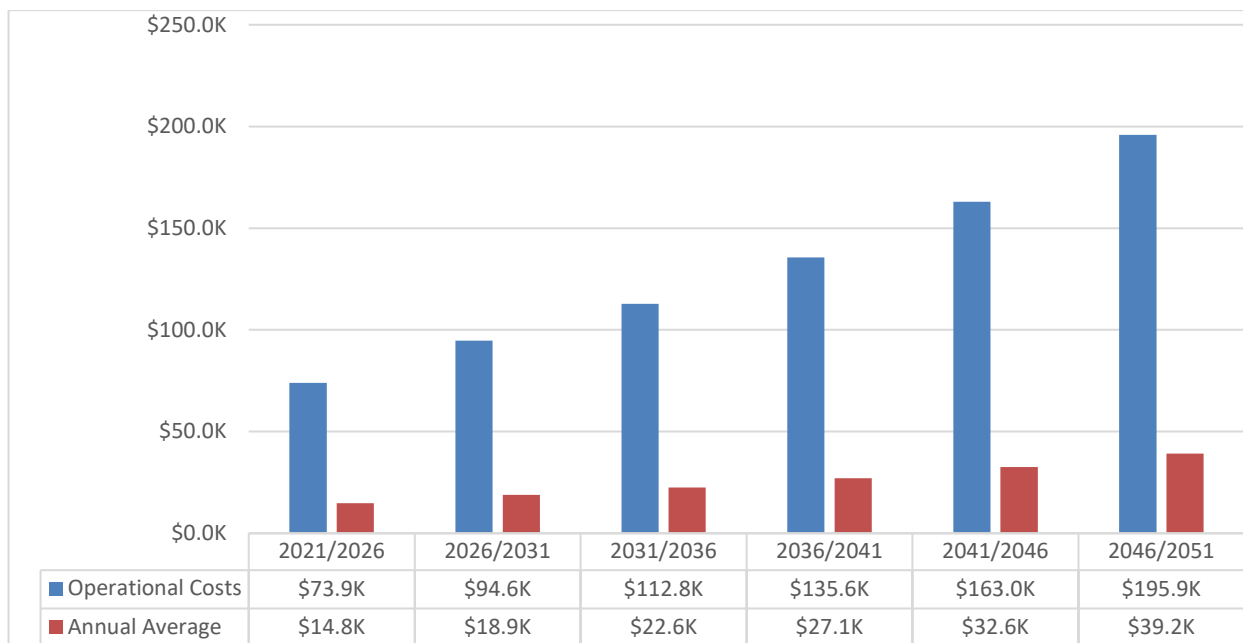
Capital works programme years 1 to 30



Operational works programme years 1 to 10



Operational works programme 1 to 30 years



PART 4 - WASTEWATER RETICULATION, TREATMENT, AND DISPOSAL

4.1 Overview of Wastewater Reticulation, Treatment, and Disposal

4.1.1 What council does

- (a) Collection, treatment, and disposal of sewage
- (b) Collection (pipelines and pump stations)
- (c) Treatment and disposal (wastewater treatment plants)

4.1.2 The Wastewater Schemes

- (a) Cambridge and Karāpiro
 - (i) Treatment: Cambridge Wastewater Treatment Plant (WWTP)
 - (ii) Significant level of trade waste (>20% by flow)
 - (iii) The Cambridge WWTP does not meet all resource consent requirements
- (b) Te Awamutu and Kihikihi
 - (i) Treatment: Te Awamutu WWTP
 - (ii) Current trade waste levels (<5% by flow) will increase significantly with the inclusion of Waikeria Prison flows in 2021

4.1.3 Overview of assets

Summary of Wastewater Treatment & Disposal Assets (30 June 2019)

Type of Wastewater Asset	Quantity	Gross Replacement Cost	Optimised Depreciated Replacement Cost
Number of Connections	16,387	\$36,240,246	\$24,826,258
Wastewater Pipes	272.4km	\$97,106,548	\$56,776,598
Manholes	4,831	\$29,604,228	\$17,021,943
Pumping Stations	60	\$10,972,633	\$6,279,049
Treatment Plants	2	\$29,411,594	\$18,985,526
Totals		\$203,335,249	\$123,889,374

4.2 Challenges and Proposed Actions

4.2.1 Current and Future Issues

- (a) Network issues - there are some capacity restrictions due to infiltration/inflow. This is expected to increase with the impacts of climate change and future growth.
- (b) WWTPs – a new Cambridge WWTP and consent is needed to meet growth requirements and improve treated wastewater quality. Te Awamutu WWTP capacity increases currently planned are likely to meet growth requirements. Future biosolids management and disposal regime is to be investigated.
- (c) Energy efficiency - energy efficiency/carbon footprint of new treatment plants and major pump stations should be considered to improve sustainability.
- (d) Unserviced areas - flexibility to provide for currently unserviced areas such as the area near the airport, Ōhaupō and Pirongia is required.

4.2.2 Projects 2021 to 2051

These projects have been included in the Infrastructure Strategy due to their significant level of investment and community impact if they are not implemented.

Note: where no alternative to the most likely scenario has been provided, the only other option so far identified is to do nothing and retain the status quo. In all cases this is likely to result in failure to comply with regulatory requirements, and/or hindered growth and reduced LOS to current and new customers, or maintained LOS at a higher cost or longer timescale.

Project WW1: Cambridge Wastewater Treatment Plant upgrade		Area: Cambridge
Most likely scenario: In the short term, upgrade the Cambridge wastewater treatment plant process. In the longer term, contribute to and implement the subregional wastewater treatment plant and operations for Cambridge.		
Alternative scenario 1: Off-site mitigation of environmental effects requiring no upgrade at the treatment plant; includes a complete review of the current resource consent. In reality this is a 'do nothing' alternative.		
Alternative scenario 2: Upgrade of Cambridge WWTP and additional offsetting measures.		
Project date: 2021 to 2030	Estimated costs (including inflation): \$100.2 million	Funding Source Growth, LOS and Renewals

Project WW2: Te Awamutu Wastewater Treatment Plant Upgrade		Area: Te Awamutu
Most likely scenario: Upgrade of Te Awamutu WWTP to achieve full compliance on all regulatory consent conditions to meet the future needs of the Waipā district and align with Waipa 2050 Growth Strategy.		
Project date: 2021 to 2031	Estimated costs (including inflation): \$20.5 million	Funding Source Growth, LOS and Renewals
2031 to 2050	\$25 million	

Project WW3: Reticulation and sewer provision for District growth and levels of service**Area:** District

Most likely scenario: Provide wastewater reticulation to growth cells and upgrade of wastewater pipes and pump stations to meet levels of service and growth.

Significant current and future growth will place significant stress on existing wastewater assets. New and upgraded infrastructure is also needed to support new developments.

Anticipated project date: 2021 to 2031	Estimated costs (including inflation): \$48.0 million	Funding Source Growth and LOS
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Project WW4: Wastewater system renewals programme**Area:** District

Most likely scenario: Renew the wastewater pipes, pump stations.

A number of wastewater assets have either reached, exceeded or are approaching their useful life and are either causing a reduction in current levels of service or pose a high level of risk to the organisation if not acted-on.

Ensure effective asset management principles meeting wastewater LOS district-wide.

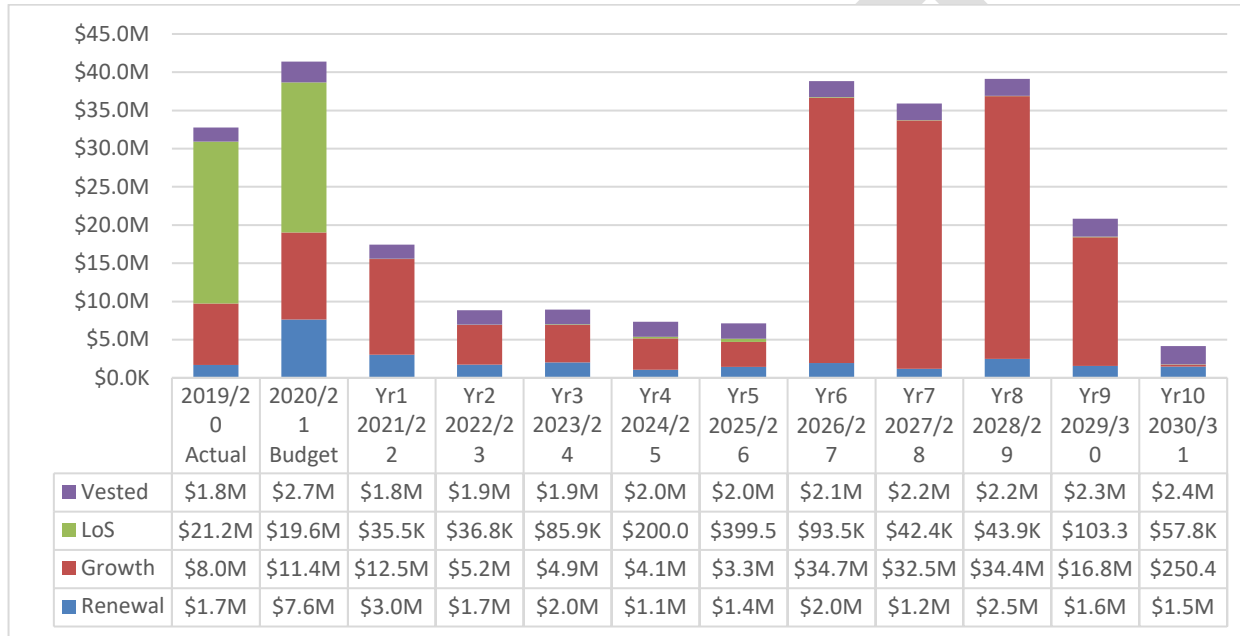
Reduce overloading on the infrastructure.

Alternative scenario: Do less resulting in fewer renewals. This increases the risk of asset failure. LOS may not be met.

