

Hamilton City Council

Draft Infrastructure Strategy

2024-54

Executive summary

As a city we've found our identity as a vibrant hub within the Waikato region as more people want to call our river city home. We're an increasingly attractive place to do business, with many of the benefits of big-city living, while remaining more affordable and easier to live in than other centres. Located at the heart of the Waikato, Hamilton Kirikiriroa is New Zealand's fourth most populous city, yet we've got a footprint of just 110km².

We're a thriving city located within the golden triangle where more than half of New Zealand's population live, and two-thirds of its recent population growth has occurred. Our prime location and accessibility enable key freight and transport links which bring opportunities for growth.

We are a youthful city with a median age of 33. Over the last ten years our city has experienced significant growth, and this is projected to continue. Our neighbouring districts Waipaa, Waikato and Matamata-Piako are also growing quickly. Many of their residents will commute to Hamilton for work, goods and services, and leisure.

However, housing is increasingly un-affordable, we have growing traffic congestion, our three waters infrastructure struggles to keep pace with growth and the increasing impacts of a compact city, we are constrained in providing industrial land for growth, our growing urban environment continues to displace natural areas, our community and recreation facilities are under pressure. Rapid growth, historical underinvestment, and aging infrastructure reaching the end of its design life are at the heart of these problems.

Our population growth is not a tap we can simply turn off. Our thriving economy, relative housing affordability and quality lifestyle offering will continue to attract people who want to live here, and businesses that want to be based here. We see a bright future for Hamilton and the wider area, but we need to ensure we are providing for the future we want.

We have hard decisions ahead of us if we are going to keep up with the increasing demands of our growing population, and these all come with a hefty price tag. Our infrastructure consists of long-lasting intergenerational assets, but they are also our most expensive and we need to spread these costs fairly across people who use the assets, over a long period of time.

We need to not only invest in new infrastructure but make better use of the infrastructure we already have. This means working smarter and doing things differently. It means working in partnership more often, and collaborating across the public and private sectors to collectively deliver what is needed.

"We can't build our way out of every infrastructure challenge."

The council must make significant investments in our infrastructure assets. To ensure both present and future affordability, it is crucial to employ a strategic approach to planning for the future. This involves prioritising projects, determining optimal timing, and devising appropriate financing strategies. Failure to make informed decisions in these areas could have severe repercussions, impacting the essential infrastructure of our city and jeopardising the council's financial stability.

Challenges and our approach summary

Council plays a key role in addressing infrastructure challenges, which are influenced by national and global factors. Ultimately, addressing these challenges requires aligned efforts at local, regional, national, and international levels. See a summary of the challenges and our approach to these challenges.

Challenges

Legislative and policy standards

The Council operates within a complex legislative and policy environment, with rising environmental and safety expectations. Meeting these standards requires significant infrastructure investment. The changing approach of the central Government adds uncertainty, complicating long-term planning and increasing costs. Existing infrastructure, built to past standards, now faces new legislation and higher environmental standards, particularly regarding the Waikato River. This drives the need for further costly infrastructure investment.

Climate Change

Climate change, a threat to human well-being and the planet, is already causing extreme weather events. Hamilton Kirikiriroa will experience gradual climate changes and more extreme weather, impacting the city, community, and infrastructure. Infrastructure must be built for future climates, considering potential impacts on community health and wellbeing. The climate crisis exacerbates the biodiversity crisis, requiring holistic, nature-based solutions. Emissions from infrastructure construction, maintenance, and disposal must also be considered.

Environmental limits

Hamilton's environment, with only 2% of native vegetation remaining, is at risk due to historical degradation. Without intervention, ecosystem collapse is possible. The Waikato River, a crucial freshwater resource, is under pressure. As population and demand grow, water availability is finite and climate change may exacerbate constraints. It's vital to manage water effectively to sustain the river and biodiversity. Extended low flow conditions also reduce environmental contaminant absorption.

Growth

Hamilton's growth, 76% over 30 years, has outpaced projections, putting pressure on infrastructure and services. This growth indicates success in attracting and retaining residents due to access to housing, jobs, and quality of life. However, growth exacerbates housing affordability issues and strains infrastructure. Infrastructure, built for past demands, now struggles to support the growing population. As the city expands, infrastructure must adapt to meet new challenges.

Affordability and Delivery

Hamilton faces increasing infrastructure funding challenges. The 2021-31 Long Term Plan identified \$1 billion of unfunded infrastructure, and these costs are increasing. High global infrastructure costs, workforce shortages, and rising demand exacerbate these challenges. Funding pressures fall on Hamilton's residents, many already under financial strain. A different approach is needed, with significant changes to planning, delivery, and funding. Incremental changes and three-year electoral cycles will not suffice.

Our Approach

Holistic

Projects must deliver on multiple fronts, contributing to broader outcomes. Community facilities, essential for social interaction, should be integral to infrastructure planning. Integrated, collaborative planning involving Hamilton City Council, neighbouring councils, Future Proof, and wider actors like the Ministry of Education, Iwi, Te Whatu Ora, electricity network providers, the Department of Conservation, and Tertiary Education providers, ensures infrastructure serves all community members and contributes to a sustainable future.

Building a Resilient, Low-Carbon City through Green Infrastructure

Our infrastructure strategy prioritises green solutions, preparing for future environmental challenges. Investment in urban nature supports climate adaptation, biodiversity, and city liveability, inviting economic investment. The strategy builds community resilience and progresses towards a low-carbon city. Transport, our main emissions source, is influenced by our infrastructure, including footpaths, bike paths, roads, and bus stops and lanes, crucial for our low-carbon transition.

Make the most of and look after what we've got

Hamilton's future relies on pragmatic decisions about renewals, operations, maintenance, and demand management. With ageing infrastructure, asset renewal is prioritised based on risk and consequence. We can't construct our way out of every problem; efficient use and demand management are key. Altering financing for roads, water services, and other infrastructure can enhance utilisation, reduce congestion, expedite decarbonisation, conserve water, and improve infrastructure quality.

Approach to Growth

Hamilton City Council guides growth, ensuring it occurs in the right places with good transport and amenities, considering environmental impact. Embracing growth opportunities through timely investment is crucial for the city's future. Effective growth management requires infrastructure to keep pace with population growth and provision of zoned, serviced land for housing and businesses. This approach is key to enabling quality, affordable housing in suitable locations.

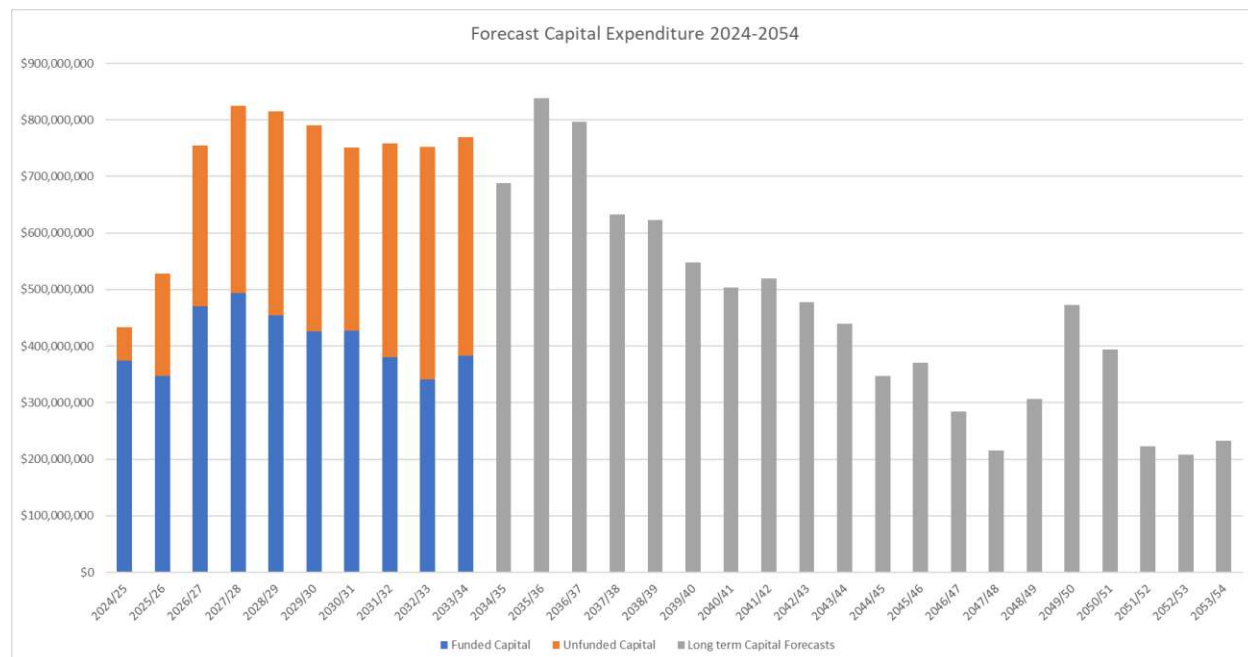
How we fund infrastructure

Hamilton City Council has a growth pays for growth funding principle and pursues alternative funding opportunities and mechanisms such as the HIF, IFF and IAF. However, the current resources for funding infrastructure are insufficient. The council aims to enable 30-year outcomes, but system change is needed for local government to become financially sustainable. Until such change is achieved, the council will continue to work with the tools at its disposal.

Financial strategy

Capital investment

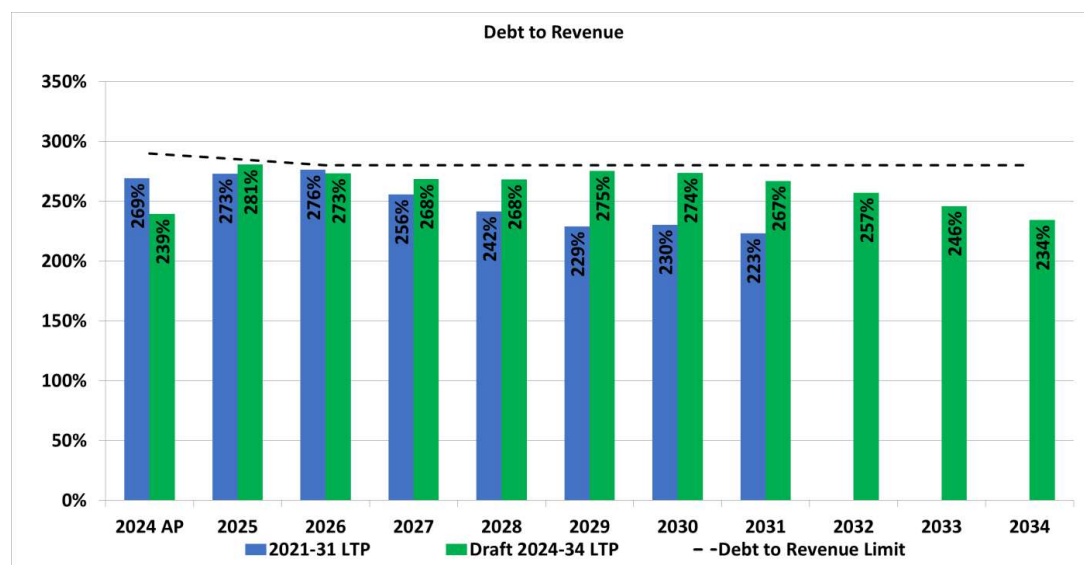
The estimate requirement for capital investment over the next 30 years is estimated at \$28.6B, as shown in the graph below:



This includes \$3.7B of unfunded infrastructure in the first 10 years of the plan – these are for projects which the Council would like to do but are unaffordable within the current financial strategy.

Debt

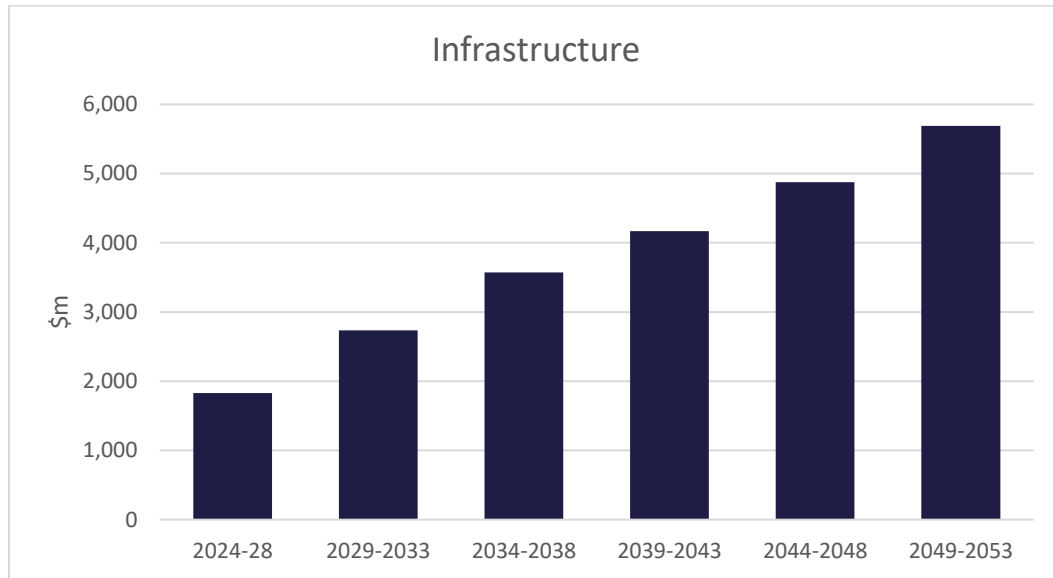
To fund the increased level of investment in new and existing assets over the next ten years, Council expects to increase its debt to 281% debt to revenue.



Operational forecasts

Estimated operating expenditure for thirty years is expected to increase in line with the growth in asset value as shown in the graph below.

The forecasted operational costs include estimates of what it will cost to deliver the services that we currently provide. There has been significant increase associated within asset related costs of interest, depreciation and maintaining new assets since the 2021-51 Strategy was produced.



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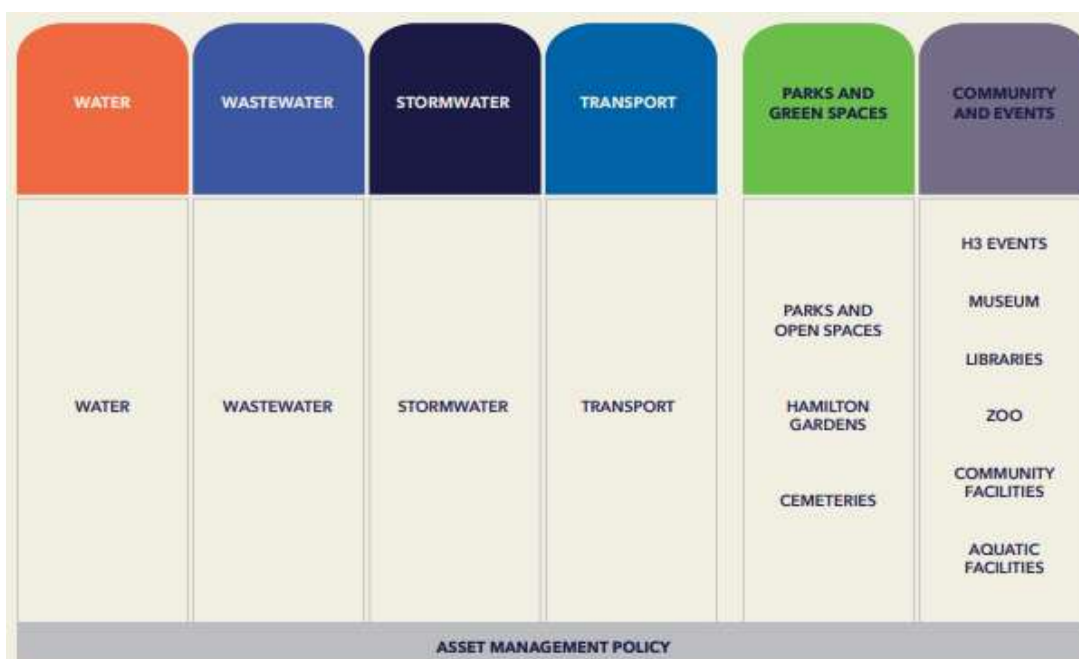
What do we mean by infrastructure?

Infrastructure is the foundation of our city. It impacts every facet of our residents' lives from travelling on roads and bridges, to turning on taps and flushing our toilets, to enjoying museums and parks. It provides us with places to relax, be entertained and make community connections.

Infrastructure has features that make it different from other goods and services. These features relate to how infrastructure is made and how it's used. This affects how infrastructure is funded and how the organisations that provide it are structured and operate. All infrastructure sectors share these features to some degree:

- Infrastructure is intergenerational. With good maintenance, some infrastructure assets could last for over a century.
- Infrastructure investment is lumpy as it involves large up-front costs to develop and upgrade.
- Infrastructure can be interconnected and interdependent. For instance, a new water pipe can only supply a home with drinking water if it connects to other water pipes that link it to a water source.
- Infrastructure often provides shared services to many people.
- Infrastructure generates spill-over effects. For example, a new road or a passenger transport service can make an existing road quieter or busier.

In terms of this strategy, we define infrastructure as the physical structures and natural environments that make up our city - including roads, pipes, community facilities, parks and gullies. Infrastructure enables wellbeing outcomes for Hamiltonians and helps Council deliver on our vision for Hamilton Kirikiriroa.



The strategy's purpose

One of Hamilton City Council's primary roles is to plan, deliver and maintain the infrastructure needed for our city. Together with the Financial Strategy, our Infrastructure Strategy outlines how Council intends to deliver on its infrastructure responsibilities in alignment with our community outcomes, primary strategies and legislative responsibilities.

The purpose of the Infrastructure Strategy is to identify significant infrastructure challenges for Hamilton City Council over the next 30 years, and to identify the principal options for managing those challenges and the implications of those options. It joins up operational planning at the asset level and strategic delivery on Council's community outcomes.

A long-term view

This strategy takes holistic, high level and long-term view of how the Council intends to manage its infrastructure assets for Hamilton. A 30-year horizon requires us to think about trends such as our changing climate and population change, and the impacts these will have on infrastructure decision-making over the coming years and decades.

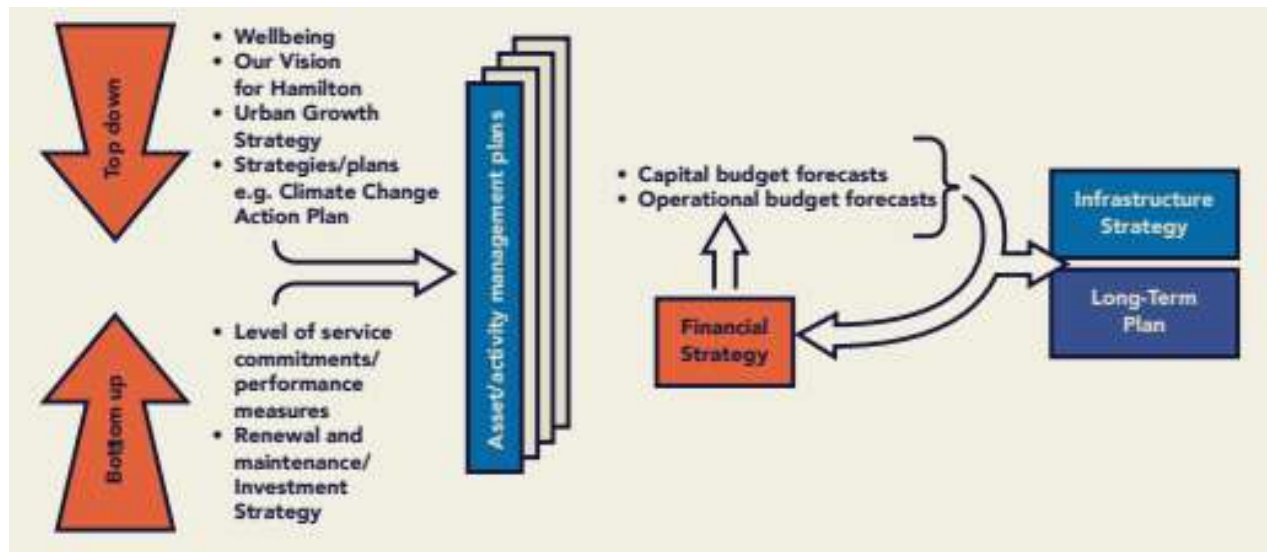
It takes a long-term view of the city's future infrastructure needs and is a statement of current assumptions and thinking on what will be required to address the major issues facing the city over the next 30 years.