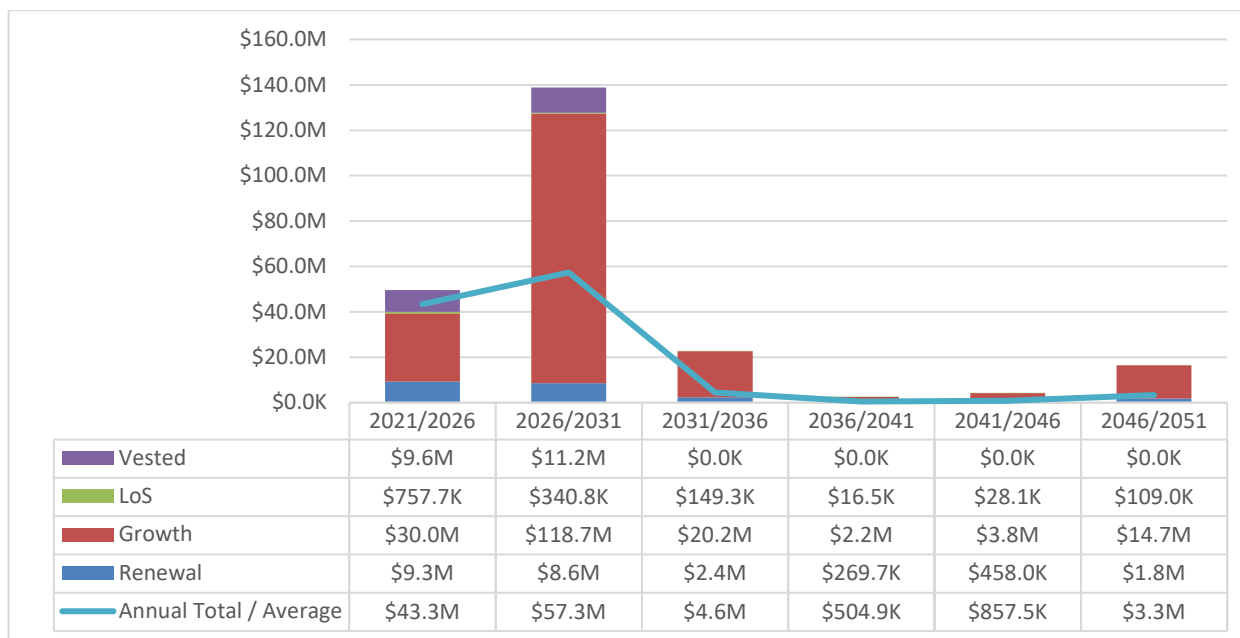
Anticipated project date: 2021 to 2031	Estimated costs (including inflation): \$10.9 million	Funding Source Renewals
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4.2.3 Financial analysis

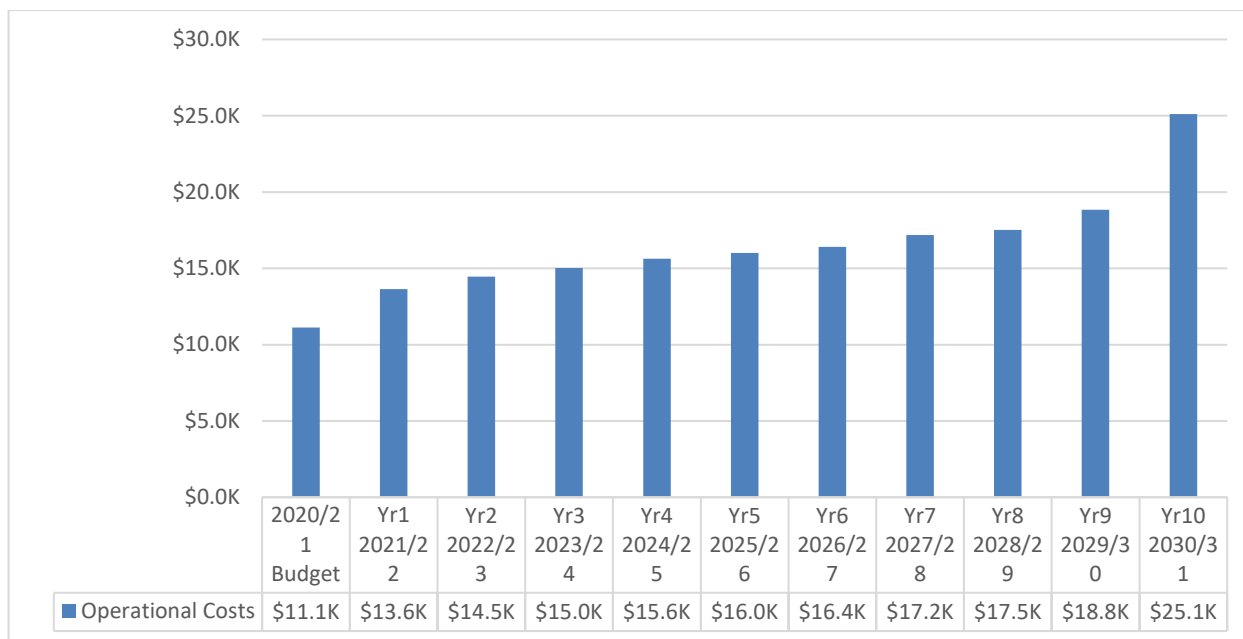
Capital works programme 1 to 10 Years



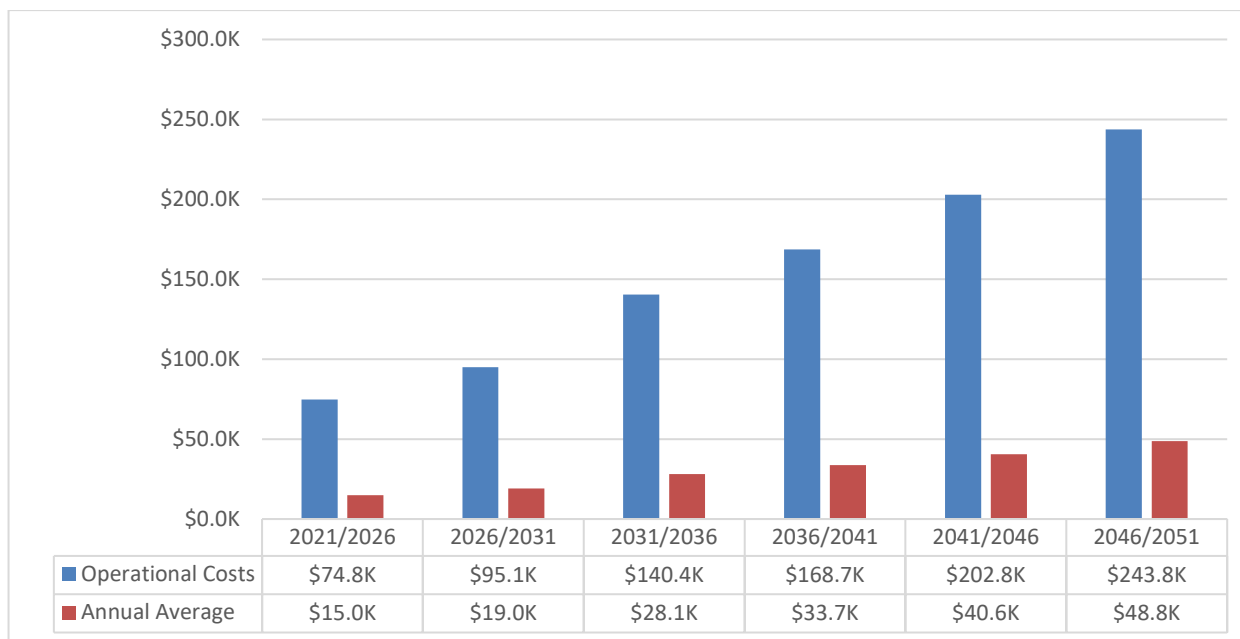
Capital works programme 1 to 30 years



Operational works programme 1 to 10 years



Operational works programme 1 to 30 years



PART 5 - STORMWATER MANAGEMENT

5.1 Overview of Stormwater Management

5.1.1 What council does

- (a) Urban Drainage; within defined areas:
 - (i) collection and control of stormwater within existing and new land developments together with drainage from the entire catchment upstream of the network.
 - (ii) Regulation of runoff to the extent that the effect of stormwater on the environment, property and people is contained within acceptable limits.
- (b) Rural Drainage
 - (i) The management of the land drainage system to ensure effective and efficient land drainage throughout the district.

5.1.2 The Stormwater Schemes

- (a) Urban Stormwater Networks
 - (i) Cambridge
 - (ii) Te Awamutu
 - (iii) Karāpiro
 - (iv) Kihikihi
 - (v) Ōhaupō and Pirongia
- (b) Rural Drainage
 - (i) 222km of rural drains which were vested to Council from the drainage boards

5.1.3 Overview of assets

Summary of Stormwater Drainage Assets (30 June 2019)

Type of Stormwater Asset	Quantity	Gross Replacement Cost	Optimised Depreciated Replacement Cost
Connections	1,375	\$2,017,557	\$1,761,909
Manholes	3,141	\$19,830,128	\$12,675,070
Pipes	174km	\$103,606,332	\$71,597,688
Inlets/outlets, trenches, soak holes, silt traps	846	\$13,161,656	\$11,397,210
Rural Drains	222km	\$7,910,546	\$7,910,546
	Totals	\$146,526,219	\$105,342,423

5.2 Challenges and Proposed Actions

5.2.1 Current and Future Issues

- (a) Flood hazard – outcomes of modelling need reviewing in line with existing levels of service (LOS). Further investigation of LOS and subsequent community impacts are required, incorporating future developments which may have higher levels of stormwater runoff.
- (b) Environmental effects – most catchments in Cambridge and Te Awamutu that have been developed prior to the Waikato Regional Council (WRC) Stormwater Guidelines for new developments do not have specific devices for the management of stormwater quality. Preparation for the renewal of the stormwater comprehensive consent in 2022 is underway.
- (c) Climate change - climate change is expected to result in a drop in LOS over time due to more extreme rainfall events.
- (d) Stormwater quality – council needs to improve understanding of water quality impacts and improve water quality in targeted existing catchments where there are compliance matters to address to meet WRC guidelines.

5.2.2 Projects 2021 to 2051

These projects have been included in the Infrastructure Strategy due to their significant level of investment and community impact if they are not implemented.

Note: where no alternative to the most likely scenario has been provided, the only other option so far identified is to do nothing and retain the status quo. In all cases this is likely to result in failure to comply with regulatory requirements, and/or hindered growth and reduced LOS to current and new customers, or maintained LOS at a higher cost or longer timescale.

Project SW1: Cambridge stormwater reticulation		Area: Cambridge
Most likely scenario: Provide stormwater reticulation to growth cells C1, C2, C3, C4, and C8 to meet future growth needs and LOS.		
Significant current and future growth will place stress on existing stormwater assets. New and upgraded infrastructure is needed to support the new development. This project will facilitate growth in Cambridge whilst ensuring LOS are maintained for present and future customers.		
Project date: 2021 to 2031	Estimated costs (including inflation): \$ 68.7 million	Funding Source Growth and LOS

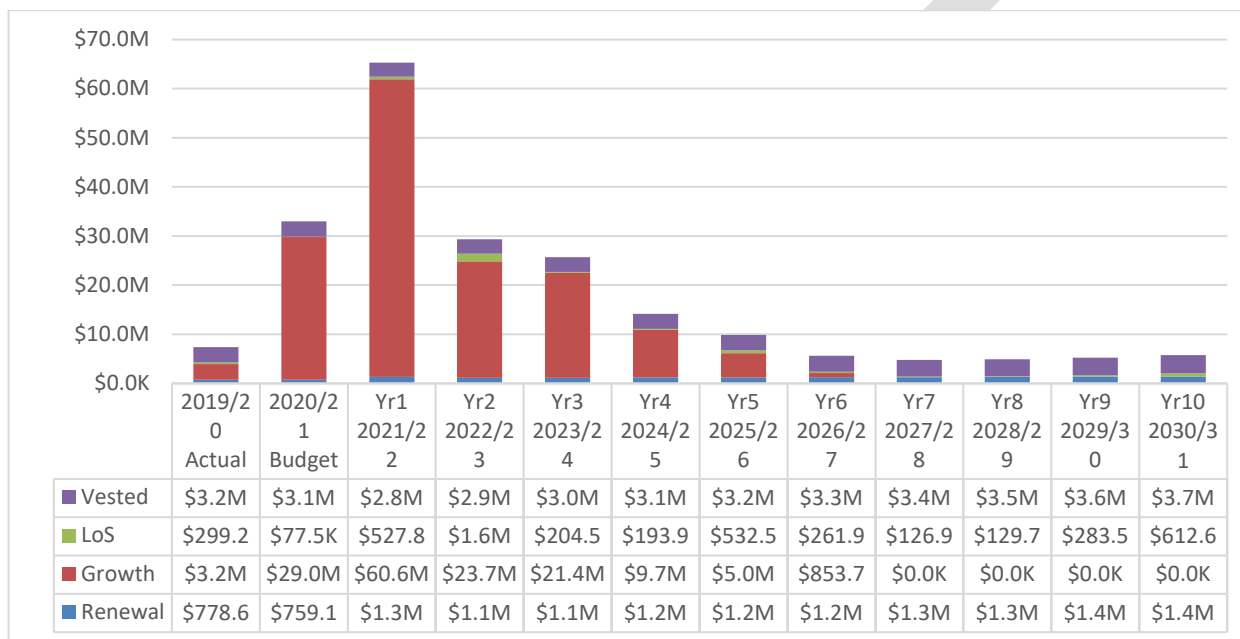
Project SW2: Hautapu industrial stormwater provision		Area: Cambridge
Most likely scenario: Provide the extra reticulation capacity to support industrial growth in Hautapu.		
Planned growth in the Hautapu industrial area will place significant stress on existing stormwater infrastructure. New and upgraded stormwater infrastructure is therefore needed to support the new development. Additionally, the upgrade of Hautapu and Hannon Roads will include managing stormwater.		
Project date: 2021 to 2024	Estimated costs (including inflation): \$6.8 million	Funding Source Growth

Project SW3: Stormwater infrastructure renewals programme		Area: District
Most likely scenario: Renew the stormwater network assets.		
A number of stormwater assets have either reached, exceeded or are approaching their useful life and are either causing detriment to current LOS or pose high risk to the organisation if not acted-on.		
Alternative scenario: Do less resulting in fewer renewals. This increases the risk of asset failure. No capital development will result in hindered growth. LOS will not be met.		
Anticipated project date: Annually 2021 to 2031	Estimated costs (including inflation): \$6.6 million	Funding Source Renewals

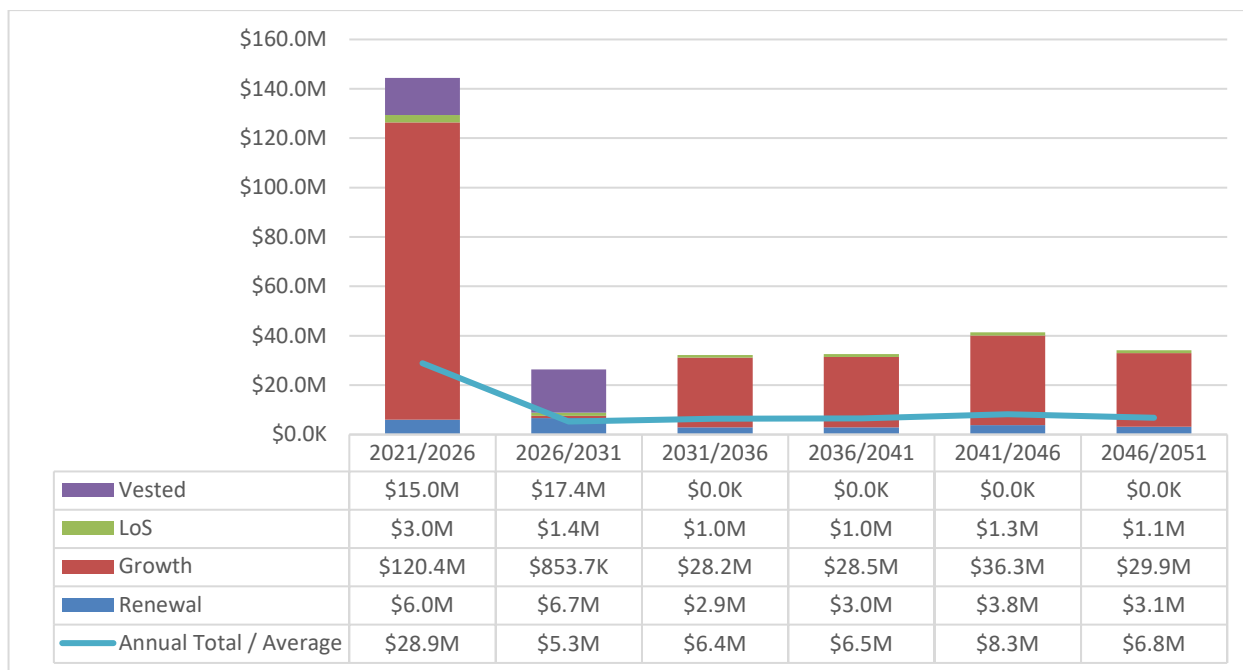
Project SW4: Stormwater network upgrades		Area: District
Most likely scenario: Upgrade the stormwater network assets.		
Implement the LOS upgrade work to alleviate identified surface water issues and achieve current LOS. Capacity issues pose a risk to the organisation in flooding events should they not be resolved.		
Alternative scenario: Do less resulting in fewer renewals. This increases the risk of asset failure. LOS will not be met.		
Anticipated project date: 2021 to 2031	Estimated costs (including inflation): \$9.0 million	Funding Source Renewals

5.2.3 Financial analysis

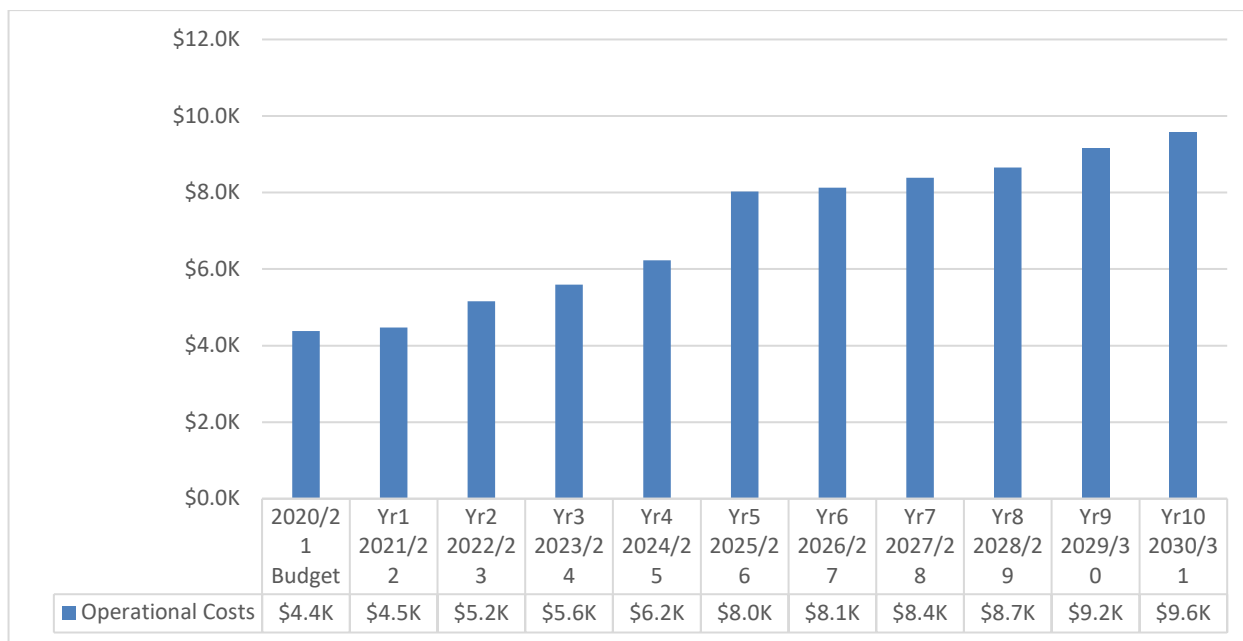
Capital works programme 1 to 10 years



Capital works programme 1 to 30 years



Operational works programme 1 to 10 years



Operational works programme 1 to 30 years



PART 6 - TRANSPORTATION

* We note that pursuant to section 46 of the Legislation Act 2019 the Transport projects named T2, T4, T6, T8-T9, T11-T13 and T15 in the consultation version of the 2021-2051 Infrastructure Strategy have been reinstated into this version. They are now projects T5-T13. This is to account for an administrative error.