The majority of the Long-Term Plan, including the Financial Strategy, has a 10-year focus, setting out operational and capital budgets on an annual basis for 10 years. However, the Infrastructure Strategy is different and covers a 30-year period. Infrastructure is costly to build and maintain, and frequently has an intended life span of 50 plus years. For these reasons councils have a requirement to take a long-term view of their infrastructure programmes, planning for the needs of communities well in advance.

The strategy is not a comprehensive 30-year programme of works. While it draws on the long-term planning of the Activity Management Plans for Councils activities, the first 10 years is of a higher confidence and completeness than indicative estimates for beyond year 10. These estimates will be refined and change over future long-term plans and infrastructure strategies.

How the Strategy was developed

The council has developed its Infrastructure Strategy from both a 'bottom up' and 'top down' approach. What this means is that Council considers the strategic context, and external environment in which infrastructure exists, while it develops operational requirements, responses and forecasts through developing its activity management plans to create a 30-Year Infrastructure Strategy.



Capital and operational forecasts that are developed in initial activity management plans are moderated based on affordability as defined in the Council's Financial Strategy.

The Infrastructure Strategy outlines investments that are both funded and unfunded in the first 10 years as well as estimates of longer-term investments in infrastructure that are anticipated.

Challenges

There are a number of overarching challenges that can be addressed through the provision of infrastructure. These are not unique to Hamilton and are predominantly caused by national and global drivers. Hamilton City Council has a key role in addressing these areas locally and contributing toward a national and global solution.

Legislative and policy standards

Council operates within a complex and broad legislative and policy environment. We have obligations to meet, with environmental quality and safety expectations continually rising. Various authorities and regulators such as regional councils, the Waikato River Authority, and central Government set stringent standards through legislation, policy statements, and strategies. These rigorous benchmarks are admirable as we continually strive for a better Hamilton but reaching high standards requires commitment to long term and costly infrastructure investment.

While local government system change is needed, the changing central Government approach to local government and infrastructure continues to cause uncertainty. An evolving legislative and policy landscape hinders the certainty needed to invest in long term and costly infrastructure. The 2017 – 2023 Labour-led Government reform agenda for water services, resource management and local government brought significant uncertainty as did the subsequent reversal of these reforms. Interpreting legislative and policy direction becomes complex and costly when contradictory positions exist concurrently.

Like other Councils, we built the existing infrastructure to cater to the standards that were appropriate at that time. Since then, there is new legislation and higher environmental standards that our infrastructure networks must meet. This includes stronger obligations to restore and protect the wellbeing of the Waikato River set out in Te Ture Whaimana o Te Awa o Waikato: the primary direction setting document for any activity that affects the Waikato River.

Increasing standards drive the need for significant infrastructure investment. Alongside the cost of this infrastructure investment, conflicting and changing direction confounds planning, slows delivery and adds cost.

Climate Change

“The scientific evidence is unequivocal: climate change is a threat to human well-being and the health of the planet. Any further delay in concerted global action will miss the brief, rapidly closing window to secure a liveable future.” IPCC

We are already experiencing the effects of climate change. In 2023, around the world, climate change drove more frequent and severe wildfires, floods, heatwaves and cyclones. These extreme weather events were also experienced across Aotearoa and are likely to become more frequent.

Climate change will affect us here in Hamilton Kirikiriroa. We are likely to experience gradual changes in climate such as warmer days and nights, making it harder for the city to cool and provide relief from the heat. We will also likely experience more extreme weather events, with intense storms, rainfall and winds coming from different directions. These all have the potential to impact on our city, community and infrastructure in different ways. We need to ready our existing infrastructure and to think differently about our future infrastructure.

In the past we have built our infrastructure for our current climate, but with the changes that are predicted we need to build infrastructure to withstand the climate over the asset's life. These risks to our infrastructure have the potential to affect the health and wellbeing of our community, including impacting our water supply, causing more flooding in our communities, increasing the heat in the city, and impacting the ease in which we can travel around the city.

The climate change crisis also exacerbates the biodiversity crisis that we are experiencing. We need to make sure that these two crises are responded to holistically and that nature-based solutions, particularly in relation to stormwater management, are central to our infrastructure response.

As well as thinking about the emissions from operating our buildings, traveling around the city, and maintaining and operating our three waters systems, we also need to consider the emissions that result from the construction, maintenance and disposal of infrastructure. The embodied emissions from the construction of bike paths, roads, buildings, and other assets need to be considered as part of our decisions.

Environmental limits

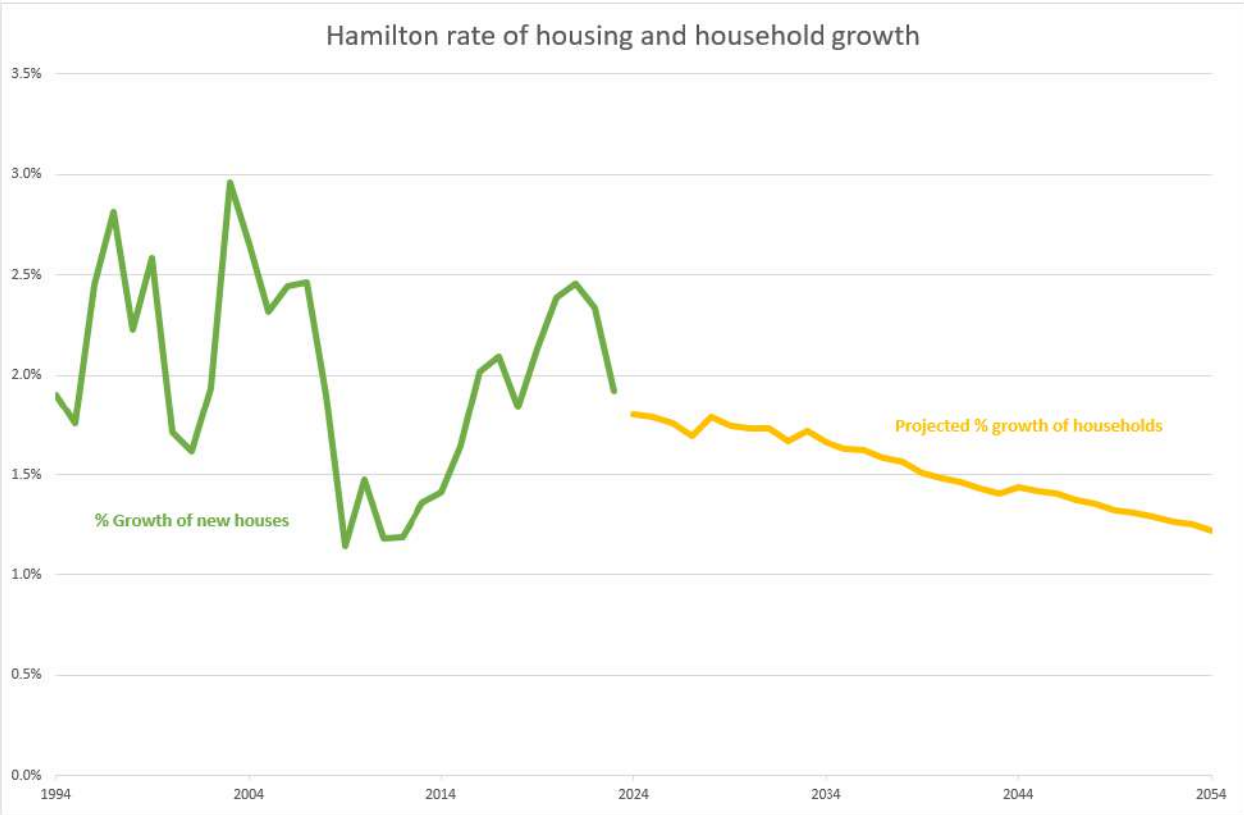
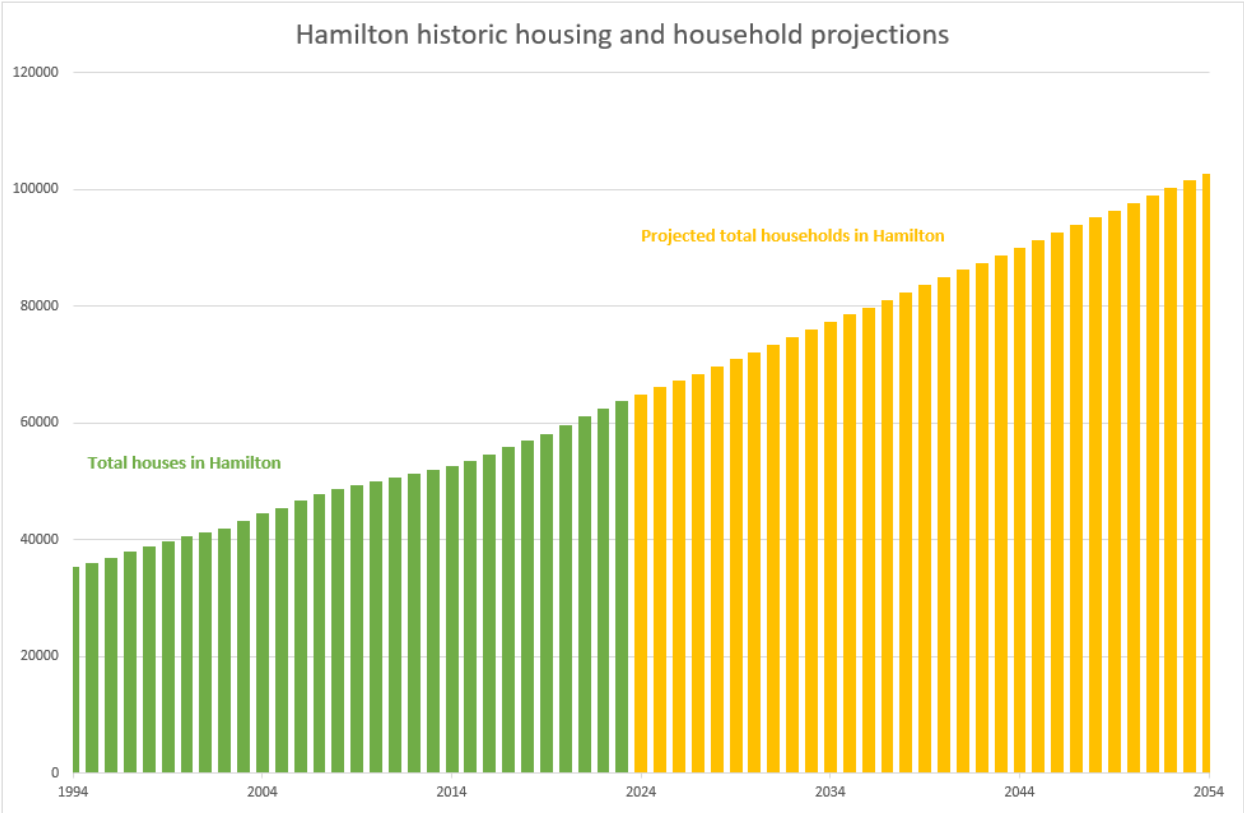
Preserving our environment and managing resources sustainably is integral to societal wellbeing. In Hamilton, where only 2% of native vegetation cover remains, the urgency of this issue is evident. Historical actions have led to significant degradation of our biodiversity, impacting plants, trees, and wildlife. Without intervention, we risk further diminishing our native vegetation, potentially leading to ecosystem collapse and a significant impact on future generations.

Freshwater, a precious yet limited resource, is under similar threat. The Waikato River enables agricultural, recreational, cultural, drinking and industrial activities throughout the Waikato and into Auckland, but sustaining sufficient river flow is an environmental limit. The Waikato River is already under pressure, it's crucial to manage the freshwater we take from the river effectively and efficiently to ensure the sustainability of the Waikato River and the biodiversity it supports. All of Hamilton's water comes from the Waikato River and is managed through a long-term water allocation consent. As our population grows, so does our demand for water. However, our ability to take water from the Waikato River is finite. Water available from the Waikato River for allocation is approaching or exceeding limits in some reaches of the Waikato River. The projected impacts of climate change are likely to exacerbate constraints on water availability and/or increase demand. Extended periods of low flow conditions also reduce the ability of our environment to absorb contaminants from our communities.

Growth

Council has a legislative role to enable growth. Council cannot choose if or how quickly we grow. However, Council can choose how we respond to growth.

Population, business and household growth have been high over the last 30 years. Over this period, the Hamilton population has grown by 76% at an average rate of 2% per year, higher than the national growth of 46%, at an average rate of 1.3% per year.



This growth has been faster than we projected. Faster growth results in quicker uptake of land and greater pressure on existing services such as roads, stormwater, water and wastewater provision and community spaces. But it's also an indicator we are doing something right. Attractive cities succeed in attracting migrants and retaining existing residents because they offer comparatively affordable housing, good access to jobs and education and good quality of life.

Growth can put pressure on existing residents of Hamilton, particularly our vulnerable communities. Housing and business capacity constraints results in higher land prices, worsening housing affordability and businesses being less financially viable. Additionally, Hamilton as a hub for employment and recreation so our infrastructure supports an even greater population than those living in Hamilton. As the wider subregion grows the effects of subregional growth compound on Hamilton.

Our water, wastewater and stormwater networks are fundamental services required for growth. Sustained high growth in existing built areas of our city has stretched our infrastructure to its limits. In some of the older areas of the city we're already seeing the impact of growth on our aging infrastructure particularly following wet weather events. As we have grown into a much larger city more people are living and working closer together but being serviced by infrastructure built to standards and for development demands that were appropriate at the time, but that are not designed for our growing population. This has resulted in some challenges with how much development our three waters networks can cope with in some areas.

[Affordability and delivery](#)

Stradling these specific challenges is a broader issue affecting all councils: funding the required infrastructure. The 2021-31 Long Term Plan identified \$1 billion of unfunded infrastructure, and these costs are increasing. The infrastructure funding challenges for Hamilton are expected to increase over this strategy's horizon.

New Zealand is grappling with some of the highest infrastructure costs globally, and these costs continue to escalate. Delivering infrastructure at scale requires a specialist, experienced workforce. However, we currently face a workforce shortage across all facets of infrastructure planning, construction, operations and maintenance. This shortage is projected to intensify as global demand for these skills continues to rise.

To support the level of infrastructure investment needed to respond to the servicing challenges significant new funding is needed, yet the same people are expected to pay for it. Funding is sourced collectively through taxes and rates or through targeted charges like development contributions and user fees. Continuing to provide public goods at current or higher levels of service will cost more money. It's the people of Hamilton funding these public goods, many of whom already face increased financial pressures and a diminished ability to contribute more towards infrastructure investment. We won't move the dial on infrastructure provision until we direct enough of our economy's productive elements towards providing long-term enabling infrastructure. But we can't fund it in a way that makes rates unaffordable or increases targeted costs to a level where it becomes too expensive to build new homes or use Council facilities.

We need a different approach. These changes will need to be marked and significant. Incremental and minor changes to how we plan, deliver, and fund infrastructure will not suffice. The three-year electoral cycles (which Council has consistently advocated against) at both central and local government levels

compound the delivery challenge.

Our approach

Our approach does not fully address the challenges ahead of Hamilton but is our best attempt at tackling these head on. Ultimately many of the challenges facing Hamilton need aligned local, regional, national and international efforts to address. Hamilton is committed to doing our part and to being a willing partner to tackle these challenges.

Holistic

Projects must deliver on multiple fronts to warrant prioritisation within our limited funding capacity. Each project should not only meet its immediate objectives but also contribute to broader outcomes. Community facilities should be included as core infrastructure and not relegated to the status of 'nice to have'. Community facilities are the lifeblood of our neighbourhoods, providing essential services and spaces for social interaction. They should be seen not as optional extras but as integral components of our infrastructure, deserving of the same attention and investment as roads, utilities, and other traditional forms of infrastructure.

Planning needs to be integrated and collaborative, pushing everyone towards a collective wellbeing outcome for communities. This involves not just Hamilton City Council, but also neighbouring councils, Future Proof (a joint project set up to consider how the Hamilton, Waipā, Waikato and Matamata-Piako sub-region should develop into the future), and wider actors like the Ministry of Education, Iwi, Te Whatu Ora, electricity network providers, the Department of Conservation, and Tertiary Education providers. By working together, we can ensure that our infrastructure serves the needs of all community members and contributes to a sustainable and prosperous future.

Building a Resilient, Low-Carbon City through Green Infrastructure

Our approach to infrastructure prioritises green and nature-based solutions, aiming to create infrastructure that is fit for the future, not just for the environment of today. We understand that extreme weather events and other natural disasters are likely to increase in frequency and intensity. For instance, Hamilton will experience extreme rainfall events within the life-span of all our assets, some of which will see multiple events over a useful life of over a century.

Investing in urban nature is a multifaceted solution that addresses a range of issues. If done well it can support climate change adaptation, increase biodiversity and contribute to the creation of a more liveable city. Moreover, it offers economic benefits by creating attractive environments that invite investment.

Our infrastructure strategy not only builds the resilience of our community and city but also determines our progress towards becoming a low-carbon city. Transport is our most significant source of emissions, and we can influence this through the infrastructure we provide. Our efforts include the design, construction, and maintenance of footpaths, bike paths, roads, and bus stops and lanes. All of these elements play a crucial role in our transition towards building a low-carbon city.

Make the most of and look after what we've got

Hamilton is faced with the challenge of making pragmatic decisions that are crucial for the city's future. These decisions revolve around renewals, operations, maintenance, and demand management. Council

has planned and forecasted the renewal of its current assets over the next 30 years. Asset renewal is continually reprioritised based on the greatest risk and consequence. Despite the relative youth of Hamilton's population, parts of the city's infrastructure is ageing, necessitating the replacement of an increasing number of assets as they reach the end of their life. When prioritising spending, we consider whole-of-life costs.

It's important to understand that we cannot construct our way out of every problem. Some issues are too costly to resolve through building alone, and others, such as limits on the fresh water take from the Waikato river, do not have easily built infrastructure solutions. Instead, we need to make the most of what we already have through demand management and more efficient use, such as encouraging efficient water use and repurposing road space for bus priority. By altering how we finance our busiest roads, water services, and other infrastructure, we can enhance asset utilisation, reduce traffic congestion, expedite decarbonisation efforts, conserve water, and elevate the quality of infrastructure.

Approach to growth

Hamilton City Council manages growth in the city. Part of this means guiding where we grow so it's in the right places with good transport connections, close to all the things we need and considers the impact on the environment. Our Hamilton Urban Growth Strategy guides how and where we do this.

We need to embrace the opportunities growth brings, by investing in the right places at the right time. Our city is at the heart of an ambitious, smart and progressive region and we know how we manage this growth will define us for years to come.

Investment is key to managing growth effectively. We must ensure that our infrastructure keeps pace with population growth. Zoned and serviced land is essential to enable capacity for houses and businesses. Our approach to growth is a key puzzle piece required to enable quality, affordable housing in the right locations.

We must prioritise Council-funded growth investment in our existing built environment. Landowners and property developers will increasingly be relied upon to fund larger share of the costs in any greenfield expansion area. This approach enables greenfield growth when it's economically feasible while encouraging the development of a compact city. Enabling compact growth also drives financial sustainability - it delivers higher rates density through increased housing density, minimises the breadth of future renewal obligations, is partly funded through depreciation when combined with existing renewal programmes, makes better use of existing community facilities and maximises the wellbeing benefits derived from well-planned density.

How we fund infrastructure

A collaborative approach is essential for infrastructure funding, where those who benefit from infrastructure contribute to its cost. We prefer a user-pays system where causal and benefit relationships can be clearly established, and it's administratively efficient to do so. However, many of our services, such as providing public goods, have broad beneficiaries and are often inefficient to commodify. Therefore, these costs should be shared widely and progressively.

We form partnerships with landowners through cost-sharing private developer agreements and collaborations with our Future Proof partners to construct boundaryless sub-regionally significant

infrastructure. We utilise intergenerational debt to align costs with long-term benefits and pursue alternative funding mechanisms such as off-balance-sheet special purpose vehicles.

Prioritising investment into the existing built areas of our city is one approach to minimise future investment obligations. This type of investment renews old assets and doesn't result in more roads and pipes like greenfield growth. Renewals can result in larger capacity assets as level of service and growth are also driving factors when making renewal investment decisions.

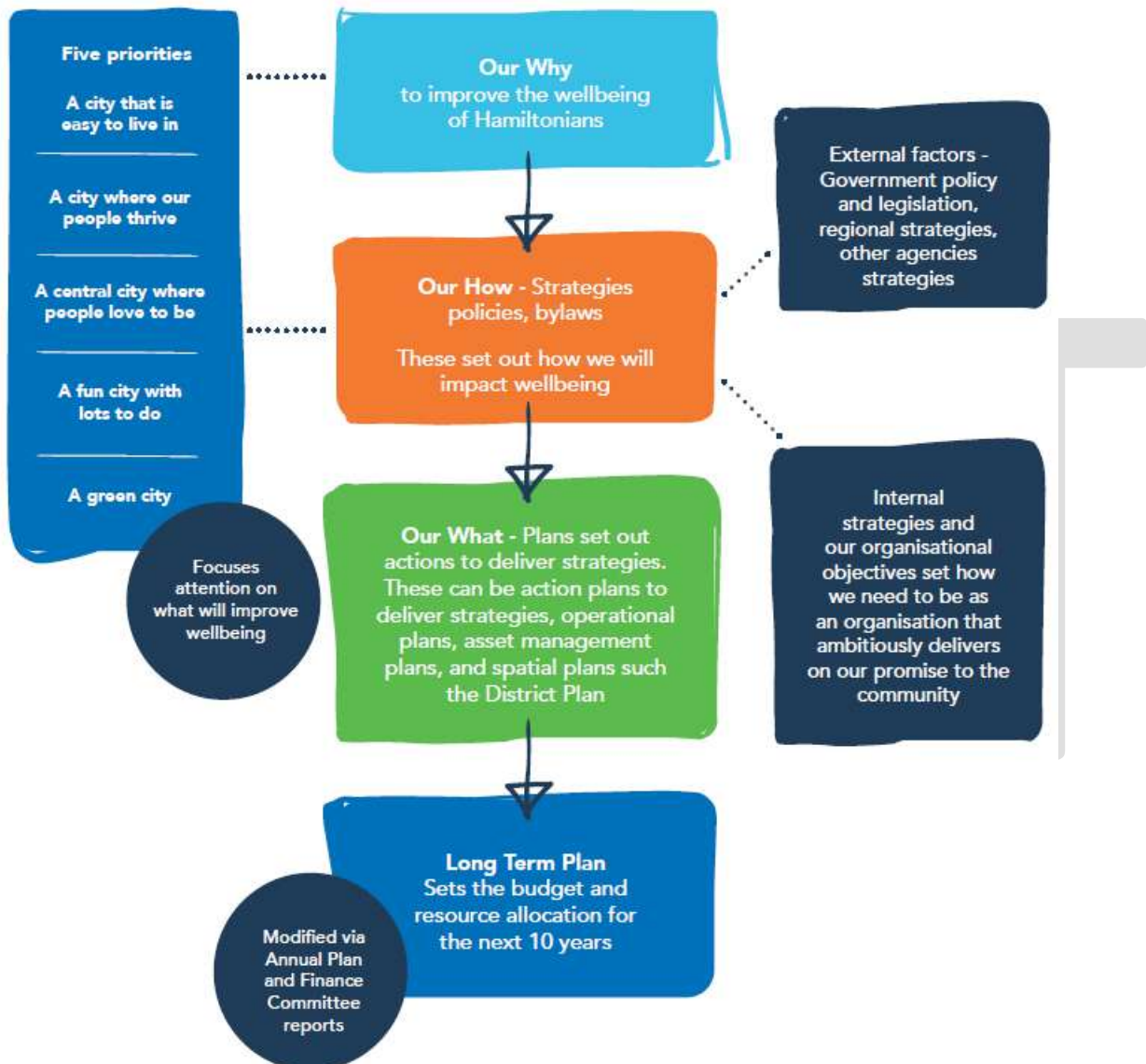
Investing in new infrastructure ahead of housing and commercial development in growing areas can sometimes be advantageous. However, this approach can be financially risky and costly. Developer feasibility is a key consideration in this process. An alternative is to identify, protect, and acquire corridors of land and sites for future infrastructure. This ensures that land is available for future infrastructure provision, while also allowing for flexibility in how and when that infrastructure will be developed.

Legislation is needed to enable value capture mechanisms. We are utilising all available resources to fund infrastructure, but it's insufficient. Our aim is to enable 30-year outcomes, but system change is needed for local government to become financially sustainable. Until such change is achieved, we will continue to work with the tools at our disposal.

DRAFT

Vision and strategic context

Our Infrastructure Strategy captures our infrastructure intent for the next 30 years in one place. It's one of Council's most important strategies and fits within the orange box below. At a high level it is informed by our Community Outcomes and Our Vision for Hamilton Kirikiriroa.



Our vision for Hamilton Kirikiriroa

Everything we do is aimed at improving the wellbeing of Hamiltonians.

A city that's easy to live in - Ahuahungia teetehi taaone e tau ai ten oho ki roto

WHAT WE WANT

We want a city that's easy to live in, explore and connect. Hamilton is small enough to enjoy a strong sense of community but big enough to be vibrant and interesting.

As we continue to grow, we'll prioritise building a connected and safe city, with walkways and cycleways that allow us to move around our city quickly and easily, bringing neighbourhoods together.

We want our children to be able to cycle safely to school and for people of all ages and abilities to easily access different neighbourhoods, from one side of the Waikato River to the other – by whatever transport option we choose.

We'll be focused on helping our neighbourhoods to create community identity and supporting community spaces across our city. People in our city want to live in lively, safe communities with shared identities and public facilities such as libraries, playgrounds and community hubs accessible to everyone.

It should be easy for us all to look after our mental and physical health by enjoying our city's green and open spaces, including the Waikato River paths and stunning places like the Hamilton Gardens. By investing in cycle paths and accessways, and utilising our beautiful gully network, we'll be able to create a city that our people can easily enjoy and explore. But we'll also need improvements in public transport – so we will enable and support strong public transport connections that help Hamiltonians get easy access to essential services such as education, health centres and supermarkets.

And we'll need to focus on delivering the amenities and services that build strong communities, both in our existing neighbourhoods and for our new ones, as well as supporting a mix of housing types – including affordable housing. It's about finding the right balance between revitalising our established neighbourhoods with investing in new liveable suburbs required for the number of new people choosing to call Hamilton home.

We want a city that's easy to live in, explore, and connect.

What we will focus on:

1. We'll prioritise building connected and safe walkways and cycleways that allow us to move around our city quickly and easily and bring neighbourhoods together.
2. We'll revitalise our existing neighbourhoods and invest in the creation of our new neighbourhoods to make sure we have a liveable, sustainable city.
3. We'll encourage new developments in Hamilton Kirikiriroa to include a mix of housing, including affordable housing options.
4. We'll enable and support strong public transport connections that help Hamiltonians get easy access to essential services such as education, health centres and supermarkets.
5. We'll put more focus on our neighbourhoods having community identity and supporting community spaces across our city.

A city where our people thrive - Ahuahungia teetehi taaone e puaawai ai ngaa taangata katoa

WHAT WE WANT

We want to actively create opportunities for our people to thrive in their jobs, careers, and lives so they can leverage the wonderful lifestyle and opportunities our city has to offer. We want our city to be welcoming and offer jobs and opportunities for everyone across a wide range of industries.

Hamilton has many advantages over other parts of the New Zealand which includes being well positioned in the middle of the country's 'Golden Triangle' (right between Auckland and Tauranga). This has enabled plans, which are now well underway, to become New Zealand's most important logistics hub. We have also maintained a regional focus for economic opportunity, looking beyond our borders, working with our regional partners to maximise the opportunities for Hamilton Kirikiriroa as the centre of the Waikato region. We are already working closely with central government, iwi and our neighbouring councils like Tauranga, Auckland, Waikato and Waipaa to make sure our region continues to flourish.

When Hamilton thrives, our wider region thrives. So we'll continue to advocate for Hamilton – and Hamiltonians – every chance we get. We are already home to world-class businesses across a range of sectors, bringing opportunities, jobs and investment, including for our young people. We are a tech-savvy city, with the digital know-how to deliver research and development on the world stage. Increasingly, our city is a place where people and businesses want to come, stay, and grow.

Our attractive lifestyle, based upon a vibrant city that's easy to live in, means more and more people want to be here. Young people are now coming to our city (and in some cases, returning home) to find good jobs, buy homes, raise families and become part of our community. This, along with more than 160 ethnic groups making up our city, adds a valuable diversity to Hamilton which brings opportunities and benefits for all Hamiltonians. We want Hamilton to continue to build on its growing reputation as a centre of excellence within innovation, training, smart and tech-sector industries. We need the infrastructure and support services in place to nurture and promote sustainable businesses that add value to our city.

We want to actively create opportunities for our people to thrive in their jobs, careers, and lives so they can leverage the wonderful lifestyle and opportunities our city has to offer. What we will focus on:

1. We'll work with partners like central government and other councils to deliver fast and efficient transport connections to connect Hamilton Kirikiriroa quickly to places like Auckland Tāmaki Makaurau and Tauranga.
2. We'll look beyond our borders and work with our regional partners to maximise the opportunities from Hamilton Kirikiriroa being the hub of the Waikato region.
3. We'll make sure our economic strength is further leveraged and that Hamilton Kirikiriroa is known as a great place to work and do business.
4. We'll empower and enable our diverse communities to share their voice, and shape their city.
5. We'll invest in the right infrastructure to make sure Hamilton Kirikiriroa is an attractive place for businesses to succeed.

A central city where people love to be - Ahuahungia te pokapuu o teetehi taaone e arohaina ai e te taangata

WHAT WE WANT

We want our central city to be the beating heart of Hamilton which always has something going on for our diverse communities to come together and enjoy.

We want our central city to be the vibrant heart of our cosmopolitan and diverse city. A city centre that is thoughtfully designed around people, culture and the natural environment. We want our city to be alive with hustle and bustle, with people happily living and playing in the central city.

Our central city should be accessible via different transport modes and enjoy easy access to the nearby Waikato River which is celebrated and treasured for the city taonga (treasure) it is.

Our restaurants and bars will offer Hamiltonians choice and entertainment, and draw people from outside of Hamilton who know that a visit to central Hamilton is a trip well worth making.

Our central city should support a thriving visual arts and performance scene through our iconic local theatres and bring the area around our Waikato Regional Theatre alive, further linking our city to the stunning Waikato River.

Inner-city dwellers will enjoy a range of apartment options, close to where they work or close to strong transport links that get them to where they need to be. But they will always be close to green open spaces, along the river and with parks like Victoria on the River nearby. Local, national and international businesses will choose to base themselves in our central city which remains affordable and accessible, serviced by everything needed to live a full Hamilton life.

We want our central city to be the beating heart of Hamilton Kirikiriroa which always has something going on for our diverse communities to come together and enjoy. What we will focus on:

1. We'll strengthen the connection and access between the city centre and the Waikato River.
2. We'll promote daytime and evening activity.
3. We'll create performance spaces such as the new regional theatre and leverage existing central city spaces to support arts and culture initiatives which offer something unique to our city.
4. We'll support mixed inner-city living options in Hamilton Kirikiriroa which encourage people to live in the central city alongside vibrant retail, hospitality, and entertainment sectors.
5. We'll make it easy to get into and around the city through a range of alternative travel options.

A fun city with lots to do - Ahuahungia teetehi taaone ngahau e tini ai ngaa kaupapa papai hei whai

WHAT WE WANT

We want Hamilton to be an even better place for everyone to play, with things to do or see around every corner.

We want to make sure our city provides opportunities for all our people to play and have fun - whether it be through organised sport, local playgrounds, events, or our visitor destinations.

A fun city should have something for everyone whether you want to join a local choir or the local quiz team – we want all of us to have something to do and be part of.

We want to build on our growing reputation for hosting outstanding events; events that bring economic benefit, that Hamiltonians love, and that bring people from all over New Zealand to our city.

But small events also have a role in the life of our city. We're keen to support more arts and cultural events and make sure we have the right indoor and outdoor facilities in place to support local community sports events that people of all ages can get involved in. All of these things add to the sense of community we all value about Hamilton.

We have already invested in world-class stadium and event facilities like Seddon Park, Claudelands Event Centre and FMG Stadium Waikato, and are home to key visitor destinations such as Hamilton Zoo, Hamilton Gardens, and Waikato Museum.

And we'll continue to embrace the outdoors, not just the Waikato River but places like Waiwhakareke Natural Heritage Park, our destination playgrounds and Lake Rotorua (Hamilton Lake). These facilities provide locals and visitors with memories and experiences that keep people entertained and wanting more. They drive interest and appreciation in our city. They make living here fun.

There's lots to do in Hamilton, but there's also quiet spaces for our community. Whether it's lying under a tree in a local park, taking in the views of the Waikato River or discovering our past at Waikato Museum, we invest in spaces where our people can relax, rest and reflect.

We want Hamilton Kirikiriroa to be an even better place for everyone to play, with things to do or see around every corner. What we will focus on:

1. We'll develop open community spaces like Korikori Park in Rototuna and Minogue Park in Forest Lake that are accessible to everyone to enjoy.
2. We'll invest in and enhance Waikato Museum, Hamilton Gardens, Hamilton Zoo and Waiwhakareke Natural Heritage Park to create new and unique experiences for our people and visitors.
3. We'll host and celebrate city events like the Hamilton Gardens Arts Festival and Balloons over Waikato.
4. We'll actively celebrate and promote a city where residents have the opportunity to have fun with their friends and family.
5. We'll support local sports events by investing in play spaces and we'll work hard to attract national and international sports events to our city.

A green city - Ahuahungia teetehi taaone tiaki taiao

WHAT WE WANT

We want to do it right together, so our city will get better by the day and we can leave a legacy we can all be proud of.

We'll promote becoming a sustainable city by challenging the way we grow our city and how we live within our city. We love our environment and we're all committed to protecting it for future generations.

We embrace our individual and collective roles as kaitiaki (caretakers) of our land, water and air. Together, we honour, enhance and protect taonga (treasures) like the Waikato River, and our city's extensive and unique gully system.

We are proud of our green, clean city and we're taking a thoughtful and city-wide partnership approach between businesses, organisations and community groups to tackle how our city responds to climate change.

We need to look after what we already have by embracing the sustainable use of natural resources such as our water. We want to enhance our beautiful open green spaces like Waiwhakareke Natural Heritage Park, the West Town Belt and Taitua Arboretum – which are valued so highly by Hamiltonians. And it's important we continue to minimise our impact on the land by leading the country in waste minimisation practices.

We want to continue to plan well for the future, so we can strongly focus on designing new neighbourhoods like Peacocke in a way where our natural environment can exist in harmony with new homes and services. That means we'll need a stronger, safer network of alternative transport which offer people real choice and also offer ways to reduce our carbon footprint.

Shaping a green city involves investing in our city's natural areas, having a clear response to climate change, managing a safe and resilient water supply, managing our stormwater and wastewater and minimising the impact of waste. What we will focus on:

1. We'll protect and restore our natural gully network and the biodiversity of Hamilton Kirikiriroa to increase how green our city is, making it healthier and stronger.
2. We'll reduce the carbon footprint of Hamilton Kirikiriroa and build a city that is resilient to the effects of climate change.
3. We'll mitigate the impact of the city on the health and wellbeing of the Waikato River and Lake Rotorua (Hamilton Lake).
4. We'll encourage and enable alternative ways to move safely and quickly around our city.
5. We'll plan our future as a sustainable city – balancing the natural and built environments so they can live in harmony.

Legislation and policy

The legislative and policy environment in which the council operates is complex. In its planning, delivery, operations and maintenance of infrastructure, the council must ensure that it is delivering on the direction that is set out in legislation and policy. Often this can put the council in the position of having to balance multiple priorities and participate in unaligned planning and funding processes.

We often find ourselves trying to give effect to conflicting priorities, for example at the national level where we are obliged to deliver an adequate supply of land for housing and businesses, whilst at the same time protecting highly productive land and indigenous biodiversity.

We need to deliver on our legal obligations, including through contributing toward achieving the Vision, Objectives and Strategies in Te Ture Whaimana o te Awa o Waikato in regard to the health and wellbeing of the Waikato River, but also cater for urban growth and development.

These competing factors all influence how, when and where council provides its infrastructure.

Summary of current key drivers for infrastructure planning, funding and delivery



This is not an exhaustive list of the drivers impacting infrastructure but covers the main legislation and planning that dictate land use, funding, and transport.

Assumptions

Assumption	Level of uncertainty and potential impact
All financial information in this Strategy includes inflation unless stated otherwise.	<p>High degree of uncertainty as based on long-term inflation forecasts that are likely to change and errors would have a compounding effect over time. Increased or decreased inflation could have a material impact on the accuracy of financial forecasts. This would result in the need to either decrease or increase funding in order to continue to deliver the same service levels and programme. Inflation rates used for the first 10 years are outlined in the 2024-34 Long Term Plan assumptions. The following annual inflation rates have been used beyond year 10:</p> <p>Operational expenditure 3.20%</p> <p>Capital expenditure: 3.40%</p>
Forecast capital expenditure is based on gross (total project) costs.	Medium level of uncertainty. Some projects will attract funding from other sources. These sources may include subsidies or grants, or be part funded by developers or from sources that don't yet exist. This could have a significant impact on the final cost of projects to the Council.
Forecast operational expenditure is based on anticipated gross cost to the Council and include indirect costs of providing the service (including depreciation, interest costs and overheads).	High level of uncertainty as revenue from operational activities is not included and is difficult to forecast a long term. The potential impact of this uncertainty is relatively low, as adjustments can be made to budgets as trends in revenue are monitored and can be predicted over the shorter term.
An additional extra 12,500 houses over the next 10 years and 38,000 over the next 30 years are required to meet the housing needs for additional people	Medium level of uncertainty as based on independent demographic projections. These could be materially impacted by unforeseen changes to migration patterns – both international and domestic. This could significantly alter the nature and timing of infrastructure required to support growth.
Waka Kotahi Transport Agency subsidies continue as currently provided at a rate of 51% subsidy for all eligible projects	<p>Medium level of uncertainty as based on assumed subsidy rates. The current Waka Kotahi funding model is insufficient to meet the transport infrastructure investment needs of New Zealand. To bridge this gap there will likely leading to a change in funding model and a further prioritisation of projects.</p> <p>Changes to rates or project eligibility criteria would have a large impact on the net cost of transport projects for the Council.</p>

Assumption	Level of uncertainty and potential impact
There will be no significant changes to legislation that would impact on the need for and nature of infrastructure.	High level of uncertainty as legislative change is probable over the 30 years of the Strategy. The potential impact of future changes could be high if legislation results in additional required expenditure to comply with new standards, new funding opportunities / mechanisms or if it requires the Council to deliver higher service levels than planned at this point.
New resource consents for three waters activities and the Waikato River are renewed with more stringent conditions.	Low degree of uncertainty that the consents are renewed but with a medium level of uncertainty surrounding the volume and stringency of the consent conditions. There will be a requirement for significantly higher discharge quality which will result in the need for additional expenditure.
There will not be any natural disasters or extreme weather events resulting in widespread damage or remedial work to the Council's infrastructure.	High level of uncertainty as natural disasters or extreme weather events cannot be foreseen and have a significant impact on infrastructure and financial requirements for remedial works. While the Council is insured for natural hazards, this would not fully cover the costs of a highly-damaging event like Cyclone Gabrielle in January 2023.
There is sufficient capacity within the professional services and contractor market to undertake the capital programme.	High level of uncertainty as there are high levels of forecasted capital expenditure from other central and local government agencies in the upper North Island. Impact could be high as budgets may not be sufficient to undertake the works as planned.
There is no significant change to service delivery models for any of the activities in this Strategy.	High level of uncertainty as the Council is working with the Government to consider a new regime for the delivery of water and wastewater services following the change in Government direction regarding three waters reform of service delivery in February 2024.
Basis for preparation of financial forecasts	The capital programme budgets have been developed using a base estimate plus a nominal contingency (50 percentile cost accuracy). This approach is consistent with previous Long-term Plans and results in budget provisions which assume a risk management approach to actual costs.
There will be no significant change to local government funding and financing	Medium degree of uncertainty as there is widespread acknowledgement of the need for local government funding and financing reform but reform has been consistently called for since the mid 2000's. If there is significant change to local government funding and financing Council will likely have more financial capacity and a subsequently increased ability to fund currently unfunded infrastructure projects.