6.1 Overview of Transportation

6.1.1 What council does

In keeping with local government purpose, council provides transport infrastructure, public services and regulatory functions. In practice this means council;

- (a) Monitors the condition of roads, bridges, footpaths and clean, repair and renew them when required.
- (b) Ensures there is signage to guide users to their destination, warn of hazards or implement regulatory controls.
- (c) Provides amenity services such as lighting, vegetation control and parking areas.
- (d) Monitors the safety performance of the network and intervene to minimise harm.
- (e) Works with Waikato Regional Council and Waka Kotahi NZ Transport Agency to provide passenger transport services and infrastructure such as current bus services and subsidised taxi services.
- (f) Plans ahead and implement improvements to services such as sealing gravel roads, increasing road capacity and providing more paths.
- (g) Manages how users access the network through control of vehicle entrances, use of road space for business purposes and utility access for power, gas, water etc.

6.1.2 Transportation network

With a large rural area and principal towns of Te Awamutu and, Cambridge, and villages of Pirongia and Kihikihi, the road network length is 1,103km long, of which 219km are urban roads and 884km are rural roads.

6.1.3 Overview of assets

Summary of Road Corridor Assets

Type of Transportation Asset	Quantity	Gross Replacement Cost	Optimised Depreciated Replacement Cost
Roads and Structures	▪ 1103km of roads and streets	\$722,546,481	\$626,185,105
	▪ 7.46 million square metres of road surface	\$67,977,900	\$37,028,258
	▪ 184 bridges	\$86,336,269	\$34,718,077
	▪ 37,834m of culvert pipes	\$31,074,457	\$15,221,933
Signs and Traffic Facilities	▪ 12,145 traffic signs of all types	\$361,499	\$198,217
	▪ 238 traffic islands	\$4,177,738	\$3,812,939
	▪ 16,611m of railings	\$4,686,557	\$3,042,273
	▪ 2 traffic signal installations	\$471,644	\$429,091
Street Lighting	▪ 4,810 lights	\$10,031,360	\$7,930,062
Footpaths	▪ 256km of path	\$51,545,072	\$33,162,603
Passenger Transport	▪ 15 bus shelters	\$113,991	\$63,039
Totals		\$979,322,968	\$761,791,597

6.2 Challenges and Proposed Actions

6.2.1 Current and Future Issues

- (a) Death and serious injury crashes on the network and particularly the rural network where speeds are higher and crashes are typically more severe. There is opportunity for improvement through a targeted and government subsidised programme of speed management, road improvement and education. (Safe Network Programme methodology and community education programme in coordination with Waka Kotahi)
- (b) Increase the use of passenger transport services through planning with Waikato Regional Council and Hamilton City. There is opportunity to action this within the next long term bus contract in 2021.
- (c) Increase the uptake of walking and cycling through an urban mobility plan and programme of path provision and education. Government change to mobility device and path use regulations may assist this goal.
- (d) Need to improve parking management.
- (e) Covid-19 potential economic impacts affecting funding of transportation services. There may also be opportunity to invest differently given increased awareness of the benefits of less traffic on streets providing a more pleasant environment for walking and cycling.
- (f) Growth planning and infrastructure building for an increased urban population at a greater scale than previous in the district is putting a strain on staff and contractor resources. However this also creates opportunities for improved planning and infrastructure that reduces demand for private car use and creates safe new streets for walking and cycling.
- (g) Climate change and global warming impacts which may include more drought and increased rainfall intensity. There is opportunity to use asset renewal programmes to make infrastructure more resilient.
- (h) Population growth may create more transport movements on key routes leading to congestion or safety issues. Greater population density provides opportunities to transition to transport modes other than private cars. The Hamilton to Auckland passenger train service is one such opportunity.
- (i) Introduction of new services and technology provides opportunities to increase access to transport and reduce cost or environmental impacts. E.g. Car-share schemes, electric vehicles, e-scooters, e-bikes, app-driven car hire schemes like Uber.
- (j) Autonomous vehicles may require a change to road or delineation standards.

- (k) Increasing traffic volumes on SH3 and SH39 create community separation and environmental impacts in Te Awamutu, Kihikihi, Ōhaupō and Pirongia. There is opportunity to work with Waka Kotahi to plan for improvements that will reduce this impact.
- (l) The two bridges linking Cambridge and Leamington may become congested by 2041. There is opportunity to plan and take interim steps to manage bridge use.
- (m) The concrete deck on the Victoria Street bridge may need to be replaced in future which would create significant disruption if additional across river traffic capacity is not first available. There is opportunity to plan for this well in advance and minimise disruption.
- (n) The radial pattern of existing streets in Te Awamutu brings all heavy traffic through residential streets and the CBD creating negative amenity impacts. There is opportunity to develop a western ring route to reduce these impacts, although the benefit to cost ratio for the construction of this route indicates it will not be constructed for many years. A review of the proposed route is planned in 2021/22.

6.2.2 Projects 2021 to 2051

These projects have been included in the Infrastructure Strategy due to their significant level of investment and community impact if they are not implemented.

Note: where no alternative to the most likely scenario has been provided, the only other option so far identified is to do nothing and retain the status quo. In all of those projects this is likely to result in failure to comply with regulatory requirements, and/or hindered growth and reduced LOS to current and new customers, or maintained LOS at a higher cost or longer timescale.

Project T1: meeting growth needs in Cambridge north and west**Area:** Cambridge

Most likely scenario: Cambridge growth cell related projects to plan and install roads and footpaths to meet long term future housing needs, levels of service and road safety targets.

Structure plans for these areas identify urbanisation of existing roads and development of primary collector routes. There will be projects required to meet expected growth beyond the 2018-2028 10-Year Plan. Timing will be dependent on development impetus around Cambridge

Project dates: 2021 to 2051	Estimated costs (including inflation): \$64.9 million	Funding Source Growth and LOS
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Project T2: Enabling industrial growth in Cambridge**Area:** Cambridge

Most likely scenario: Construct roads and intersection improvements in the industrial growth cells on Hautapu and Victoria Roads including C8, C9 & C10 to safely accommodate increased traffic.

The structure plan prepared for the area's development includes existing road upgrades to make the area suitable for increased volumes and turning traffic.

Anticipated Project dates: 2021 to 2031	Estimated costs (including inflation): \$22.1 million (across all decisions)	Funding Source Growth
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Project T3: Urban growth projects – Te Awamutu (long term)**Area:** Te Awamutu

Most likely scenario: New roads are planned and developed including T9 & T10 to meet growing housing needs, levels of service and safety targets in towns outside Cambridge. Precise projects, costs and timescales will be responsive to events and cannot be determined at this time. Some level of project planning and implementation is likely to be continuous across a range of projects.

Provides for housing growth around Te Awamutu and Kihikihi. The timing of projects will be subject to development progress.

Project dates: 2021 to 2051	Estimated costs (including inflation): \$14.2 million	Funding Source Growth
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Project T4: Tourism provision**Area:** District

Most likely scenario: Airport and urban transport improvements to cater for increased visitor numbers such as improved passenger transport connections to Hamilton Airport and urban centres, visitor parking and amenities.

Precise projects, costs and timescales will be responsive to events and cannot be determined at this time. Some level of project planning and implementation is likely to be continuous across a range of projects.

Project dates: 2021 to 2051	Estimated costs (including inflation): \$6.0 million	Funding Source Growth
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Project T5: Urban growth projects – Cambridge (long term)**Area:** Cambridge

Most likely scenario: Cambridge growth cell related projects to plan and install roads and footpaths to meet long term future housing needs, LOS and road safety targets.

There will be projects required to meet expected growth beyond the Long Term Plan 2021-2031. Timing will be dependent on development impetus around Cambridge.

Anticipated Project dates:	Estimated costs (including inflation):	Funding Source
2028 to 2038	\$28.6 million (across all decisions)	Growth

Project T6: Urban growth projects – Te Awamutu and villages (medium-long term)**Area:** District

Most likely scenario: New roads are planned and developed to meet growing housing needs, LOS and safety targets in towns outside Cambridge.

Provides for housing growth around other towns such as Te Awamutu, and villages of Kihikihi, Pirongia, Ngāhinapōuri. The timing of projects will be subject to development progress.

Project dates:	Estimated costs (including inflation):	Funding Source
2018 to 2021	\$2.1 million	Growth and LOS
2021 to 2028	\$11.6 million	

Project T7: Urban growth projects – villages (long term)**Area:** District

Most likely scenario: New roads are planned and developed to meet growing housing needs, LOS and safety targets in towns outside Cambridge. Precise projects, costs and timescales will be responsive to events and cannot be determined at this time. Some level of project planning and implementation is likely to be continuous across a range of projects.

Provides for housing growth around villages such as Ōhaupō, Pirongia and Ngāhinapōuri . The timing of projects will be subject to development progress.

Anticipated project dates:	Estimated costs (including inflation):	Funding Source
2023 to 2043	\$ 9.8 million	Growth

Project T8: Te Awamutu western arterial route**Area:** Te Awamutu

Most likely scenario: Te Awamutu Western Arterial Heavy Traffic Route is constructed to reduce heavy vehicle traffic in CBD streets. The arterial route is already designated and Council may be required to purchase further designated properties in the LTP period and beyond.

Alternative scenario 1: Do nothing. This option risks increasing conflict with local traffic, and lower amenity value or environmental quality of the CBD.

Alternative scenario 2: Intersection changes which direct traffic around the CBD may provide medium-term relief.

Anticipated project dates:	Estimated costs (including inflation):	Funding Source
2028 to 2033 (possible intersection changes)	\$ 58 million (total)	LOS
2038 to 2048		

Project T9: Town centre vehicle parking

Area: Cambridge and Te Awamutu

Most likely scenario: Improved parking provision and management on roadsides and in Council car parks.
Maintaining vibrant and accessible town centres requires continued improvement in parking provision and operation.