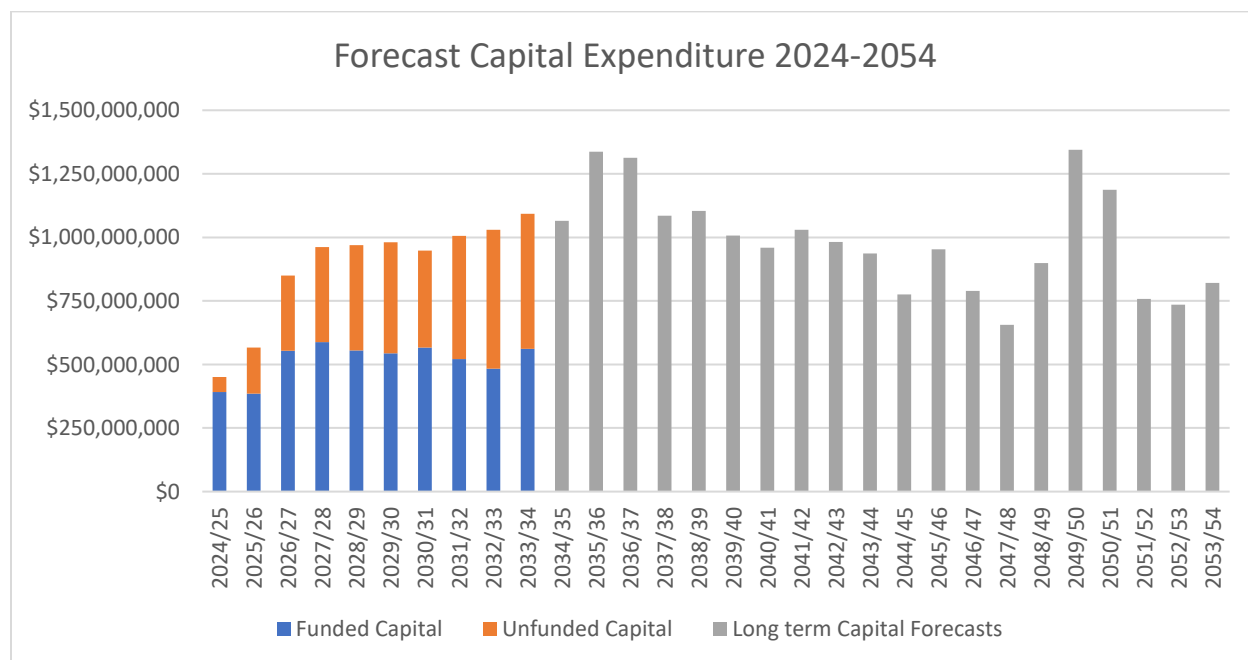
Most likely scenario

We have choices in how we address our infrastructure challenges, but these involve making trade-offs. Because we have limited resources with which to build, operate, maintain and renew infrastructure, we can't invest everywhere at once. Improving infrastructure in one area can mean leaving needs unmet in another. A careful prioritisation of investment is needed when deciding where, when and how much to invest.

Taking the above into account, this strategy provides the overview of Council's most likely scenario for the management of its infrastructure. This scenario has been determined by:

- Including the funded capital and operating budget forecasts from the Draft 2024-34 Long-Term Plan. The timing of projects and budget provisions have been informed by the 30-Year AMPs.
- Identifying projects through the 10-Year Plan that are unable to fit within the financial provision set by the Financial Strategy. These projects are likely to still be required in the future and this will need to be reflected in future Long-Term Plans and related financial strategies.
- Using the assumptions for levels of service, demand and renewals.

The plans and forecasts for the next three years are those with most detail and confidence as the greatest amount of planning has taken place for these matters. The investments required over the remaining first 10 years are an outline and have a reasonable degree of confidence. The forecasts beyond year 10 should be viewed as indicative estimates and will be developed further as time passes and more information is obtained.



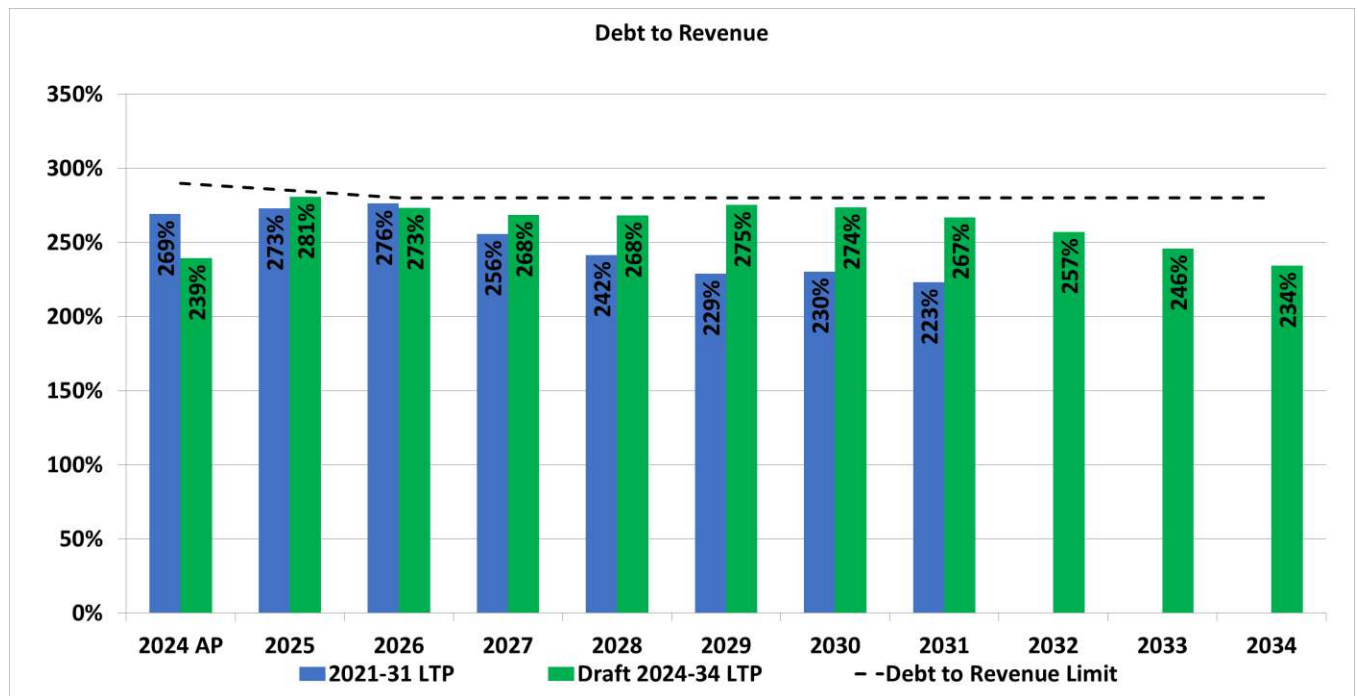
There is a high likelihood that over time the indicative estimates beyond 10 years in this strategy will need to change to reflect:

- changes in assumed growth rates
- changes to standards and compliance requirements not anticipated
- new technologies and options for provision of infrastructure
- new models for the funding and delivery of infrastructure (these may include the Council not funding and/or owning infrastructure)
- greater certainty about the nature and timing of the projects that are required
- affordability and ability for the Council to deliver the programme.

Impact on Council's Debt

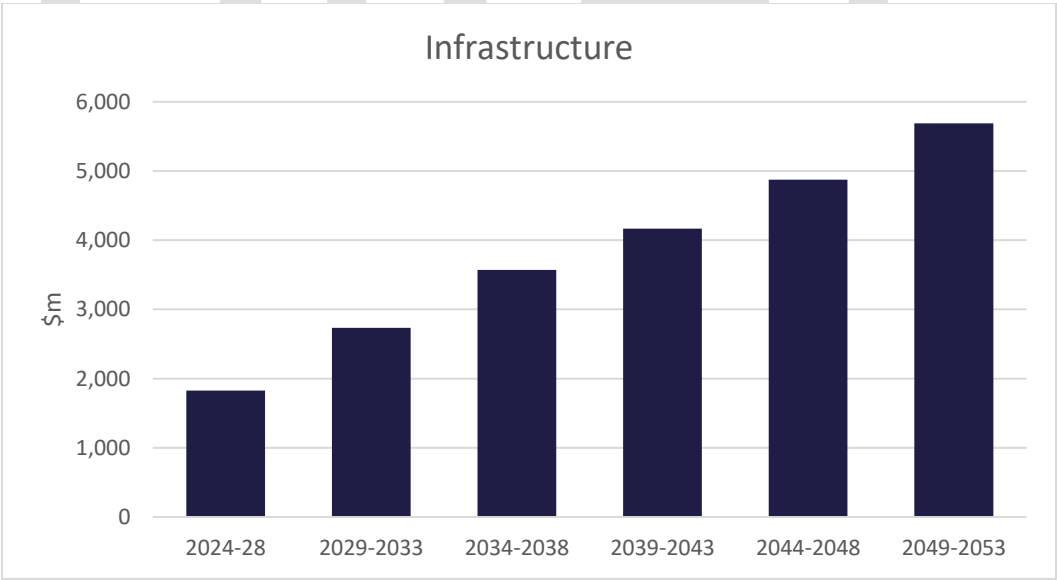
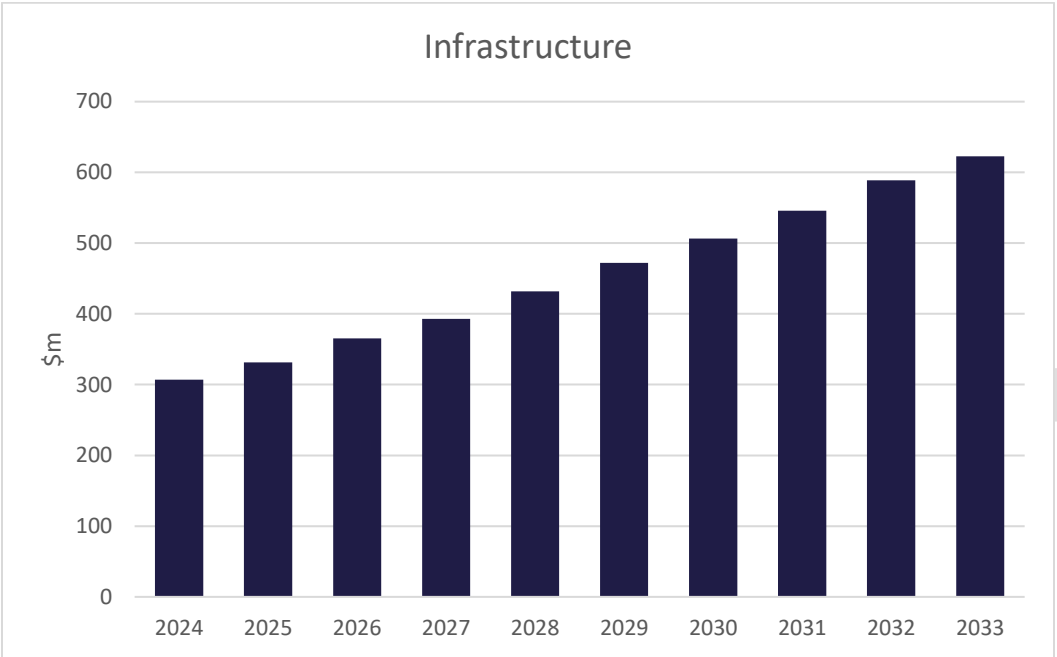
The Council's Financial Strategy has been updated through the development of the 2024-34 Long-Term Plan. The Financial Strategy has a 10-Year horizon and helps the Council and the community to understand the long-term financial impacts and sustainability of the Council's budget and plans.

The Financial Strategy describes the impact on debt and rates of the Council's budget. Over the next 10 years debt will remain below Council's debt to revenue limit. This is achieved through a proposed significant increase in revenue over the same period.



30-year operational forecasts

Operational expenditure for the 30 years has also been estimated. The forecasts for the first 10 years are from the 2024-34 Long-Term Plan and longer-term estimates have been based on applying inflation and estimated impacts from the 30-Year capital forecasts.



Significant Decisions

There are a number of significant decisions for capital expenditure anticipated over the next 30 years to address the previously identified challenges and priorities.

The significant decisions that Council expects to make, when we expect to make them, and the estimated cost, are set out below. In many cases the principal options that underpin these decisions have already been considered in the council's various strategies and plans. This means that there is often a delay between the timing of the actual decision and when the capital investment occurs.

Replacing worn out assets

At each long-term plan, the Council needs to confirm the level of funding it will provide for the renewal of its existing assets. Through the 2024-34 Long-Term Plan process, the Council has proposed to increase the funding for the renewal of assets. Over the next 10 years, \$1644M has been included in the budget for replacing assets.

Over time, as the city's asset base grows, the cost to replace our worn-out assets is anticipated to also increase. Through each Long-Term Plan the Council needs to confirm its investment in renewals. If, in the future, Council chooses to save money by not renewing assets, these assets won't be available for use or may not be reliable and could pose a risk. If the council has underfunded renewals this will result in higher risk profiles, reductions in service levels and increased maintenance costs.

Transport

It's important our city is safe and easy to get around. With significant growth forecast to continue, we need to be making decisions with a much bigger city in mind. Without bold investment, road traffic congestion will significantly worsen over the next 30 years, increasing delays in peak periods and significantly reducing the efficiency of freight movements. Transport emissions will also continue to increase.

Council has several key decisions to make to ensure all trips and people are catered for on our network.

The primary mode of transport in Hamilton is currently by personal vehicle. Council can choose to invest to balance transport infrastructure of our city so that walking, cycling and public transport are more viable, reliable and increasingly safe methods of transport alongside the personal vehicle. Council has programmes of work to support safety, biking and micromobility and public transport it can choose to fund through each subsequent long-term plan.

New transport corridors are required to ensure future decisions are not constrained. Land purchasing for transport corridors is expensive but, as land develops and rises in price, is never more affordable than now. Examples of historic corridor protection can be seen coming to fruition in Hamilton through Wairere Drive and the new bridge over the river. Council currently has investigations underway to determine where future transport corridor protection may be required. At a subsequent long-term plan, Council will have the option to protect transport corridors for future generations.

Widening transport corridors within the city is disruptive and often cost prohibitive. International examples demonstrate that traffic demand management is an approach to get the best use out of the existing transport corridors while also being a new funding stream for the city to improve our transport network. Unfortunately, legislative change is required to implement traffic demand management in New

Zealand. Pending this legislative change, the Council can choose to implement traffic demand management through a subsequent long-term plan. Depending on the nature of the traffic demand management the programme is likely to be cost neutral or revenue generating.

Stormwater solutions and blue green networks

Council's Stormwater Master Plan has identified there is significant investment in stormwater infrastructure required to mitigate flooding from extreme weather events and to deliver on the Vision of enhancing the health of the Waikato River. Much of the city's existing stormwater system was built to historic standards, without the effects of climate change in mind and there often isn't any treatment before discharging into the Waikato River. Modern stormwater management practice involves retention of stormwater and treatment chains to manage its environmental effects. By embracing nature-based solutions stormwater management can help Hamilton become more resilient and contribute towards ecological restoration in the city's main gully systems to contribute to achieving the 10% native vegetation cover required in the city to ensure that ecosystems are sustainable over time.

While stormwater solutions in the newer areas of our city have been delivered to today's design standards the city must decide how it manages stormwater in the rest of the city. A citywide blue green corridor network will cost billions of dollars to implement. Pragmatically the city will need to take a staged approach to investment into stormwater solutions and blue green networks. Unfortunately, the cost of not investing is also high, as the health of the Waikato River is degraded by unmanaged stormwater flows and extreme weather events could cause significant public and private property damage alongside higher insurance premiums in areas identified as higher flood risk.

Council can decide to invest in increased stormwater infrastructure through each subsequent long-term plan. Investment decisions will often be required alongside other investments which support redevelopment and intensification of existing urban environments.

Water Demand Management

Hamilton has a water take consent until 2044 which limits how much raw water it can take from the Waikato River. Current growth projections indicate we will exceed our allocation around 2034 unless we significantly reduce our water use over time. Council has requirements under legislation to manage water efficiently.

Reduced water use will extend the operational life of our treatment plants, defers costly investment, increases our network resilience, and enables growth through better use of existing capacity.

Existing or potential methods for Council to promote more efficient water use include education (such as the SmartWater campaign), leak detection and repair programmes to reduce network water loss, commercial water metering (around 3500 already in the city), or residential metering.

National and international evidence shows residential (or universal) metering delivers significant water savings, with reductions of between 20% and 25% seen after meters were introduced.

In the 2024-34 Long-Term Plan, Council has proposed funding to investigate the impacts and benefits of introducing universal metering in Hamilton alongside other water demand management options. This business case would also consider how any metering would be charged to consumers, whether it was by amount of water, a combination of an initial flat fee and a subsequent usage charge, or another method. Demand management through metering will not generate operational revenue over and above the cost

of delivering water services. Legislatively Council cannot make a profit from water and can only recover the cost of providing water services.

The Council is anticipated to need to make a decision on water demand management at the next Long-Term Plan. If the city were to implement water meters these are estimated to cost over \$50m.

Subregional approach to wastewater treatment

A collaborative approach between three councils - Hamilton City, Waipā District and Waikato District – and mana whenua has identified the best options for managing wastewater treatment for the future of the Waikato Metro subregional area. This work identifies significant upgrades to the Pukete Waste Water Treatment Plant (WWTP) to meet anticipated treatment standards expected as part of renewing the wastewater discharge consent renewal as well as catering for growth. Alongside Pukete WWTP, a new wastewater treatment plant to provide for future planned growth in Hamilton's south, the Airport's industrial area and Waipā.

These treatment plants are critical compliance, place making and growth enabling investments for the city and the broader subregion. The Pukete treatment plant will require circa \$500 million capital investment over the next 15 years to meet our current and future needs. A significant component of the required investment is included in the draft 2024 – 2034 LTP. The new southern wastewater treatment plant will require a staged investment over time to meet demand and supplement the Pukete WWTP. The planning and initial stages of the plant are proposed in the draft 2024 – 2034 LTP.

Council will have the opportunity to work with partners including our neighboring councils, central government and private investment to develop innovative funding solutions in order to deliver these key investments and to ensure equitable user pays funding.

Enabling central city redevelopment

The Council has prioritised growing up and out from the central city in our Hamilton Urban Growth Strategy. Yet the central city is serviced by some of our city's oldest infrastructure and is already a high-density area. This means that to service the growth we have planned here significant infrastructure upgrades are required. Currently infrastructure upgrades in the central city are incrementally being delivered. This differs from a greenfield growth cell which has lumpy upfront investment which unlocks large development capacity.

Council has received an Infrastructure Acceleration Fund grant of \$150.6 million to deliver some of the \$334 million infrastructure investment required to support more homes in the central city but this is just the start. Council could invest in the central city like a growth cell. Investment would enable significant development capacity in the central city removing a significant barrier to Council's preferred growth area in the city. Investing in the central city like this would bring forward investment and cause very costly upfront investment. Planning and delivering a growth cell holistically would allow council to maximise collaborative benefits and enable better wellbeing outcomes. It would send strong signals to the development community who would gain three waters connection certainty. The infrastructure cost of investing into the central city like a growth cell would be billions of dollars but as the central city infrastructure is aging depreciation can help fund a portion of the projects alongside growth. Council can consider investing in the central city like a growth cell in a subsequent long-term plan.

Invest to enable greenfield growth

Council makes subregional growth settlement plans alongside our neighboring Councils and partners. It sometimes makes sense to invest in new infrastructure ahead of housing and commercial development in growing areas. However, this can be costly and financially risky. It is anticipated that all growth cells will be developed by us in partnership with those providing privately funded infrastructure.

As our current financial constraints do not allow for all growth infrastructure in all areas zoned for development, a high portion of third-party funding is required across all growth cells through the vesting of developer-provided infrastructure and the use of private development agreements. Council will continue to explore the use of new funding and financing tools such as off-balance sheet structures provided by the Infrastructure Funding and Financing Act 2020.

It has been assumed we will generally make upsizing contributions to developers on an incremental marginal cost basis where these are required. It is also assumed that any strategic infrastructure upgrades required to service development outside of Council's priority development areas (i.e. the up and out from the central city) will be funded by third parties. While our newest greenfield growth areas have been planned for densities much higher than in the past, no allowance has been included in the Long-Term Plan for strategic network upgrades that may be needed to service increased densities in existing greenfield development areas (e.g., Peacocke, Ruakura, Rototuna, Rotokauri) from those assumed at the planning stages for those areas.

Sometimes an opportunity to progress a new greenfield area for development comes before council. Any additional greenfield growth areas, such as out-of-boundary developments, must enhance the overall wellbeing of current and future Hamiltonians and create quality communities. Our out-of-boundary principles guide decision making for progressing unplanned or out of-boundary greenfield growth areas. The principles set out expectations for developers, landowners and other key partners to ensure any new development areas contribute positively to achieving the city's vision. These principles help minimise Council's exposure to large infrastructure costs and drive the principle of growth pays for growth to progressing these areas.

Council has not made any funding provision to enable growth in out-of-district areas or new greenfield development areas. However, from time-to-time Council will have to make decisions on new greenfield development proposals. The costs and benefits of each proposal will be unique but if Council follows its principles the benefits should be maximised, and the costs minimized.

An alternative option available to Council is to identify, protect and acquire corridors of land and sites for future infrastructure. This ensures that land is available to provide infrastructure in the future, while also allowing for flexibility in how and when that infrastructure will be developed. Council could choose to do this at any time but it would need to be accompanied by significant funding which practically can only be accomplished through a long-term plan.

Community infrastructure in growth areas

Community infrastructure is vital to enabling the wellbeing of our communities. Unfortunately, when budgets are tight, funding for community infrastructure is often delayed or removed. This is not the long-term approach Council wants to take when providing community assets.

Over the last 30 years Hamilton's primary growth area has been Rototuna to the Northeast of our city. This is a community which has grown to over 30 000 people, yet the investment in community facilities and parks in this area has lagged behind population growth and Council has only recently completed construction of the new Rototuna Library. A pool facility for this area is still to be funded and delivered.

Moving forward, Council could plan and invest for community infrastructure in each of Hamilton's future growth areas at the same time as more traditional infrastructure like pipes and roads. Community infrastructure for a growth cell range, depending on what is needed, often exceeds \$100 million depending on land prices and development costs of parks and other community facilities. Early planning can help with delivery alongside the Ministry of Education and other partners.

DRAFT

How we manage assets

Activity Management Plans (AMPs) have been prepared for nearly all of Council's activities. These plans have been revised for the 2024-34 Long-Term Plan and have been used to forecast the expenditure needed to operate, maintain and renew assets as well as identify new assets that will be required in the future. The Council uses its AMPs as an initial basis for its long-term plans and 30-Year infrastructure strategies.

The 2024-34 Long-Term Plan balances the forecasted spending needs with affordability. This affordability has been determined by projecting revenue from rates and other sources and maintaining prudent debt levels. It is usual that not all the identified investments forecasted in AMPs can be afforded with funding available. In these cases, the budgeting process often prioritizes expenditure on maintaining and renewing existing assets before creating new ones. On occasions, the Council also identifies assets that are no longer required. This is generally in conjunction with a decision to stop or reduce the level of service to the community. The Council considers its service levels for the community as part of each Long-Term Plan process.

The Council is committed to improving its AMPs and places focus on improving asset management processes and systems and has an Asset Strategy team that works across the organisation to continually improve our approach to asset management.

AMPs take strategic direction from a range of strategies, plans and documents. There are a number of high-level future focused planning processes that have examined the need for future infrastructure to support one or more activities.

INFRASTRUCTURE ACTIVITIES

WATER SUPPLY

Council provides Hamilton's residents and businesses with a safe, high-quality, reliable, and sustainable service, through treatment, distribution, and management of Hamilton's water supply. Raw water is drawn from the Waikato River into the Water Treatment Plant, where it is treated to provide a high standard of drinking water. We also strive to provide water at the appropriate pressure for its intended use and firefighting standards.

In addition to supplying water to over 58,000 households and 5,600 commercial, industrial, and rural premises, we supply several thousand properties in the Waikato District area and over 100 properties in the Waipa District area.

Council owns and operates all water supply assets from the intake at the Waikato River to the connection at the customer's property boundary.

Focus Areas

- Addressing dependence on a single source of water and a single water treatment plant.
- Providing sufficient urban capacity and infrastructure to meet the long-term demands of a rapidly growing city.
- Responding to increasing compliance requirements that are significantly increasing the cost to deliver water services.
- Moving toward data led decision making, with increased investment in the assessment and documentation of asset condition.
- Looking after and maintaining our existing infrastructure.

Asset Summary

Asset Group	Description	Depreciated Replacement Cost \$000s (At 30 June 2024)
Water Treatment	The city has one treatment plant that treats river water to drinking water standards. Built in 1971 with a significant upgrade in 2005, the treatment plant relies on the Waikato River as a single water source. The sustainable peak treatment capability of the plant is about 78 million litres per day. During summer, peak demand has reached up to 90 million litres per day and in the evenings a large portion of the demand for water is met from reservoir storage.	92,860
Water Storage	Ten reservoirs have been constructed throughout the city from 1932 (Ruakiwi) to 2020 (Ruakura), of which nine are operational (Hillcrest is unused). The reservoirs provide a total of 112 million litres storage. Water storage equivalent to peak demand per day is required for emergency purposes.	29,107

Water Supply Network	<p>Treated water is pumped from the treatment plant to the reservoirs and then on to users through approximately 1,308km of pipe network. The pipes account for 70% of the total value of the water network.</p> <p>As well as the water supply pipes, the reticulation network also includes service connection pipes to premises, valves, hydrants, commercial and leak detection water meters, backflow prevention devices and bulkmain chambers (e.g. manholes).</p>	402,277
Total Value		524,244

Critical Assets

Critical assets are those that have a high consequence of failure. Typically, assets that service more customers or facilities have a higher criticality rating, e.g. hospitals, schools, emergency centres. Assets with the highest criticality across the Water Supply Activity include:

Asset Group	Asset Type	Why it is Critical
Water Treatment	Treatment Plant	<p>Hamilton is dependent on the Waikato River as its single source of water, treated via a single treatment plant. The plant is essentially two 55ML plants running in parallel, this allows half of the plant to be off-line for maintenance during the winter months. However, there are a few assets which are not duplicated and are considered critical for operation.</p> <p>During the summer when consumption gets over and above 70 million litres per day, the entire plant becomes critical as any plant failure at this time may impact on Council's ability to supply water.</p>
Water Storage	Reservoirs	The amount of storage that we have meets the guidelines for drinking water. If a reservoir was to fail, we would be unable to meet these standards.
	Pumps	Due to the flat topography of the city, most of our reservoirs require pumps to provide flow and pressure to the customer. Without these pumps disruption to supply or reduction in pressure would be felt by all customers serviced by the reservoir.
Reticulation Network	Bulk mains and valves	Our bulk and ring mains feed reservoirs and the network. If these were to fail interruptions to supply or reduction in pressure would be felt by all customers within the city.
	Pipes and valves servicing significant customers	Pipes that provide water to our significant customers, such as the hospital, are considered critical.
	Fire hydrants	Our fire hydrants must be always operational, to ensure that they are available for firefighting.

Data Confidence

Asset data is used to inform operations and maintenance, capital, and renewal activities for infrastructure assets. Asset condition and performance data is not included in the following assessment.

Asset Group	Asset Data Confidence Grade*	Comments
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Water Treatment and Storage	B - Reliable	<ul style="list-style-type: none"> Equipment make and model attributes are substantially complete. Further development and improvements are required for current process hierarchies, asset labelling and data capture processes and tools. Improvements needed to capture capital additions at location and component level with costs. A data improvement plan is in development and subject to budget approval.
Water Supply Network	B - Reliable	<ul style="list-style-type: none"> There is a reliable level of attribute information available e.g., pipe diameter, length, ownership, and material, along with valuation unit rates and base lives. Some data gaps exist. Gaps are updated in the asset database as the information is received. Improvements needed to asset information such as location data for existing underground assets.
Buildings	B - Reliable	<ul style="list-style-type: none"> Buildings are recorded in the corporate asset management system and overall, the data is sound, however some data is estimated, and further improvements are required to improve data reliability.
<p>*Data Confidence Grades (as per International Infrastructure Management Manual definitions): A – Highly reliable and accurate; B – Reliable with minor inaccuracies; C – Uncertain, 50% estimated; D – Very uncertain, significant data estimated; E – Unknown, all data estimated.</p>		

Asset Lives

The useful lives of major asset classes are estimated as follows:

Asset Class	Useful Life (Years)
Bulkmain chambers	100
Backflow devices	40
Pipes	40-100
Valves	40-75
Meters	15
Hydrants	50-75
Aerial mains	10-100
Cathodic Protection Device	15-100
Treatment Plant (civil (tanks, building, pipework, metalwork), electrical services, instrumentation, mechanical services, pumps and motors)	5-100
Reservoirs (tanks, building, pipework, electrical & mechanical)	15-100

Asset Condition

Water Supply Network

While we have a sound asset inventory, there are limitations with the information we hold on the physical condition of our water supply assets.

The condition of wastewater and stormwater pipes is commonly assessed with CCTV cameras; however, water supply pipes are often pressurised and can be difficult to isolate without impacting flow to communities. Although various non-intrusive techniques are available, the norm in New Zealand has been to use the pipe's age as a proxy to assess its condition.

The condition of Hamilton's water supply pipes is inferred using the pipe's age and material, with some limited physical inspection data. Based on the information we currently have; it is estimated that that 84% of Hamilton's water pipes are in fair or better condition. This is consistent with their average age of 35 to 40 years, and the level of service the pipes were designed to deliver. We generally expect our pipelines to last around 80 years, with the oldest pipes more than 70 years old.

We have used this information, overlayed with asset criticality, to inform the renewal programme for the 30-year period of this Infrastructure Strategy. However, funding is included in Council's 2024-54 Long Term Plan to significantly improve asset condition and performance information, which will inform future planning and budgets.

Treatment and Storage

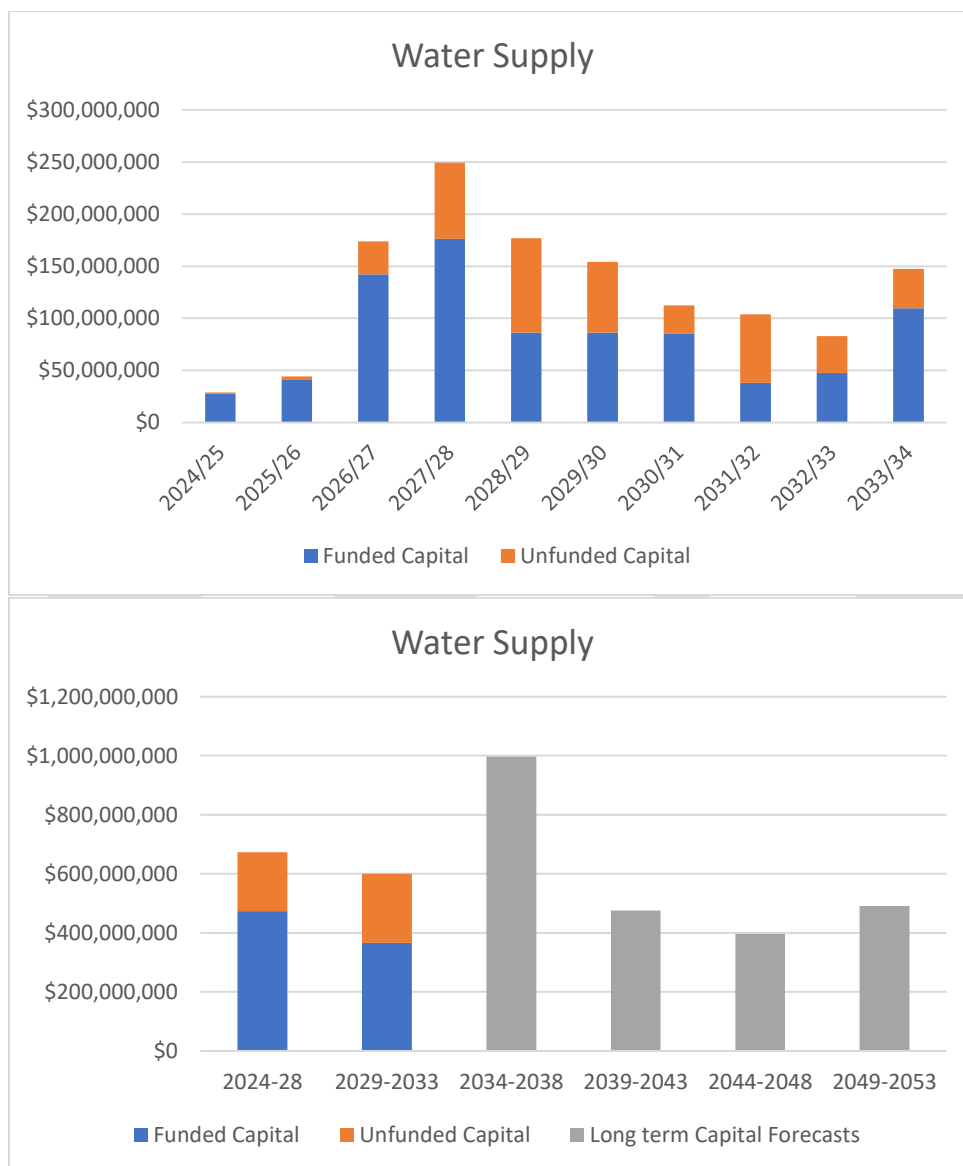
Most of the assets within the Water Treatment Plant and reservoirs are above ground so they are easier to assess; however, there are still gaps in condition information. Along with asset age and materials, the condition of the treatment plant and reservoirs is determined using a combination of visual and structural inspections, and asset performance/condition analysis (e.g. vibration/motor analysis, oil testing, ultrasonic testing, and thermography).

Based on their age and remaining life, over 50% of our water treatment and storage assets are in a fair or better condition. As with our water network assets, Council's Long Term Plan allows for additional funding to gradually capture and improve condition and performance information for these assets.

Capital and Operating Expenditure – Indicative Estimates

Capital Expenditure

The estimated capital needs for the Water Supply Activity have been prepared for the next 30 years. The forecasted capital expenditure from the year ending 30 June 2024 to 2034 has been included in the 2024-34 Long Term Plan.



Levels of Service

- The forecasted level of service expenditure does not include any changes to levels of service. Funding included over the 30 years is to ensure we are meeting current levels of service and increasing compliance requirements. Overall, residents and businesses can continue to expect:
 - Water that is safe to drink.
 - Our water network to be maintained in a way that minimises water loss.
 - Satisfaction with the clarity, taste, odour, continuity, and pressure of the water supply.
 - That we will work with the community to sustainably manage the supply and use of water.
 - A timely response and a timely resolution if there is a problem with the water supply.
- Funding for water supply activities is based on the day-to-day needs of service provision. Funding to cover the potential costs associated with large scale incidents such as low river levels, critical asset failure, biosecurity responses, supply chain disruption or emergency events

such as repeat major wet weather events, or natural disasters, have not been included in the expenditure forecasts.

- The Water Treatment Plant Abstraction Resource Consent expires in 2044. It is assumed that the consent conditions will continue for the remaining life of the consent.
- It is assumed that the current controls funded in the Long Term Plan will be appropriate to manage drinking water safety risks and meet requirements of the Water Services Act 2021.
- Hamilton has a high level of compliance with the Drinking Water Quality Assurance Rules and Standards. It is assumed that the current water supply infrastructure and operational methodologies funded in the Long Term Plan will continue to meet compliance.

Growth and Demand

- Demand for water is driven by three key factors:
 - City growth – a combination of population increases and the economic performance of the city.
 - Peak seasonal demand - generally based on peak summer demand for water.
 - Industrial demand – more difficult to predict as water needs are very specific to each industrial operation.
- Infrastructure required to provide for growth is forecasted through analysis of:
 - Population projections.
 - Geographic demand and the long-term settlement pattern for the city, including both greenfield and existing areas of the city.
 - Water network hydraulic modelling, which allows us to understand our capacity, constraints and what will happen in the future. The model has been used to develop solutions for projected growth scenarios.
 - Strategic asset requirements determined through Master Plans.
 - Engagement with government, regional council and neighbouring councils on future infrastructure requirements.
- The capital works programme is developed and informed by the Water Master Plan. The Master Plan has a 40-year horizon, providing proposed solutions and timing for major water network infrastructure within Hamilton necessary to service anticipated growth and to ensure current levels of service are maintained.
- No funding is included in the Long Term Plan for Council investment in water supply infrastructure to support development of future greenfield development areas or emerging areas. Investment is targeted at enabling growth in selected priority development areas, addressing existing network performance issues, and ensuring that Council meets necessary levels of service.

Renewals

- We are entering a period of higher renewal investment due to aging assets that are reaching the end of their useful lives. Even with this level of funding, some assets will be pushed beyond their recommended lifecycle.
- The renewal budgets for Years 1-10 are based on a medium risk profile. There is some in-built resilience to help deal with unexpected shocks and to reprioritise works appropriately.
- Inflationary increases, the complexity of works and compliance requirements are impacting the replacement cost of these assets.
- The risks and consequences in further deferring asset replacement are increased asset failures resulting in service disruptions, increased reactive replacement costs, compliance breaches, and reputational damage.

Operating Expenditure

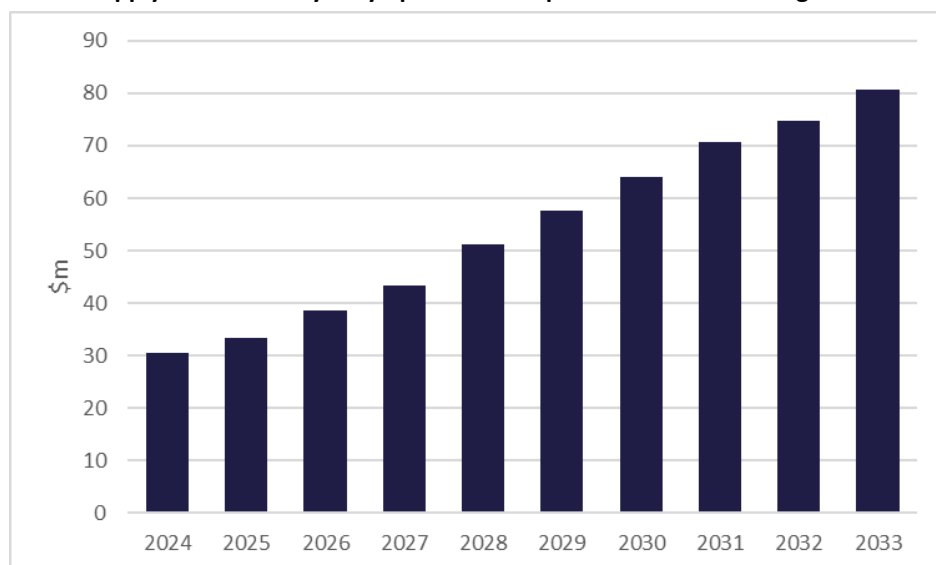
The forecasted operating expenditure from the year ending 30 June 2024 to 2034 has been included in the 2024-34 Long Term Plan. Estimated expenditure beyond 2034 is based on the Year 10 forecast and adjusted for anticipated future growth of the city.