Alternative scenario: No additional provision.

This will lead to private provision of parking within commercial buildings; and parking charges introduced to manage demand and fund parking provision.

Anticipated project dates: 2028 to 2033	Estimated costs (including inflation): \$ 4.1 million	Funding Source LOS
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Project T10: Repurposing revoked state highways

Area: Cambridge

Most likely scenario: A group of projects to bring the revoked State Highways [those replaced by the Waikato Expressway] into the local road network; to bring them to Council’s LOS standards; to improve pedestrian and cycle facilities at intersections; and to align these roads with the Cambridge Town Concept Plan Refresh (each LTP from 2021 to 2027).

Sections of the former state highway have become part of the Council-managed local road network.

Some intersections, principally those at Albert/Queen Streets, Albert/Duke Streets, Shakespeare/Tirau, will in time require transformation to create urban local road functionality and amenity.

Anticipated project dates:	Estimated costs (including inflation):	Funding Source
2018 to 2021	\$4.4 million	LOS
2021 to 2028	\$2.1 million	
2028 to 2033	\$3.4 million	

Project T11: Cycling and walking projects**Area:** District

Most likely scenario: Combining urban and recreational cycling/walking projects from Council's Integrated Transport Strategy in each subsequent LTP.

There have been community requests for good urban and recreational cycling opportunities. Projects are included in Council's adopted Integrated Transport Strategy. Council has already committed to developing the Te Awa Cycleway project.

Precise projects, costs and timescales will be responsive to events and cannot be determined at this time.

Alternative scenario: Do nothing resulting in more traffic conflicts with cyclists and pedestrians on existing roads and river crossings, further congestion; there would be no consequential reduction in carbon and nitrous oxide emissions.

Anticipated project dates:	Estimated costs (including inflation):	Funding Source
2018 to 2021	\$1.5 million	Growth and LOS
2021 to 2028	\$6.3 million	
2028 to 2048	\$8.3 million	

Project T12: A third bridge crossing the Waikato River

Area: Cambridge

Most likely scenario: Council investigates timing and location options, secures land on either side of the Waikato River and constructs a third bridge.

Population and traffic volume growth will result in increasing congestion on Cambridge’s existing bridges. The timing of this project is contingent on actual traffic growth if we are unsuccessful in achieving a mode shift away from private cars..

Alternative scenario: Do nothing, but this will result in increased congestion in peak periods and vulnerability to major disruption should the historic Victoria Bridge need to be closed for repair.

Anticipated project dates:	Estimated costs (including inflation):	Funding Source
2018 to 2021	\$57.4 million	LOS
2021 to 2028		
2028 to 2048		

Project T13: Extending road seals programme

Area: District

Most likely scenario: Seal remaining unsealed rural roads.

Council's adopted policy is to progress seal extensions.

Alternative scenario 1: Do less resulting in roads remaining unsealed for longer. LOS may not be met.

Alternative scenario 2: Seal highest priority roads and leave very low use roads until such time as use increases.

Anticipated project dates:

2024 to 2038

Estimated costs (including inflation):

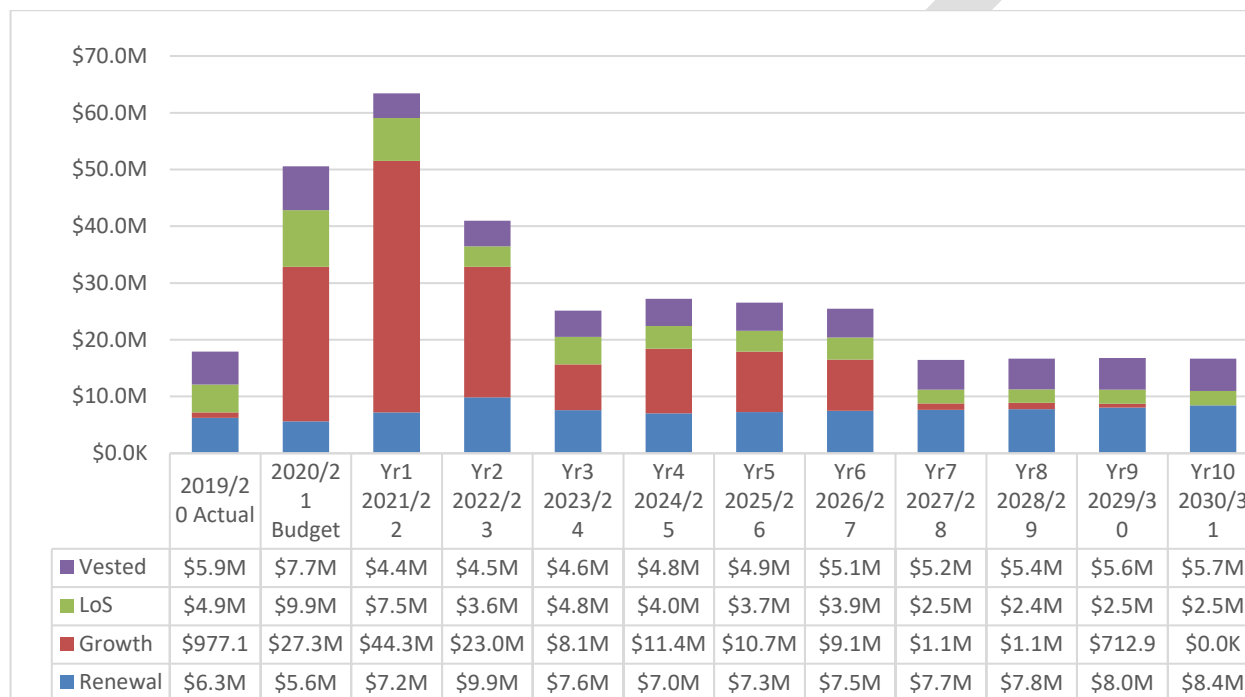
\$ 7.9 million
(\$0.79m per year)

Funding Source

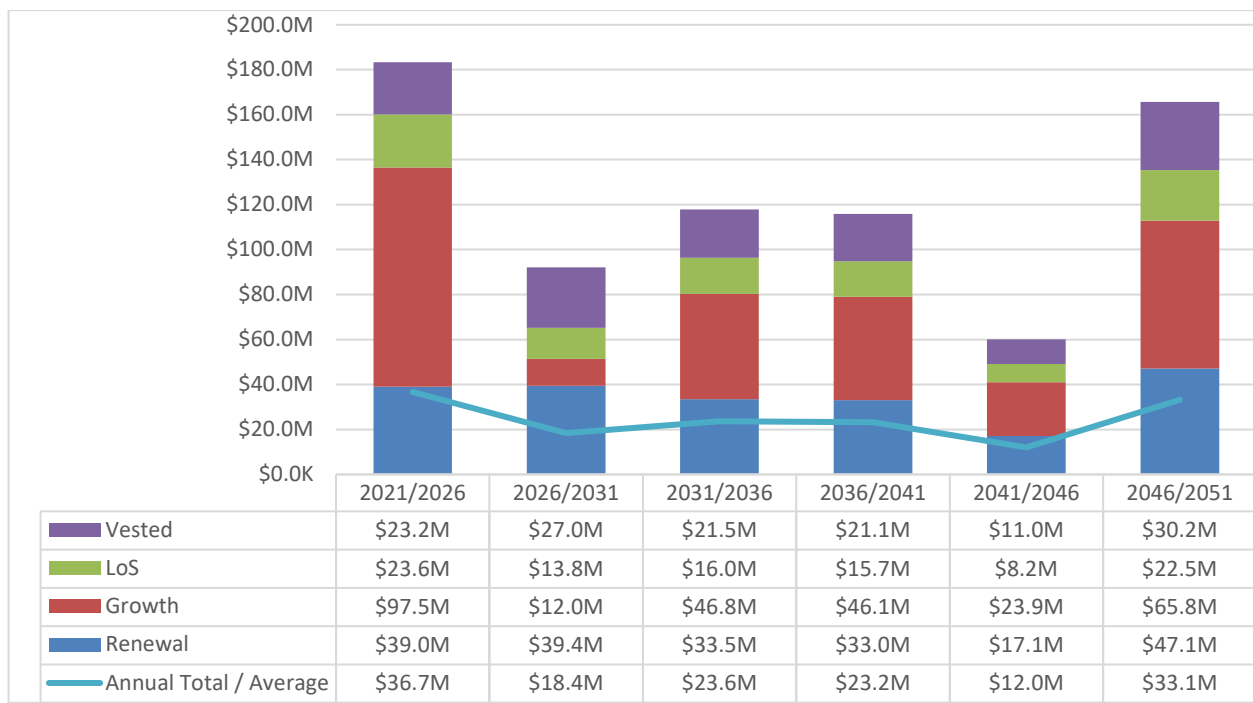
LOS

6.2.3 Financial analysis

Capital works programme 1 to 10 years



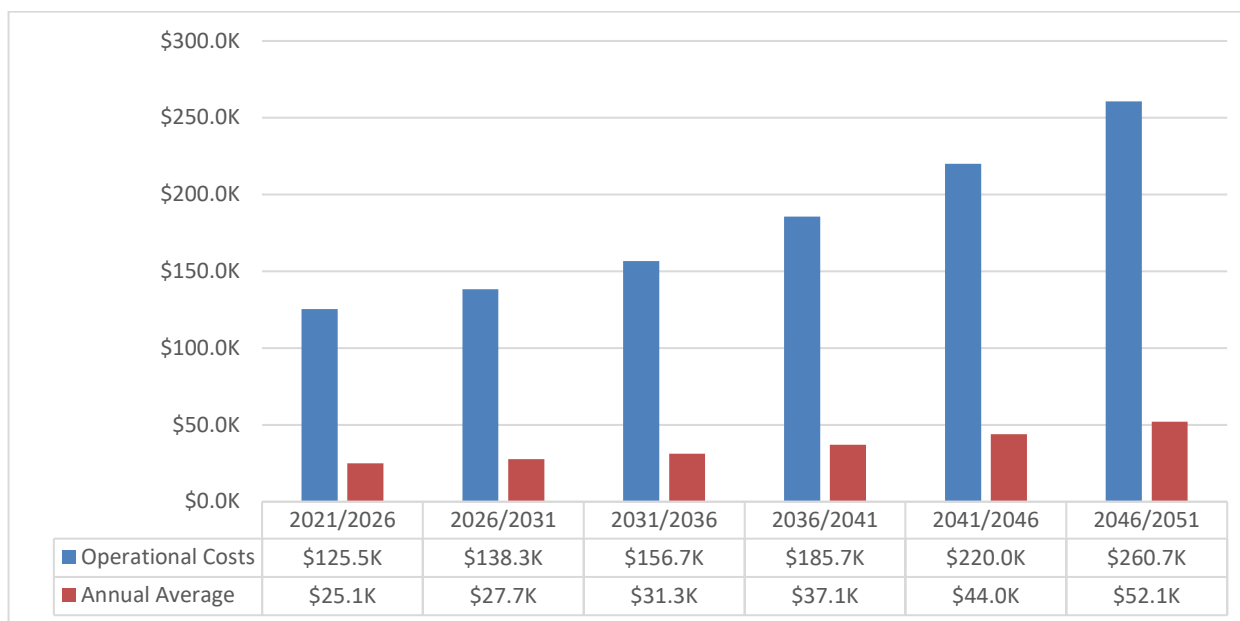
Capital works programme 1 to 30 years



Operational works programme 1 to 10 years



Operational works programme 1 to 30 years



6.2.4 Service delivery mechanisms

There are a number of shared services initiatives between Waikato roading authorities, including in the area of transportation asset management, bridge management professional services, and regional traffic modelling. These are all managed under the Waikato Local Authority Shared Services delivery mechanism.