Operating expenditure includes indirect costs to provide the service to the community such as depreciation, interest costs and overheads. Forecasted operating expenditure is shown as gross costs.

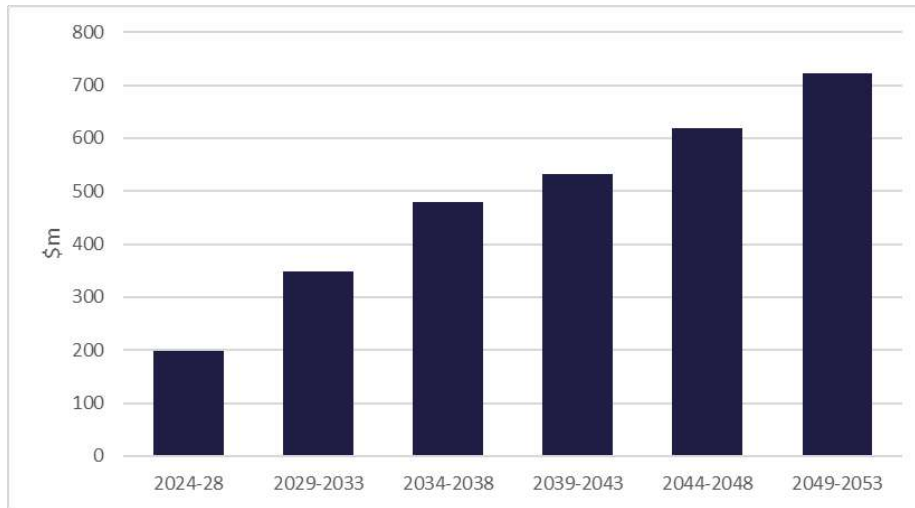
The future compliance requirements of three water services continue to be uncertain as the government is proposing changes in policy, legislation and regulation that impact the way in which three water services will be delivered.

A conservative operational budget has been developed with a focus on base requirements to enhance asset management maturity, enhancing data, demand management, condition assessment, quality, and risk management approaches to increase the operational resilience of three waters services.

Water Supply – forecasted yearly operational expenditure 2024-34 Long Term Plan



Water Supply – forecasted operational expenditure – five yearly periods 2024-53



DRAFT

WASTEWATER

Council provides Hamilton's residents and businesses with a sustainable, reliable, and cost-effective service which includes collection, conveyance and treatment of wastewater and trade waste discharges.

Wastewater drains from showers, baths, sinks, washing machines, dishwashers, and toilets, and is collected and transferred through a network of pipes and pump stations to the Pukete Wastewater Treatment Plant. Wastewater from commercial and industrial premises also feeds into this network.

At the treatment plant, wastewater is thoroughly treated before being discharged into the Waikato River. The wastewater network services approximately 64,000 properties.

Council owns and operates all wastewater assets from the customer property boundary to the treatment plant effluent outfall.

Focus Areas

- Providing infrastructure for a rapidly growing city.
- Providing a reliable, resilient, and responsive wastewater service.
- Responding to increasing compliance requirements that are significantly increasing the cost to deliver water services.
- Moving toward data led decision making, with increased investment in condition assessments and inflow and infiltration investigations (groundwater and stormwater entering the wastewater network).
- Looking after and maintaining our existing infrastructure.

Asset Summary

Asset Group	Description	Depreciated Replacement Cost \$000s (At 30 June 2024)
Wastewater Network	Once wastewater leaves a property it travels in a network of pipes to the wastewater treatment plant. Hamilton has 900km of connecting pipework, which accounts for 65% of the total value of the wastewater network. The reticulation network also includes the pipes that connect private premises to the network, and manholes which allow access for inspection, cleaning, and maintenance.	274,333
Pump Stations	Due to Hamilton's flat topography, a series of pump stations are required to transport wastewater across the city. The city has 132 pump stations installed at low points in the network so that wastewater flowing from these areas can be lifted to a higher point and continue its journey to the treatment plant under gravity. Pump stations consist of a wet well, pumps, electrics and cabinets, alarms, control systems and associated fixtures and fittings. Some of our pump stations are also fitted with storage and biofilters.	7,090
Wastewater Treatment	The city has a single wastewater treatment plant constructed in 1975, which converts wastewater and trade waste into a disposable effluent and solids. It is a biological plant that can receive and provide primary treatment for to 2,000 litres per second of wastewater and up to 600 litres per second for secondary treatment. Our wastewater treatment plant relies on the Waikato River as the receiving environment for final treated effluent. The existing resource consent for the	484,624

	wastewater treatment plant expires in 2027 and a high focus on discharge quality can be expected.	
Total Value		766,047

Critical Assets

Critical assets are those that have a high consequence of failure. Typically, assets that service more customers or facilities have a higher criticality rating, e.g., hospitals, schools, emergency centres. Assets with the highest criticality across the Wastewater activity include:

Asset Group	Asset Type	Why it is Critical
Wastewater Network	Interceptors	Interceptors provide conveyance of wastewater from large areas of the city to the wastewater treatment plant. If these were to fail, significant amounts of wastewater will spill into the environment.
	Pipes/manholes adjacent to streams and the Waikato River	Due to their location, a failure of these assets will result in a direct wastewater spill to stormwater and/or waterways.
	Connections servicing key customers	Connections that provide a service to our key customers that deliver a city-wide service, such as schools and hospitals.
	Pipes with constrained capacity	All pipes that are at greater than 50% full during dry weather are considered critical, as it is more likely that they will overflow during a wet weather event.
Pump Stations	Pump stations	Pump stations are considered critical assets as they are located at low points in our network and near waterways, therefore the risk of spills have a higher consequence. Some pump stations are more critical than others, depending on their size and/or location.
	Treatment Plant	The wastewater treatment plant as a whole is considered a critical asset as it is our only treatment plant for the entire city, certain processes are more critical than others.

Data Confidence

Asset data is used to inform operations and maintenance, capital, and renewal activities for infrastructure assets. Asset condition and performance information is not included in the following assessment.

Asset Group	Asset Data Confidence Grade*	Comments
Wastewater Network	B – Reliable	There is a reliable level of attribute information available e.g., pipe diameter, length, ownership, and material, along with valuation unit rates and base lives. Asset attribute data such as material and depth have been assumed in older areas of network where this data was not captured historically. Wastewater service line data will be updated in the database as renewals across older development areas occur.

		A data improvement plan is in development and subject to budget approval.
Pump Stations	B – Reliable	Pump station data is recorded in the asset management system. Gaps exist for the specific components housed in electrical cabinets. Improvements to processes will ensure that pump station data is accurately captured and recorded in database.
Wastewater Treatment Plant	B – Reliable	Equipment make and model attributes are substantially complete. Further development and improvements are required for current process hierarchies, asset labelling and data capture processes and tools. Improvements needed to capture capital additions at location and component level with costs. A data improvement plan is in development and subject to budget approval.
Buildings	B – Reliable	Buildings are recorded in the corporate asset management system and overall, the data is sound, however some data is estimated, and further improvements are required to improve data reliability.
*Data Confidence Grades (as per International Infrastructure Management Manual definitions): A – Highly reliable and accurate; B – Reliable with minor inaccuracies; C – Uncertain, 50% estimated; D – Very uncertain, significant data estimated; E – Unknown, all data estimated.		

Asset Lives

The useful lives of major asset classes are estimated as follows:

Asset Class	Useful Life (Years)
Aerial pipes	50-100
Pipes	30-100
Manholes	100
Valves	40-75
Pump stations (electrical cabinet and level control; wet well; storage and valve chambers; lids, valves and pipework; pumps; electrical)	15-100
Treatment Plant (civil (tanks, building, pipework, metalwork), electrical services, instrumentation, mechanical services, pumps and motors)	5-100

Asset Condition

Wastewater Network

The condition of our wastewater pipes is determined through targeted and representative sample surveys, the most effective method being CCTV camera surveys. This information is analysed and extrapolated across all similar assets (age, material, operational environment) to determine the overall condition of the pipe network.

A hydraulic model is used to determine where the network constraints are and assists in informing renewals programmes and growth upgrades. Areas prone to overflows are prioritised for network improvements.

Based on the condition and performance information we currently have; the network is in fair to good condition. This is consistent with its average age of around 43 years and the level of service the pipes were designed to deliver.

We generally expect our pipelines to last between 75-100 years. It is predicted that nearly 10% of the network assets will reach the end of life within the next 10 years. Continued investment is required over the next 10 years and beyond to replace these assets.

As more of our infrastructure approaches the end of its useful life, the condition, performance (e.g. pipe breaks, leaks, overflows), and criticality of our wastewater assets plays a big role in determining how we inform, prioritise, and fund our asset renewal programmes.

As with water supply assets, Council's 2024-54 Long Term Plan budget includes funding to increase our investment in condition assessment programmes. We will also invest more in inflow and infiltration (I&I) investigations (groundwater and stormwater entering the wastewater network). Reducing I&I by repairing or replacing damaged below ground assets provides the opportunity to gain network capacity.

Wastewater Treatment and Pump Stations

The condition of our treatment plant and pump stations is determined utilising a combination of assessments and performance information:

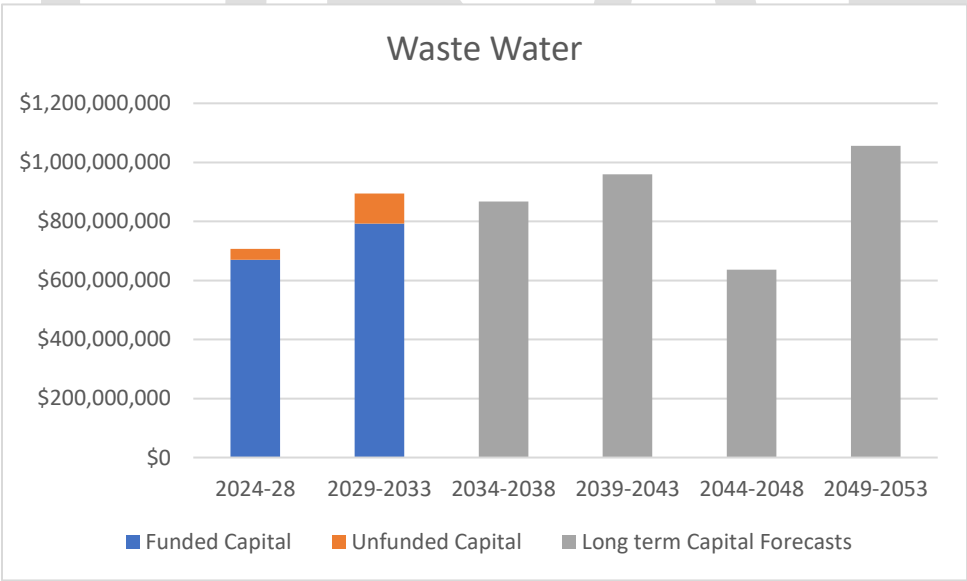
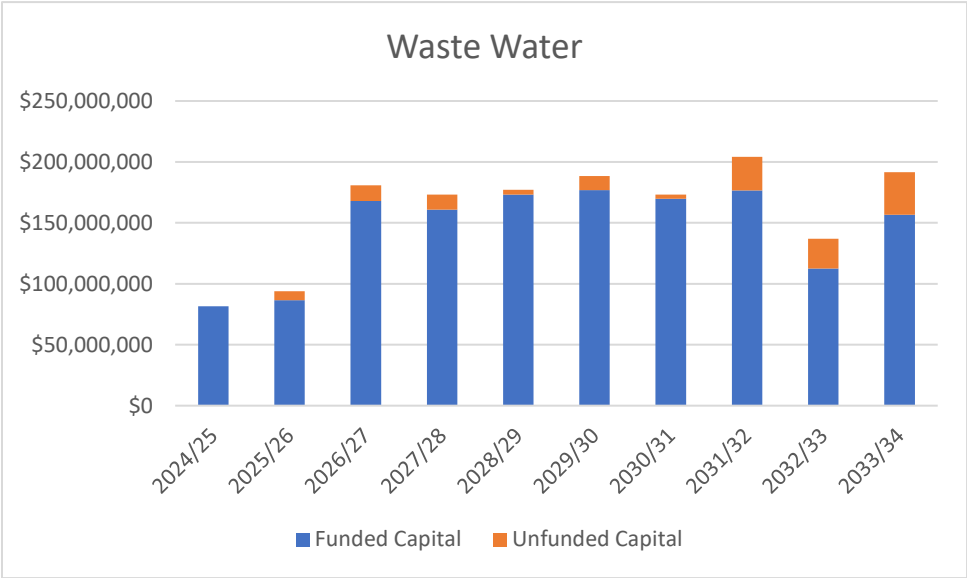
- Visual and non-invasive condition assessments of mechanical and electrical components are undertaken annually for pump stations.
- Annual safety, compliance and operability assessment and certification is undertaken on all our waters related electrical switchboards.
- Structural assessments at the treatment plant are undertaken as required, the level of information capture and frequency needs to be improved. An improved condition assessment programme is in development along with improved use of the asset database.
- Asset performance and condition analysis is carried out using a range of methods: vibration analysis on equipment such as pumps and motors, CCTV inspections on our wastewater pipe network (for which we have an annual program), and thermography analysis on our electrical equipment.

The overall health of the assets is monitored using qualitative and quantitative measures including operational performance, age, criticality, condition, and future demand.

Capital and Operating Expenditure – Indicative Estimates

Capital Expenditure

The estimated capital needs for the Wastewater Activity have been prepared for the next 30 years. The forecasted capital expenditure from the year ending 30 June 2024 to 2034 has been included in the 2024-34 Long Term Plan.



Levels of Service

- The forecast level of service expenditure does not include any changes to levels of service. Funding included over the 30 years is to ensure we are meeting current levels of service and increasing compliance requirements. Overall, residents and businesses can continue to expect:
 - Our wastewater system to be designed and maintained to minimise harm to the community and the environment.

- That we will operate and maintain the wastewater system to minimise odour and blockages, and to minimise the impact on the environment.
- That we will operate and maintain the wastewater system to minimise the impact on the environment.
- A timely response and resolution if there is an urgent problem with the wastewater system.
- Funding for wastewater activities is based on the day-to-day needs of service provision. Funding to cover the potential costs associated with large scale incidents such as critical asset failure, biosecurity responses, supply chain disruption or emergency events such as repeat major wet weather events, or natural disasters, have not been included in the expenditure forecasts.

Growth and Demand

- It is assumed that new greenfield areas of the city will be serviced through the main reticulated network and existing treatment plant rather than standalone wastewater package plants.
- No funding is included in the Long Term Plan for Council investment in wastewater infrastructure to support development of future greenfield development areas or emerging areas. Investment is targeted at enabling growth in selected priority development areas, addressing existing network performance issues, and ensuring that Council meets necessary levels of service.
- Capacity upgrades of our wastewater treatment plant will be required to accommodate growth.
- The Wastewater Network Master Plan outlines the programme of works to meet forecast growth for the next 30 years. In support of the greenfield and infill development a series of network capacity upgrades, extensions and integration of new infrastructure with the existing networks is required.
- Projected population and resulting wastewater volumes are based on Council's growth model using population projections prepared by National Institute of Demographic and Economic Analysis (The University of Waikato).
- No allowance has been made for new wet industry in the city as this has unique requirements that are not known until a specific proposal is put forward for consideration.
- The Wastewater Treatment Plant discharge consent expires in 2027. It is assumed that securing a new discharge consent will require significant improvements in water quality in line with agreements made through the Metro Wastewater Detailed Business Case Memorandum of Understanding (2022). Accordingly, significant investment allowances have been included in the expenditure forecasts to upgrade the treatment plant to achieve improved discharge standards.
- Continued discharge to the Waikato River is assumed, albeit with significantly improved treatment and provision for an improved discharge structure. Given that the plant must remain fully operational, the upgrade programme is planned over a 15-year period starting in Year 1. The programme assumes that new resource consents secured post 2027 will include a transition period to achieve the improved discharge standards. There is a medium level of uncertainty with this assumption.
- Council has also included investment in the Long Term Plan for a new wastewater treatment plant to meet the needs of Hamilton. Resource consents are required for this activity.

Renewals

- We are entering a period of higher renewal investment due to aging assets that are reaching the end of their useful lives. Even with this level of funding, some assets will be pushed beyond their recommended lifecycle.
- The renewal budgets for Years 1-10 are based on a medium risk profile. There is some in-built resilience to help deal with unexpected shocks and to reprioritise works appropriately.
- Inflationary increases, the complexity of works and compliance requirements are impacting the replacement cost of these assets.
- The risks and consequences in further deferring asset replacement are increased asset failures resulting in service disruptions, increased reactive replacement costs, compliance breaches, and reputational damage.

Operating Expenditure

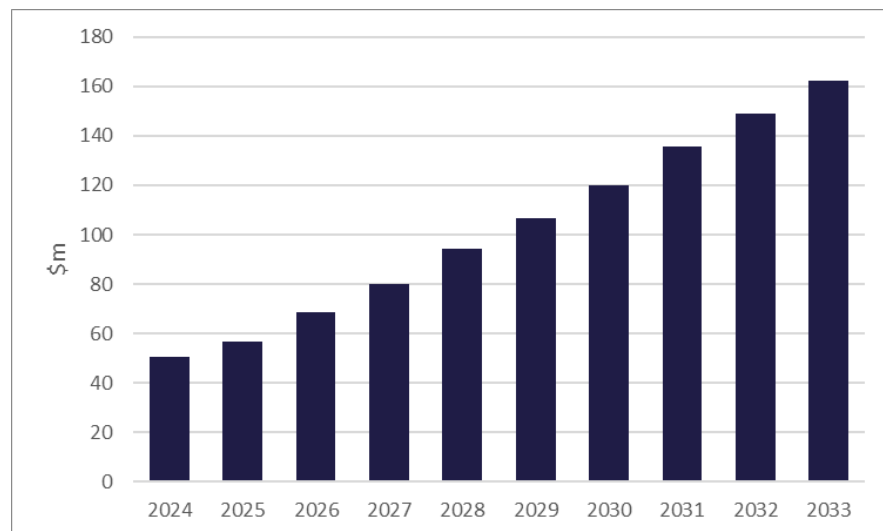
The forecasted operating expenditure from the year ending 30 June 2024 to 2034 has been included in the 2024-34 Long Term Plan. Estimated expenditure beyond 2034 is based on the Year 10 forecast and adjusted for anticipated future growth of the city.

Operating expenditure includes indirect costs to provide the service to the community such as depreciation, interest costs and overheads. Forecasted operating expenditure is shown as gross costs.

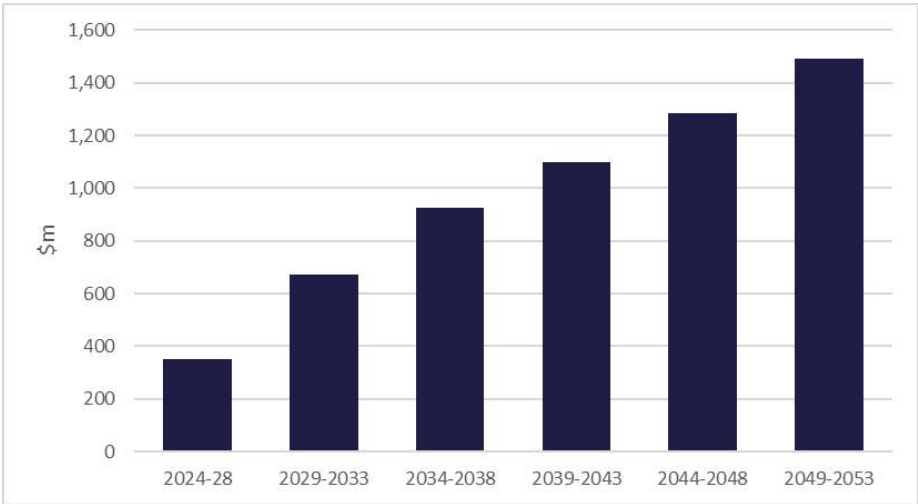
The future compliance requirements of three water services continue to be uncertain as the government is proposing changes in policy, legislation and regulation that impact the way in which three water services will be delivered.

A conservative operational budget has been developed with a focus on base requirements to enhance asset management maturity, enhancing data, demand management, condition assessment, quality, and risk management approaches to increase the operational resilience of three waters services.

Wastewater – forecasted yearly operational expenditure 2024-34 Long Term Plan



Wastewater – forecasted operational expenditure – five yearly periods 2024-53



DRAFT

STORMWATER

Rainwater that flows from surfaces such as roads, footpaths, and buildings is called stormwater and is directed to either the ground or the stormwater system. Council's stormwater service protects people and properties from flooding and minimises the pollution of waterways.

The stormwater system consists of pipes, channels, treatment devices and open watercourses, which release untreated or treated water into the city's streams, lakes, and the Waikato River. The system drains an urban catchment of approximately 9,000 hectares, however the total catchment draining to the city reach of the Waikato River is much larger at approximately 30,000 hectares.

Council owns all the assets that convey, detain and treat stormwater from the premise boundary to an outfall in a stream or river.

Focus Areas

- Managing stormwater assets to protect people, property, and the environment, by understanding the likely impact of climate change and planning adaptation measures that will mitigate flooding and potential erosion, as well as reducing environmental effects.
- Restoring and protecting the health and wellbeing of the Waikato River and its tributaries.
- Providing sufficient urban capacity and infrastructure to meet long term demand for a rapidly growing city.
- Reflecting tangata whenua values and interests in the management of freshwater and ecosystems.
- Responding to increasing compliance requirements that are significantly increasing the cost to deliver water services.
- Moving toward data led decision making, with increased investment in assessing and recording the condition of our assets.
- Looking after and maintaining our existing infrastructure.

Asset Summary

Asset Group	Description	Depreciated Replacement Cost \$000s (At 30 June 2024)
Stormwater Network	Once stormwater leaves a property, it can travel through in pipes to an open watercourse. Hamilton has approximately 730km of stormwater pipes, which account for 99% of the value of the stormwater assets. The network also includes the pipes that connect private premises to the network, and manholes which allow access for inspection, cleaning, and maintenance.	702,376
Stormwater Treatment	Treatment, detention, and flood management devices include ponds, wetlands and bunded areas that treat and/or detain stormwater during high rainfall events to protect downstream properties from flooding.	24
Assets Within Waterways	Drains and streams transport water to other streams or the Waikato River. Some of these are described as channels as they have been lined with concrete or other materials. We have approximately 88km of open watercourses within the city, of which 8.3km are lined.	17,131

	Located at the end of pipes, 870 outlets and inlets prevent erosion and scouring of the open watercourse to which stormwater is discharged. Other devices include soakage trenches, soakage pits, fish passage devices, and erosion control devices.	
Total Value		719,531

Critical Assets

Critical assets are those that have a high consequence of failure. Typically, assets that service more customers or facilities have a higher criticality rating. Assets with the highest criticality across the Stormwater activity include:

Asset Group	Asset Type	Why it is Critical
Stormwater Network	Pipes, manholes, inlets, overland flow paths	Any asset that is damaged or blocked at the time of a storm event is considered critical, as its inability to transfer stormwater may result in flooding.
Stormwater Treatment	Ponds/wetlands	Proper functioning of the treatment and detention devices is critical to protecting our streams and the Waikato River from the effects of urban development and ensuring compliance with discharge consents.

Data Confidence

Asset data is used to inform operations and maintenance, capital, and renewal activities for infrastructure assets. Asset condition and performance information is not included in the following assessment.

Asset Group	Asset Data Confidence Grade*	Comments
Stormwater Network	B – Reliable	The data for the pipes and manholes is generally good. Data gaps are updated in the asset database as the information is received.
Treatment/Detention Devices	B – Reliable	Ownership data and associated process improvements are required. A data improvement plan is in development and subject to budget approval.
*Data Confidence Grades (as per International Infrastructure Management Manual definitions): A – Highly reliable and accurate; B – Reliable with minor inaccuracies; C – Uncertain, 50% estimated; D – Very uncertain, significant data estimated; E – Unknown, all data estimated.		

Asset Lives

The useful lives of major asset classes are estimated as follows:

Asset Class	Useful Life (Years)
Pipes	30-100
Manholes, inlets, and outlets	100
Soakage trench	50
Channels	70-90
Fish pass	50
Erosion control	100

Asset Condition

Stormwater pipes account for 99% of the total value of stormwater assets. Most of the pipes were installed between 1975 and 1995.

Based on the condition and performance information we currently have, the network is in fair to good condition, consistent with its average age of around 35-40 years and the level of service the pipes were designed to deliver. We generally expect our pipelines to last around 80 years, with the oldest pipes (around 115km) older than 70 years.

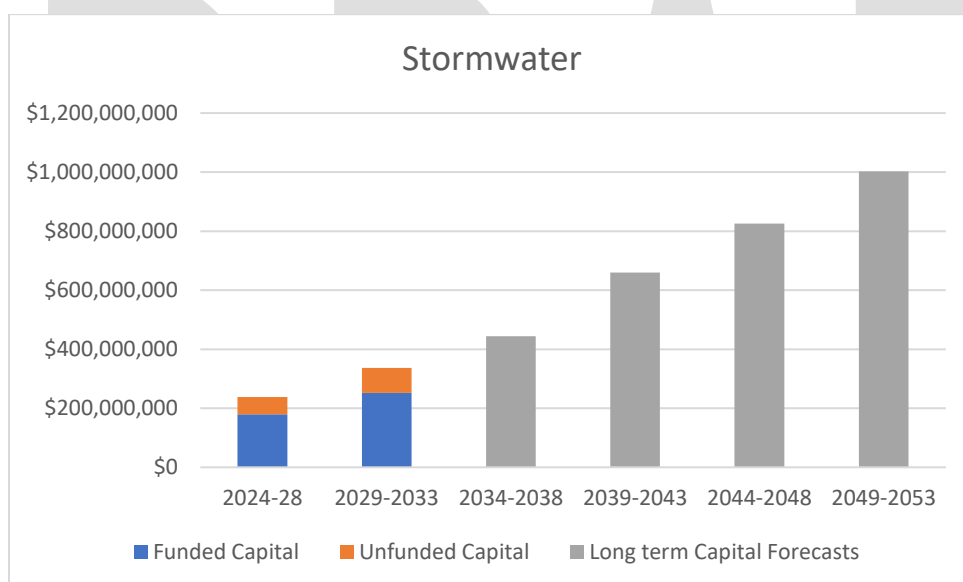
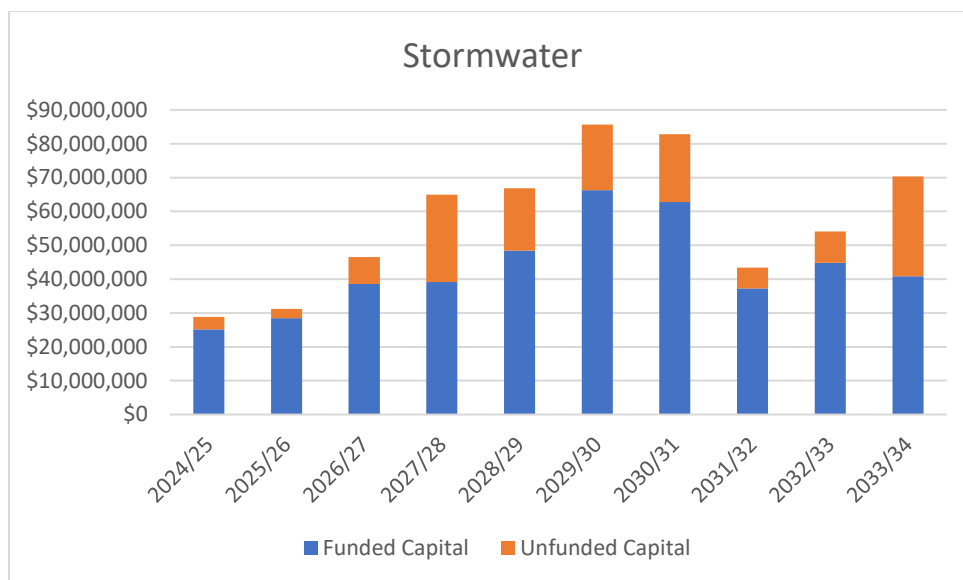
The condition of our stormwater pipes is determined through targeted and representative sample surveys, the most effective method being CCTV camera surveys. This information is analysed and extrapolated across all similar assets (age, material, operational environment) to determine the overall condition of the pipes.

In line with our water supply and wastewater assets, we also plan to invest more in condition assessments for our stormwater assets.

Capital and Operating Expenditure – Indicative Estimates

Capital Expenditure

The estimated capital needs for the Stormwater Activity have been prepared for the next 30 years. The forecasted capital expenditure from the year ending 30 June 2024 to 2034 has been included in the 2024-34 Long Term Plan.



Levels of Service

- The forecast level of service expenditure does not include any changes to levels of service. Funding included over the 30 years is to ensure we are meeting current levels of service and increasing compliance requirements. Overall, residents and businesses can continue to expect:
 - The stormwater system to be designed and maintained to minimise the likelihood of stormwater entering habitable buildings.
 - Council will operate and maintain the stormwater system to minimise the impact on the environment.
 - A timely response if there is a problem with the stormwater system or flooding of a habitable building.
 - That we will provide a reliable and effective stormwater system that the community is satisfied with.

- Funding for stormwater activities is based on the day-to-day needs of service provision. Funding to cover the potential costs associated with large scale incidents such as low river levels, critical asset failure, biosecurity responses, supply chain disruption or emergency events such as repeat major wet weather events, or natural disasters, have not been included in the expenditure forecasts.
- The Comprehensive Stormwater Consent expires in 2036. It is assumed that the consent conditions will continue for the remaining life of the consent.

Growth and Demand

- Demand for stormwater is driven by three key factors:
 - City growth – providing enough urban development capacity to meet long term demand.
 - Climate change – climate scientists predict that Waikato Region could be up to 20% wetter, with more varied rainfall patterns and flooding up to four times as frequent by 2070.
 - Mitigation of environmental impacts – there is a growing expectation for ongoing improvement to water quality and natural habitat values within river and gully systems, which for an integral part of the city's stormwater system.
- Infrastructure required to provide for growth is forecast through analysis of:
 - Geographic demand and the long-term settlement pattern for the city, including both greenfield and existing areas of the city. Construction of new treatment devices in existing areas of the city is very expensive and technically challenging.
 - Climate change assumptions - demand for stormwater infrastructure is expected due to increased storm runoff and local flooding generated by more frequent and intense rainfall events.
 - Environmental impacts and stream gully restoration projects.
 - Strategic asset requirements determined through Master Plans.
 - Engagement with government, regional council and neighbouring councils on future infrastructure requirements.
- The capital works programme is developed and informed by the Stormwater Master Plan. The main objectives are to accommodate growth and comply with the regulatory requirements of the activity.
- No funding is included in the Long Term Plan for Council investment in stormwater infrastructure to support development of future greenfield development areas or emerging areas. Investment is targeted at enabling growth in selected priority development areas, addressing existing network performance issues, and ensuring that Council meets necessary levels of service.

Renewals

- We are entering a period of higher renewal investment due to aging assets that are reaching the end of their useful lives. Even with this level of funding, some assets will be pushed beyond their recommended lifecycle.

- The renewal budgets for Years 1-10 are based on a medium risk profile. There is some in-built resilience to help deal with unexpected shocks and to reprioritise works appropriately.
- Inflationary increases, the complexity of works and compliance requirements are impacting the replacement cost of these assets.
- The risks and consequences in further deferring asset replacement are increased asset failures resulting in service disruptions, increased reactive replacement costs, compliance breaches, and reputational damage.

Operating Expenditure

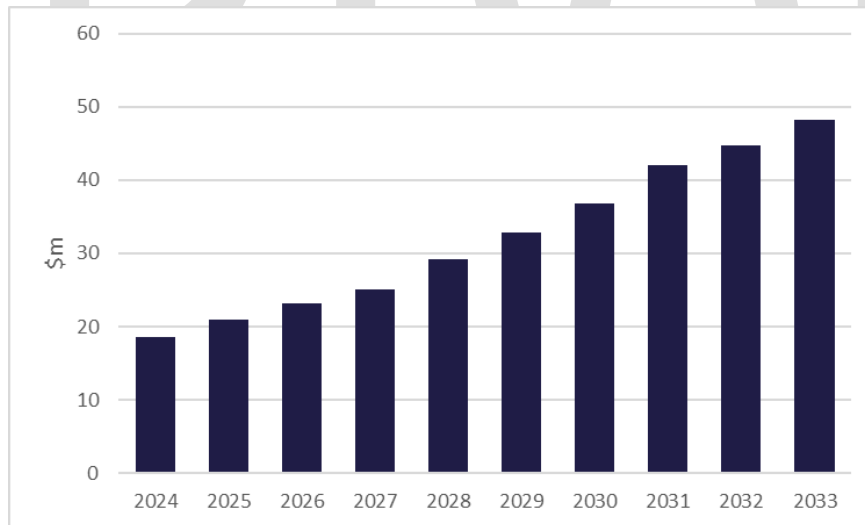
The forecasted operating expenditure from the year ending 30 June 2024 to 2034 has been included in the 2024-34 Long Term Plan. Estimated expenditure beyond 2034 is based on the Year 10 forecast and adjusted for anticipated future growth of the city.

Operating expenditure includes indirect costs to provide the service to the community such as depreciation, interest costs and overheads. Forecasted operating expenditure is shown as gross costs.

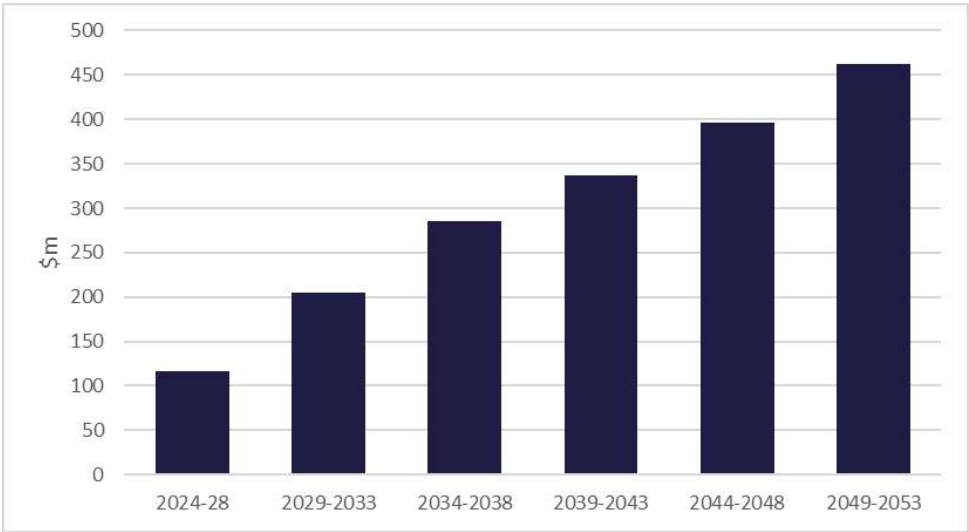
The future compliance requirements of three water services continue to be uncertain as the government is proposing changes in policy, legislation and regulation that impact the way in which three water services will be delivered.

A conservative operational budget has been developed with a focus on base requirements to enhance asset management maturity, enhancing data, demand management, condition assessment, quality, and risk management approaches to increase the operational resilience of three waters services.

Stormwater – forecasted yearly operational expenditure 2024-34 Long Term Plan



Stormwater – forecasted operational expenditure – five yearly periods 2024-53



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TRANSPORT

Council provides, maintains, and manages a safe, efficient, and sustainable transport network. This network integrates freight, private vehicles, buses, cycling and walking, includes management of on and off-street parking activity and planning for future development.

We work with communities and stakeholders to raise awareness of travel options and influence travel behaviour. We also have a partnership with the Waikato Regional Council who provide and manage the bus service in Hamilton.

The Government through Waka Kotahi Transport Agency partners with Council by operating the state highways that run through Hamilton and co-investing with Council in transport infrastructure and services. Waka Kotahi currently provides a 51% subsidy for eligible transport projects.

Focus Areas

- Operating the transport network to provide a safe means of movement of people and goods.
- Supporting the outcomes of Access Hamilton for an increasing uptake of alternate travel choices (non-fossil fuels).
- Providing infrastructure for a rapidly growing city, balancing and coordinating different forms of transport.
- Continuing to maintain and renew the existing network to an appropriate level of service.

Asset Summary

Asset Group	Description	Depreciated Replacement Cost \$000s (At 30 June 2024)
Carriageways	Hamilton has a predominantly urban road network. The total road length in the city is 714km, with low traffic residential streets making up a large proportion. Carriageway assets include the hard layered pavement that forms the carriageway, cycle lanes, parking bays, service lanes and off-street carparks. Carriageways service light and heavy motor vehicles, motorcycles, scooters, and bicycles.	883,673
Structures	Bridges are critical to the transport network's functioning, and none more so than the Waikato River bridges and approaches, with the six river crossing bridges allowing connection of the city's east and west sides. A seventh bridge to the Peacocke area of the city is nearing completion. Other than bridges, the structures asset group also includes culverts with 3.4m ² or more waterway area, retaining walls, signs, gantries, and bus shelters.	270,591
Drainage Assets	Road drainage assets play a pivotal part in the collection and initial treatment of stormwater runoff. Assets include over 1,312km of kerb and channel, 13,266 catchpits and other features used to drain water from the roads into the city's stormwater system.	319,744
Footpaths and Cycle Paths	A dedicated surface adjacent to and linking roads which is for use by pedestrians, cycles, and other active modes. Surfaced generally in asphalt or concrete.	191,564

Traffic Control Devices	Assets that help to manage and guide all road users on the network, including vehicular guardrails, signs, lighting, traffic signals, electronic signs, road marking, and amenity lighting.	101,412
Streetscapes	Assets that add to the amenity value of the network to improve the user experience. This includes grasses, planted verges and islands and street furniture (railings, litter bins, cycle racks etc).	25,048
Buildings	Various properties owned by Council for transportation or future improvement purposes.	6,698
Total Value		1,798,730

Critical Assets

Critical assets are those that have a high consequence of failure. Critical transport infrastructure is considered in two related contexts – Asset Group Criticality, and Network Location Criticality.

Asset Group Criticality considers the general criticality of the different types of Asset Groups. For example, an Asset Group Criticality view would indicate that bridges are critical because of the high consequences of failure and high impact on safety and transport services.

Network Location Criticality considers the location or part of the transport that is critical. This may be due to the numbers of users on routes, or the vicinity and access to critical public facilities. Examples include transport routes that provide access to and from hospitals, emergency services, or civil defence evacuation routes.

The following table provides a summary of critical assets for the Transport Activity. Although other assets are critical to the efficient and effective operation of the transport network, they are not deemed critical. For example, footpaths are important to the success of many commercial and public operations that rely on people being able to access premises, however it is relatively simple to detour around any single section of footpath that is closed for any reason. Therefore, there are no footpaths that are critical for the running of the city.

Asset Group	Critical Assets
Carriageways	<p>The carriageway network is highly resilient and should an incident or event cause the closure of any road, alternative routes and detours can be rapidly set in place. It is a compact network with a network service provider situated within the limits of the city and the typically gridded layout common in urban networks.</p> <p>Several sites are critical to the overall running of the city:</p> <ul style="list-style-type: none"> • Waikato Hospital • Hamilton City Council Water and Wastewater Treatment Plants • The Telecom Central Telephone Exchange • Principle fire, police, and ambulance stations • Waikato river bridges and approaches.
Structures and Drainage Assets	<p>Four road culverts are identified as critical assets and would require road closure as a result of failure, causing major disruption to road users on these busy routes. Failure of other culverts will also cause inconvenience and require detours, but the effect would be localised. The four critical road culvert are:</p> <ul style="list-style-type: none"> • Cobham Drive. • Ulster Street (Waitawhiriwhiri Stream). • Victoria Street by Fairfield Bridge (Waitawhiriwhiri Stream).