PART 7 - WASTE MANAGEMENT

7.1 Overview of Waste Management

7.1.1 What council does:

- (a) Through the engagement of an external contractor we deliver a kerbside recycling wheelie bin service for all residential dwellings in both rural and urban areas. Service includes glass, tin & aluminium cans, plastics 1, 2 and 5, cardboard and paper.
- (b) Encouraging waste minimisation through education, community initiatives, and recycling.

7.1.2 Our waste management scheme

- (a) Typically each residential dwellings is provided:
 - (i) one large 240L wheelie bin for accepted household plastics, tins, cans, paper and cardboard, collected fortnightly, and
 - (ii) one smaller 140L wheelie bin for glass bottles and jars, collected monthly.
- (b) Each household recycles approximately 195kgs per year.

7.1.3 Overview of assets

Since divesting solid waste management, Council does not own any transfer stations, landfills or run any refuse removal services. Council contracts a service to operate a recycling collection from all properties in the district, but does not own any assets for this service.

7.2 Challenges and Proposed Actions

7.2.1 Current and Future Issues

There are small privately owned and operated refuse transfer stations in Te Awamutu and Cambridge. These facilities have had minimal investment in the last 25 years. There is a risk that they may be closed by the operators and the district would have to rely on the nearest transfer station owned by Hamilton City Council and operated under contract.

7.2.2 Projects 2021 to 2051

Project WM1: Expanding waste recovery facilities		Area: Cambridge and Te Awamutu
<p>Most likely scenario Develop a community led RRC on a site with existing building, fencing and concreting. Services provided are staged and grown over several years.</p> <p>Cambridge is currently served by a basic refuse transfer station with limited waste recovery.</p> <p>Te Awamutu/ Kihikihi/ Pirongia/ Ōhaupō is currently served by a basic refuse transfer station with limited waste recovery.</p> <p>Neither transfer station is a fit-for-purpose service in the long term.</p>		
<p>Alternative scenario: Do nothing - not an option as there is a legislative requirement and increasing expectation from the community for options.</p> <p>Private resource recovery centres may operate if sufficient volume and revenue is available and public/ private delivery is possible.</p>		
<p>Anticipated project dates:</p> <p>2023 to 2025</p>	<p>Estimated costs (including inflation):</p> <p>\$ 2.1 million total</p>	<p>Funding Source</p> <p>LOS</p>

PART 8 - COMMUNITY FACILITIES

8.1 Overview of Community Facilities

8.1.1 What council does

- (a) Open Space management planning, provision and servicing of a network of;
 - (i) formal and informal open spaces in both urban, rural and conservation areas
 - (ii) structures associated within the open space network
 - (iii) playgrounds
 - (iv) walkways and cycleways
 - (v) street and park trees
- (b) Library services involving;
 - (i) lending of books and other media
 - (ii) provision of facilities
 - (iii) access to electronic resources
 - (iv) literacy and lifelong learning support
- (c) The provision of public toilets within high use parks, reserves and commercial areas
- (d) Cemetery provision and servicing of;
 - (i) burials and internments
 - (ii) cemetery maintenance
 - (iii) cemetery data & mapping
 - (iv) customer support
- (e) Heritage provision and servicing through;
 - (i) the Te Awamutu Museum
 - (ii) heritage interpretation

- (iii) Council collections
 - (iv) the Waipa Heritage Fund
- (f) Provide support to;
- (i) Waipa Community Facilities Trust
 - (ii) Maungatautari Ecological Island Trust
 - (iii) Ngaa Pae Whenua
 - (iv) Pukemako Joint Management Body

8.1.2 The community services networks

Providing district-wide assets and services, and including the principal towns of Te Awamutu, Cambridge, and villages of Pirongia, Ōhaupō and Kihikihi, with:

- Over 4,000 hectares of open space consisting of 356 parks, esplanades and reserves with 3,564 assets/site improvements, 27 playgrounds, 31km of shared walkways and cycleways and 6,257 street trees;
- Two libraries (Cambridge and Te Awamutu), providing the lending of 152,054 books and other media, the provision of a community space, access to 3,893 electronic resources (e-books and e-audiobooks) and multiple literacy and lifelong learning support programmes;
- 50 public toilets within high-use parks, reserves and commercial areas;
- 10 cemeteries located in Hautapu, Leamington, Pukerimu, Pukeatua, Te Awamutu, Kihikihi, Pirongia, Ōhaupō, Puahue and Paterangi with a combined 232 assets/site improvements;
- The housing of the heritage collection through the Te Awamutu Museum with approximately 23,000 items (circa 51 per cent in archives and photographic material, 36 per cent social history, 8 per cent Maori Taonga, 4 per cent natural history and 1 per cent world ethnology);
- Support to the Waipa Community Facilities Trust (operating the Te Awamutu Events Centre and the Cambridge Pools), Maungatautari Ecological Island Trust, Ngaa Pae Whenua and the Pukemako Joint Management Body.

8.1.3 Overview of Assets

Type of Transportation Asset	Quantity	Gross Replacement Cost	Optimised Depreciated Replacement Cost
Open Spaces Network	▪ 4,123.9ha of opens space land	-	-
	▪ 3,564 assets in open space	\$23,926,070	\$12,955,299
	▪ 6,257 street trees	-	-
Libraries	▪ 2 libraries	\$51,728,018	\$10,049,719
Public Toilets	▪ 50	\$3,541,018	\$2,065,389
Cemeteries	▪ 23.0ha	-	-
	▪ 232 assets in cemeteries	\$887,662	\$296,240
Heritage	▪ 309 Heritage interpretation and art collection items	-	-
	▪ Unknown quantity for archaeology collection and museum exhibition equipment	-	-
Totals		\$80,082,768	\$25,366,647

8.2 Challenges and Proposed Actions

8.2.1 Current and Future Issues

- (a) Increase in population – population growth leads to development which has a significant impact on the demand and provision of existing assets and services.
- (b) Changing customer expectations – migration from other districts in New Zealand and rapid changes in digital technology can lead to changes in demand and expectations of more interactive recreation and desired levels of service.
- (c) Demographic changes – any change in the demographic makeup of the population, particularly in the relative size of the age groups can have a significant impact. Each age group will have specific requirements around what they need from the service.
- (d) Legislation – requirements to restore, protect and minimise impacts on the natural environment are increasing through provisions such as the Healthy Waterways Package, Climate Change Response (Zero Carbon) Amendment Act and the Aotearoa New Zealand Biodiversity Strategy 2020. The subsequent legislative requirements are already guiding activities throughout New Zealand to mitigate environmental impacts and introduce controls on some high risk activities.
- (e) Climate Change - The increased frequency of heavy rainfall or drought events is changing the conditions under which the service has to operate and what assets are required to mitigate the effects of climate change
- (f) Council direction and goals – The impacts of significant events or decisions that affect the financial position of Council tend to have a direct impact on community services. As it is not necessarily considered core infrastructure such as Three Waters or roading, community services are often the first developments and services to be removed from Annual Plan or Long Term Plan budgets.

8.2.2 Projects 2021 to 2051

Project CS1: Cycling Te Awamutu/Ngaroto/Pirongia Connection		Area: Te Awamutu/Pirongia
<p>Most likely scenario: An off-road cycleway from Te Awamutu to Pirongia, via Lake Ngaroto to provide connection to natural environments, key cultural and heritage features and connect communities.</p> <p>The connection to Lake Ngaroto provides a future link to Ōhaupō and Mystery Creek, for which separate Network Plans have been identified to meet future growth needs and LOS.</p>		
<p>Project date: 2021-2024</p>	<p>Estimated costs (including inflation): \$9.5 million</p>	<p>Funding Source Level of Service</p>

Project CS2: Cemetery land acquisition		Area: Cambridge and Te Awamutu
<p>Most likely scenario: The acquisition of appropriate land to allow for the future provision of cemetery land for the deceased residents of the district.</p> <p>Council has a statutory requirement under the Burials and Cremations Act 1964 to ensure that sufficient burial space is planned and provided across the region. Both the Te Awamutu and Hautapu cemeteries have only 10-15 years provision until they reach capacity and it is considered a new cemetery takes approximately ten years to develop.</p> <p>The Cemeteries Provision Plan developed in 2020 will inform land identification, valuations, negotiations, subdivision/SO process.</p>		
<p>Project date: 2025-2028</p>	<p>Estimated costs (including inflation): \$14.6 million</p>	<p>Funding Source Growth and Level of Service</p>

Project CS3: Lake Te Koo Utu and Memorial Park Development

Area: Cambridge and Te Awamutu

Most likely scenario: Implementation of community aspirations for premier reserves Lake Te Koo Utu and Memorial Park (Te Awamutu)

The projects will deliver improved water and habitat quality, improved visitor experiences, acknowledgement of significance of the reserves to mana whenua and acknowledgment of the importance of the premier reserves as a central recreation hub for the community and beyond.

Project date:

2021-2031

Estimated costs (including inflation):

\$8.6 million

Funding Source

Level of Service

Project CS4: Te Ara Wai Marketing Resource, Te Ara Wai Collection Move and Te Ara Wai Exhibition Development

Area: Te Awamutu

Most likely scenario: A new museum located in the centre of Te Awamutu to provide appropriate space to share the districts rich history, display museum collections and provide educational experiences to meet future growth needs and LOS.

The existing Te Awamutu Museum is not big enough or functional to carry out all the desired services. New infrastructure is required to support the activity. These projects and estimated costs exclude the construction of the building.

Project date:

2022-2025

Estimated costs (including inflation):

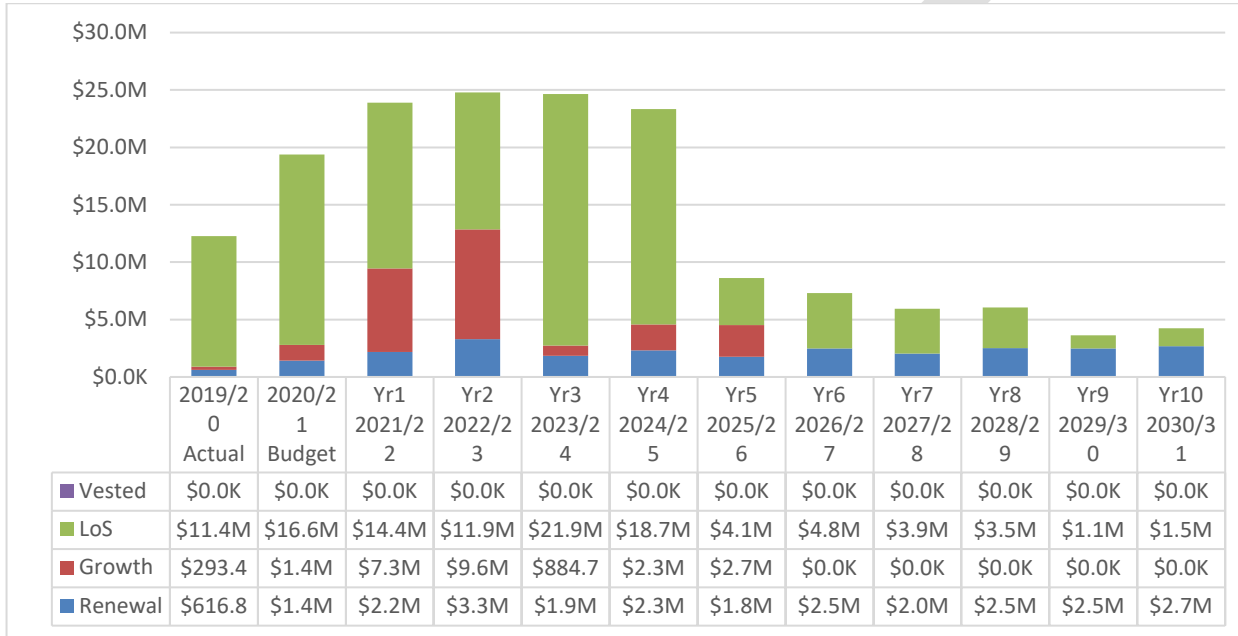
\$20.5 million

Funding Source

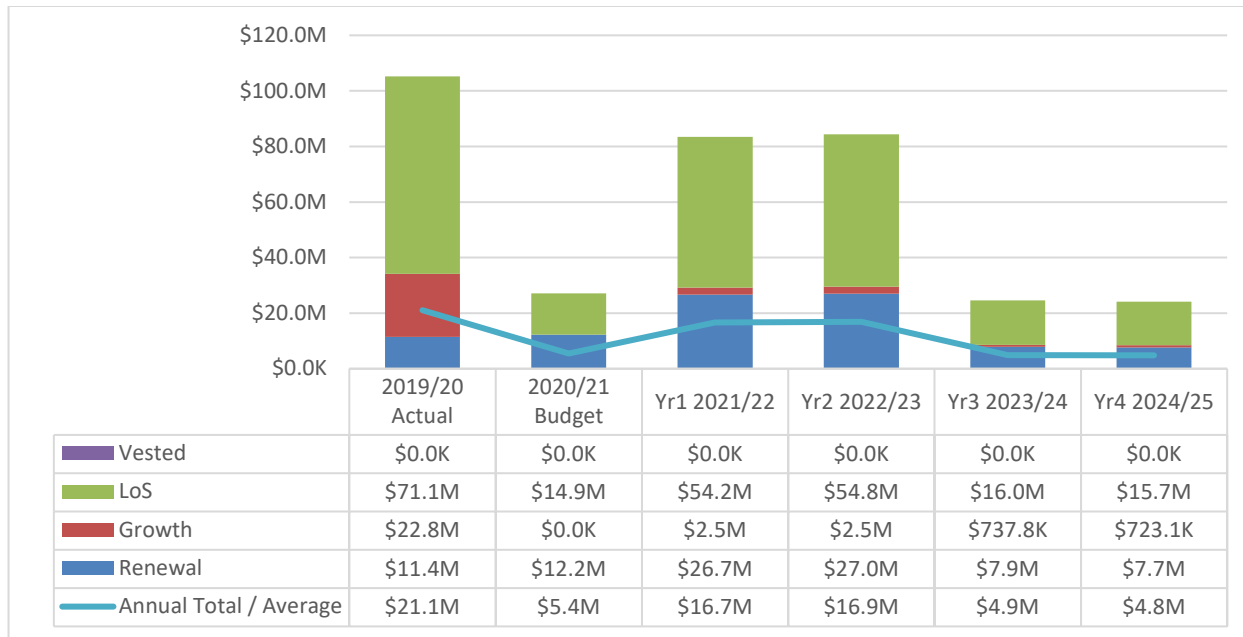
LOS

8.2.3 Financial analysis

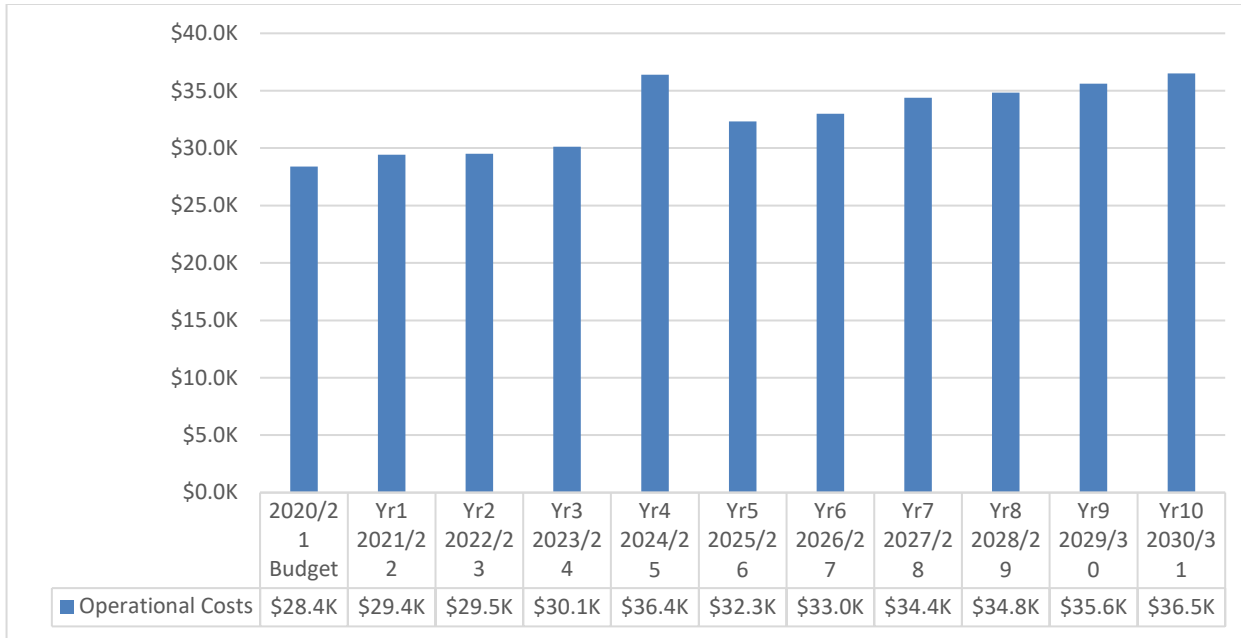
Capital works programme 1 to 10 years



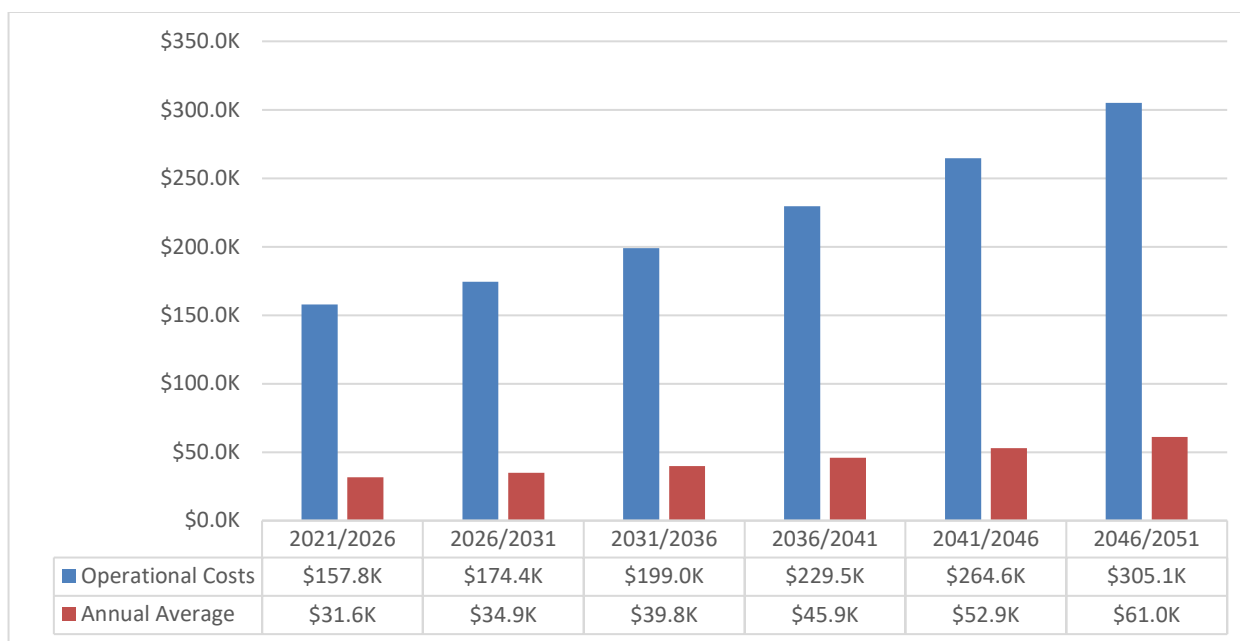
Capital works programme 1 to 30 years



Operational works programme 1 to 10 years



Operational works programme 1 to 30 years



8.2.4 Service delivery mechanisms

Service Area	Delivery Model
Neighbourhood and Amenity Parks	<ul style="list-style-type: none"> In-house
Sports Parks	<ul style="list-style-type: none"> In-house
Premier Reserves	<ul style="list-style-type: none"> In-house
Conservation Parks	<ul style="list-style-type: none"> In-house
Site Improvements	<ul style="list-style-type: none"> In-house – management External – construction
Playgrounds	<ul style="list-style-type: none"> In-house – management External – construction
Walkways and Cycleways	<ul style="list-style-type: none"> In-house

Maintenance of park land and site improvements	<ul style="list-style-type: none"> ▪ Both
Co-Managed sites	<ul style="list-style-type: none"> ▪ In-house (Council element)
Street Trees	<ul style="list-style-type: none"> ▪ In-house – management ▪ External – maintenance
Protected Trees Advisory Service	<ul style="list-style-type: none"> ▪ In-house
Customer service	<ul style="list-style-type: none"> ▪ In-house
Planning	<ul style="list-style-type: none"> ▪ In-house

All Park Renewals are currently delivered through the Project Delivery Team within Council.

DRAFT

PART 9 - APPENDIX 1 – LTP PERFORMANCE FRAMEWORK – COMMUNITY OUTCOMES AND EXTERNAL STRATEGIC PRIORITIES

COMMUNITY OUTCOMES & KEY EXTERNAL PRIORITIES

Community Outcome	Description Statement	Draft measure and desired trend	Source	Direct connection to Infrastructure Planning	Description of Connection
Socially resilient - He aha te mea nui o te ao? Māku e kī atu he tangata, he tangata, he tangata! – it's all about people	Waipā is a great place to live, work, play and invest	Resident survey response to: How would you rate Waipā as a district that is a great place to live, learn, work and play? Te Waka survey response to: How confident are you in the future success of your business?	Resident Perception Survey – Existing question. Te Waka Business Sentiment Survey – Existing question	Yes	Feedback from this survey informs whether council is delivering our agreed levels of service or if these levels are requiring amendment to meet community expectations or aspirations
	We invest in hauora and support the great work community groups do	Procurement measures considering local contribution through contracts.	Procurement strategy monitoring	No	
	Waipā provides a high quality of life for current and future generations	Proportion of the population aged 15 years or more who agree that they experience a sense of community with others in their neighbourhood.	Existing vital signs survey	No	
Cultural champions - Promoting our	We champion the unique history of Waipā	Number of annual visitors to key heritage sites (Te Awamutu	2021-31 LTP level of	Yes	Our infrastructure supports the delivery of these services and will

Community Outcome	Description Statement	Draft measure and desired trend	Source	Direct connection to Infrastructure Planning	Description of Connection
culture and heritage		Museum, Pirongia Visitor Centre, Cambridge Museum, and Lake Ngā Roto). Usage of Te Ara Wai Journeys website – target as per LTP.	service measure 2021-31 LTP level of service measure		reflect the level of attractiveness of these visits and levels of engagement
	We have a high level of cultural awareness	Percentage of staff who have attended cultural awareness training - tikanga training. Resident survey response to: Do you think that culture and heritage are promoted in Waipā District?	Internal performance measure. New resident perception survey question.	No	Whilst not a direct connection, this measure will inform whether the decision-making frameworks within our Activity Management Plans are appropriate and achieving our community outcome expectations
	We partner with tangata whenua	New targeted survey to tangata whenua partners.	New survey to be developed.	Yes	We are committed to meeting our Treaty obligations and achieving our partnership with iwi. Our decision-making frameworks will reflect this; for example through consent processes for wastewater treatment plants
	We respect the cultural diversity in our district	Resident survey response to: As a local resident, how accepting and welcoming is the district to	New resident perception	No	

Community Outcome	Description Statement	Draft measure and desired trend	Source	Direct connection to Infrastructure Planning	Description of Connection
		newcomers and respecting towards the cultural diversity (recent migrants, international students, former refugees)?	survey question.		
Community Outcome	Description Statement	Draft measure and desired trend	Source	Direct connection to Infrastructure Planning	Description of Connection
Environmental champions - Protecting and sustaining our environment	Environmental awareness and responsibility is promoted within the community	Annual average quantity (kg) of recycled material per household. Council-led volunteer activities - facilitate at least four conservation volunteer days per annum.	2021-31 LTP level of service measure. Internal Performance Measure	No	Whilst not a direct connection, we are committed to reducing our waste in our activities and looking for opportunities to incorporate recycled materials where this is appropriate and cost effective
	We support programmes that promote environmental sustainability	Percentage schools in Waipā with Enviroschools subscription. Number of face-to-face participants in the waste	Internal Performance Measure 2021-31 LTP level of	No	

Community Outcome	Description Statement	Draft measure and desired trend	Source	Direct connection to Infrastructure Planning	Description of Connection
		minimisation education programme.	service measure.		
	We are responsive to climate change	Council's carbon footprint.	New reporting being developed.	Yes	Council is committed to reducing our carbon footprint, although this is an emerging work stream so will be a part of council's improvement programme for our 2024 AMP's
Economically progressive - Supporting a thriving, sustainable economy	We have financially sustainable decision-making and work programmes	Resident survey response to: How would you rate Council overall for its financial management? Actual opex1 and capex2 spend against the Annual Plan budget.	Existing Resident Perception Survey question. Internal performance measure.	No Yes	This is managed as a key KPI for the organisation to ensure that our optimised programmes are delivered
	We provide new infrastructure as an economic stimulus for our district	Compliance with National Policy Statement - Urban Development 2020 conditions.	Through future proof monitoring.	Yes	Compliance with this requirement means that council needs to fully understand the infrastructure investment need to support the commitment to availability of land. As a high growth Council this is an ongoing challenge as the market and land development sector can be unpredictable
	Our services provide excellent value for money	Resident survey response to: Overall how satisfied are you that	Existing Resident	Yes	Feedback from this survey informs whether council is delivering our

Community Outcome	Description Statement	Draft measure and desired trend	Source	Direct connection to Infrastructure Planning	Description of Connection
		you receive good value for the money you spend in rates and other fees?	Perception Survey question.		agreed levels of service or if these levels are requiring amendment to meet community expectations or aspirations
	We actively promote our district to enable development, employment and business opportunities	Annual tourism expenditure in the District	Infometric economic reporting	No	
	Waipā is a great place to invest and do business	GDP (this indicator measures the level of productive activity undertaken in Waipā), Money spent locally in the district.	SOLGM wellbeing indicator. Te Waka Monthly update. Infometrics economic reporting (Quarterly Economic Monitor)	No	

EXTERNAL STRATEGIC PRIORITIES – DRAFT MEASURES

Strategic Priority	Description	Draft measure and desired trend	Source	Direct connection to Infrastructure Planning	Description of Connection
Creating vibrant communities	We celebrate all the things residents love about Waipā and foster connections with people and places.	Resident survey response to: How proud do you feel to say that you live in this district? Resident survey response to: Waipā has a great sense of community spirit (a sense of togetherness and good atmosphere among people)?	Existing Resident Survey question. New resident perception survey question.	Yes	Feedback from this survey informs whether council is delivering our agreed levels of service or if these levels are requiring amendment to meet community expectations or aspirations
Nurturing and respecting our unique culture and heritage	In partnership with tangata whenua, we increase our communities' awareness, understanding and appreciation of the district's history and significant sites.	Number of annual visitors to key heritage sites (Te Awamutu Museum, Pirongia Visitor Centre, Cambridge Museum, and Lake Ngā Roto). Usage of Te Ara Wai Journeys website.	2021-31 LTP level of service measure. 2021-31 LTP level of service measure.	No	
Effectively planning and providing for growing communities	Our population is increasing because Waipā is a highly desirable place to live, work, play and invest. Growth is forecasted to continue, and we need robust planning and infrastructure to create liveable communities.	Resident survey response to: How satisfied are you with the way your town is developing in terms of look and feel? Compliance with National Policy Statement - Urban Development 2020 conditions.	Existing Resident Perception Survey question. Future proof	Yes	Feedback from this survey informs whether council is delivering our agreed levels of service or if these levels are requiring amendment to meet community expectations or aspirations
Preparing for climate change	We are experiencing the impacts of climate change in Waipā and must	Real water loss and water consumption quantities.	2021-31 LTP level of service measure.	Yes	Ensuring we are delivery an efficient water supply network is a key focus for council. Projects to

Strategic Priority	Description	Draft measure and desired trend	Source	Direct connection to Infrastructure Planning	Description of Connection
	actively respond to ensure we have resilient communities.				address this will be developed in response to the outcomes from the measure
Leading the recovery of Waipā	<p>In partnership with iwi, we lead the community in the economic and social recovery of the district in response to the global COVID-19 pandemic.</p> <p>We enhance our communities' resilience for the future.</p>	<p>Procurement measures considering local contribution through contracts.</p> <p>How would you rate Council playing a positive role in the social, environmental, economic and cultural recovery for our district?</p>	<p>WDC Procurement strategy monitoring.</p> <p>New resident perception survey question.</p>	No	



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