	<ul style="list-style-type: none"> Hukanui Road - North of Brookview Court). <p>Other culverts on the State Highway network in the city are similarly critical but are not Council assets. Culverts along waterways and catchpits in sag curves are critical in that if they become blocked there is potential to flood private property or the carriageway. We have also identified a service gap regarding inadequate drainage in flood-prone locations. These high-risk locations to ensure they are inspected and cleared when heavy rain is forecast and during and after high rainfall events.</p> <p>The pump stations that drain pedestrian underpasses are critical to their operation. If necessary, the underpasses can be closed, and pedestrians diverted to other routes.</p>
Streetscapes	Some fences are critical as they protect the public from falling at a height, mainly on ramps to and from pedestrian underpasses, but also at the top of steep embankments.
Buildings	The Garden Place parking building and the Transport Centre are critical to the respective parking and public transport services as they are purpose-built buildings that cannot be readily replaced.

Data Confidence

Asset data is used to inform operations and maintenance, capital, and renewal activities for infrastructure assets.

Asset Group	Asset Data Confidence Grade*	Comments
Carriageways	B - Reliable	Data is complete and external RAMM (Road Assessment and Maintenance Management) rating is high. Condition rating age is generally current as appropriate for asset group, but not all processes are recorded. Traffic count information requires review and expansion to improve active modes, which is currently underway.
Structures	B - Reliable	
Drainage Assets	B - Reliable	
Footpaths and Cycle Paths	B - Reliable	
Traffic Control Devices	B - Reliable	
Streetscapes	B - Reliable	
Buildings	B - Reliable	Buildings are recorded in the corporate asset management system and overall, the data is sound, however some data is estimated, and further improvements are required to improve data reliability.
*Data Confidence Grades (as per International Infrastructure Management Manual definitions): A – Highly reliable; B – Reliable; C – Uncertain; D – Very uncertain.		

Asset Lives

The useful lives of major asset classes are estimated as follows:

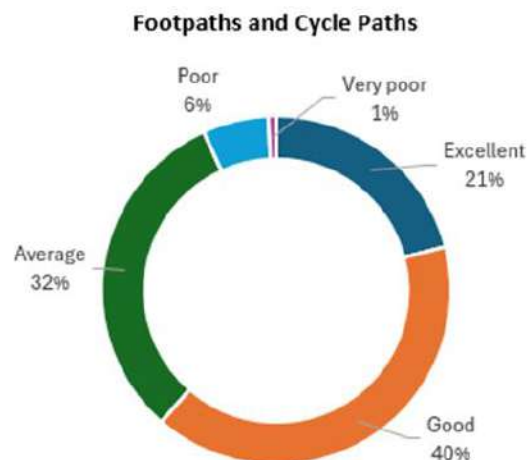
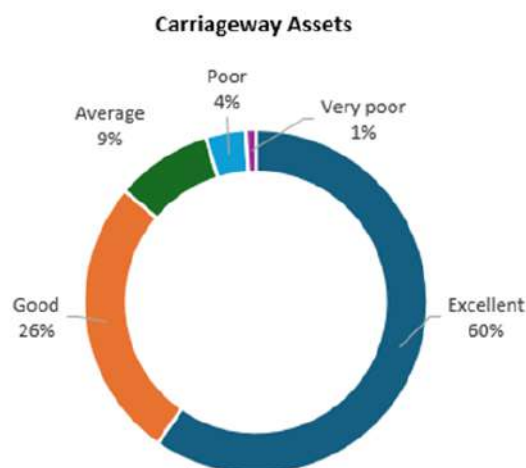
Asset Class	Useful Life (Years)
Top surface (seal)	5-20
Pavement (basecourse)	50-140
Concrete	60
Drainage	60-70
Carparking buildings	100
Footpaths and cycleways	5-75
Kerbs and traffic islands	20-60
Signs	15
Streetlight poles	50
Bridges and culverts	40 (culverts) -150 (Bridges)

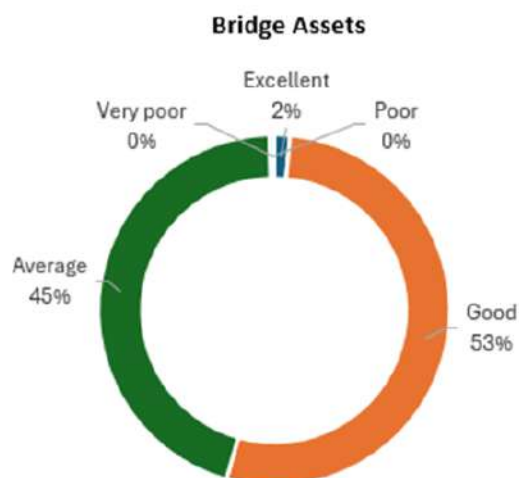
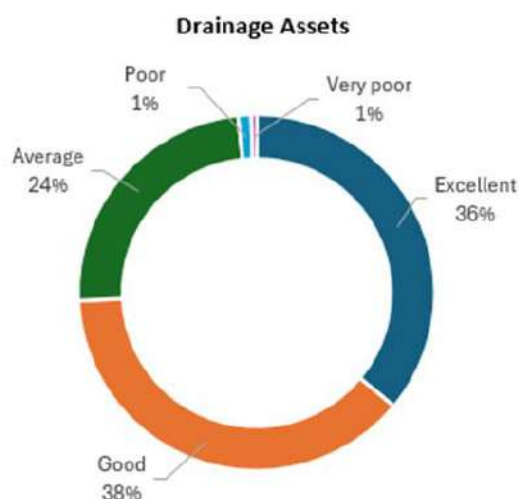
Asset Condition

Asset condition assessment cycles are prioritised based on the risk of asset failure and the expected rate of asset deterioration. The condition of the road carriageway is based on:

- Asset age.
- Historic and predicted traffic loadings.
- Depth and quality of the pavement layers.
- Maintenance history.
- Recorded pavement faults, including potholes (asset performance).

The following graphs provide a summary of asset condition for major transport asset classes by replacement value.



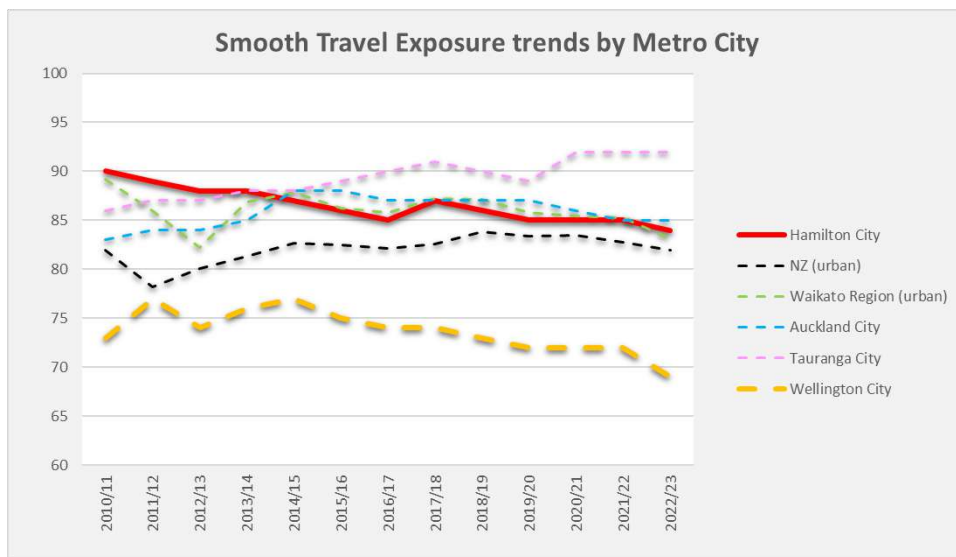


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The roughness of roads can impact the safety and comfort of road users, as well as vehicle operating and maintenance costs. Smooth Travel Exposure (STE) is a system of measurement used to assess the quality of the ride on our city's roads. The higher the STE percentage, the smoother the network.

In comparison with other large metro councils and the New Zealand urban average, the Hamilton network is showing a decline in smooth travel exposure. This can be an indicator that the maintenance and renewal of our existing roads is not keeping up with the deterioration of the network.

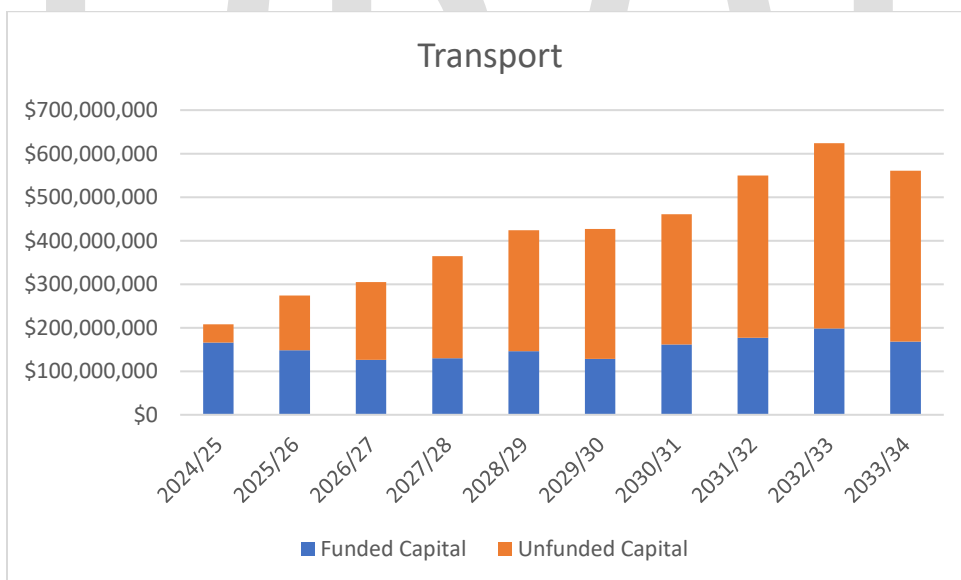
An STE rating of 84% in 2022/23 indicates the city's roads are still within a reasonable standard, however an appropriate level of both maintenance and renewal expenditure will be required to keep our roads in good condition in the coming years.

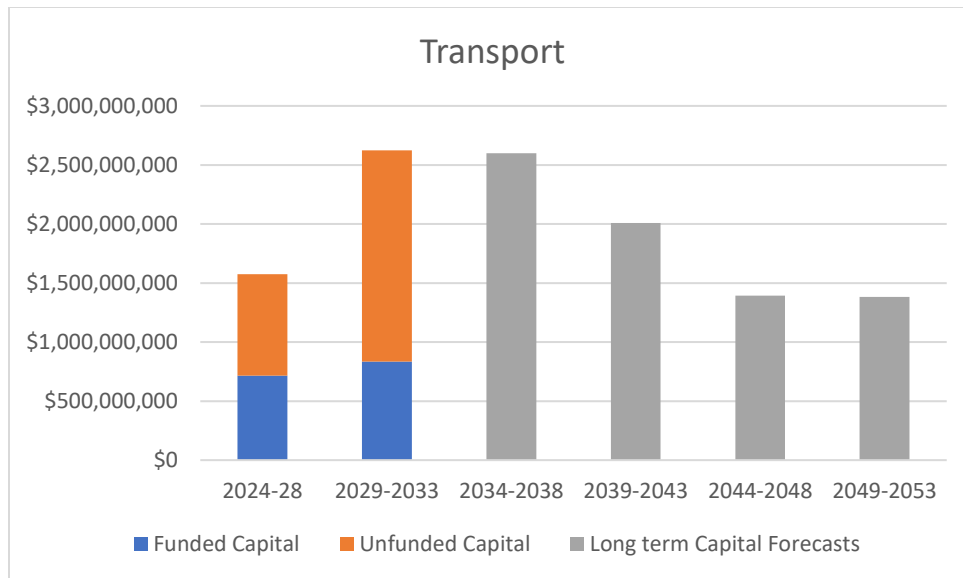


Capital and Operating Expenditure – Indicative Estimates

Capital Expenditure

The estimated capital needs for the Transport Activity have been prepared for the next 30 years. The forecasted capital expenditure from the year ending 30 June 2024 to 2034 has been included in the 2024-34 Long Term Plan.





Levels of Service

- The forecast level of service expenditure does not include any changes to levels of service. Funding included over the 30 years is to ensure we are meeting current levels of service and compliance requirements. Overall, residents and businesses can continue to expect:
 - Travel times for all vehicles to be predictable as our city grows.
 - The transport network to be safe to use.
 - The transport network to be kept in good operating condition.
 - Customer service requests to be responded to promptly.

Growth and Demand

- Key influences in transport demand include population growth, land use patterns, urban density, and use of alternative transport options.
- Projected population and resulting traffic volumes have been based on Council's growth model using population projections prepared by the National Institute of Demographic and Economic Analysis (University of Waikato) and the Waikato Regional Transport Model (WRTM).
- Planning for transport infrastructure assets to provide for growth and demand has assumed that:
 - Over the next 30 years, the length of the transport network will continue to grow at a similar rate to the past 10+ years.
 - The congestion that Hamilton currently experiences for short periods of the day is expected to increase as the city continues to grow.
 - Before building new infrastructure, demand will be managed by making best use of existing road network capacity.
 - Primarily, growth in demand will be managed through provision and facilitation of transport choice, i.e. ongoing development of public transport, cycling and walking options.
 - Development in the existing city will be serviced largely through the current network.

- New development in greenfield growth areas may result in the need for capacity and safety improvements to existing arterial/collector roads.
- Freight movement is expected to increase over the next 10 years.
- The growth forecasts and assumed settlement pattern provide uneven demand growth on the network.

Renewals

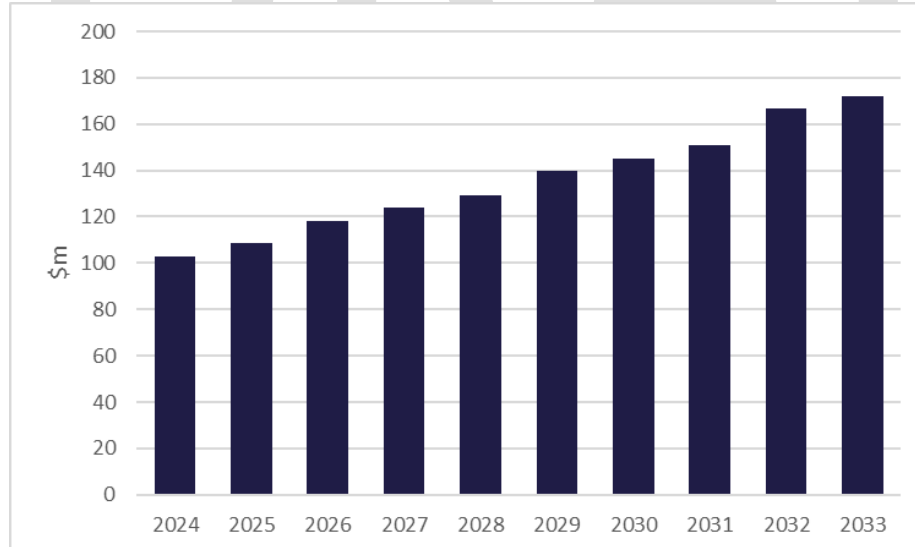
- The renewal budgets for Years 1-3 are based on a medium risk profile. Years 4-10 carry a higher risk profile. There is some in-built resilience to help deal with unexpected shocks, long term fatigue of the network and to reprioritise works appropriately.
- Renewal profiles for pavement structures and road surfaces (chip seal and asphalt) have been moderated to spread the works evenly across years 1 – 10 of the Long Term Plan. This is to achieve affordability and deliverability of the programme and reduce service interruptions.

Operating Expenditure

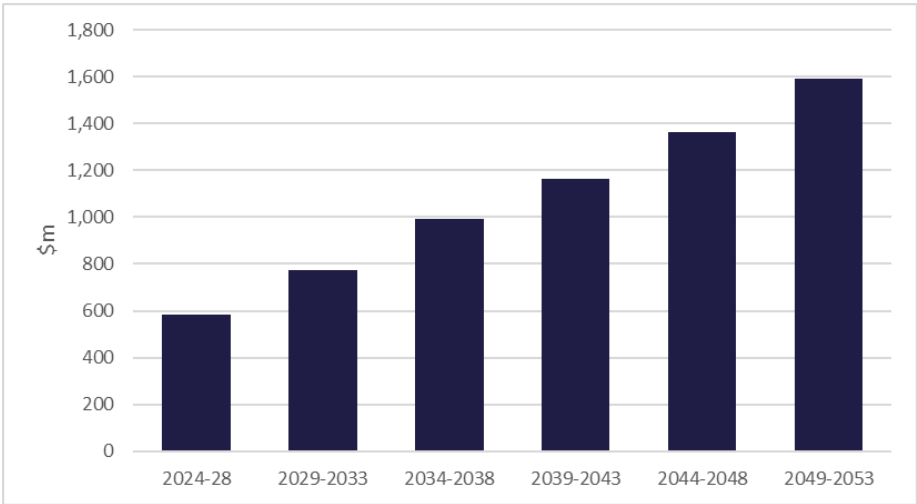
The forecasted operating expenditure from the year ending 30 June 2024 to 2034 has been included in the 2024-34 Long Term Plan. Estimated expenditure beyond 2034 is based on the Year 10 forecast and adjusted for anticipated future growth of the city.

Operating expenditure includes indirect costs to provide the service to the community such as depreciation, interest costs and overheads. Forecasted operating expenditure is shown as gross costs.

Transport – forecasted yearly operational expenditure 2024-34 Long Term Plan



Transport – forecasted operational expenditure – five yearly periods 2024-53



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PARKS AND GREEN SPACES

This category of infrastructure activities includes our parks and recreation network, Hamilton Gardens, and the cemeteries and crematorium.

Hamilton's parks and recreation network includes parks and reserves as well as river corridors, gully systems, peat lakes, wetlands, and remnant indigenous vegetation along with gardens, walkways, sports facilities, streetscapes, and civic spaces.

Our parks and recreation network provides places for activity and engagement, for peace and enjoyment, for freedom and relief from the built environment and an opportunity to connect with nature and heritage. It contributes to the health, well-being and quality of life of Hamiltonians, and the ecological and environmental well-being of our city.

Hamilton Gardens is one of the city's much-loved green spaces providing an important social and recreational asset for city residents. Highly regarded nationally and abroad and our most popular visitor destination, Hamilton Gardens has an internationally unique concept; to tell the story of civilisations through gardens. Each garden is a point in the history of human civilisation and represents an idea or a pivotal moment in the evolution of human cultures, ideas, and beliefs.

Also classified as reserves and providing a full range of end-of-life services, Council manages and maintains three cemeteries: Hamilton Park Cemetery at Newstead with a crematorium and chapel facilities; and the closed heritage cemeteries in Hamilton East (near Hamilton Gardens) and Hamilton West (next to FMG Stadium Waikato).

Focus Areas

- Continuing to invest in Hamilton's significantly degraded indigenous biodiversity through the Nature in the City Programme, enabling ecological restoration and path/access track development at priority sites and habitats within the city.
- Delivering priority projects to improve the quality and capacity of sports parks.
- Creating a connected network of play, through continued investment in the play spaces programme.
- Redevelopment of Boyes Park and the old Founders Theatre site into open space for people to enjoy in the central city.
- Ongoing development of Hamilton Gardens, with a focus on visitor amenities in the earlier years of the 10-Year Plan, and continued site and enclosed garden development in later years (pending external funding for new gardens).
- Increasing the financial resilience of Hamilton Gardens, reducing the impact on the ratepayer. Paid entry to the Gardens is being introduced in 2024.
- Remaining a preferred provider of cremation services in the Waikato sub-region, through our cremation facilities at Hamilton Park Cemetery.
- Continued development of Hamilton Park Cemetery burial and ash lawns to meet legislative requirements and our city's diverse cultural and spiritual needs.
- Looking after and maintaining our existing infrastructure.

Activity	Asset Type	Why it is Critical (consequence of failure)
Parks and Recreation	Playgrounds	There are NZ standards for all aspects of playground provision with a strong focus on safety. Risks of failure include health and safety, major expenditure, and impact on community wellbeing.
	Bridges, jetties and viewing platforms	Council provides both pedestrian and vehicle bridges in parks throughout the city. Critical elements are bridge approaches and structures. Failure risks include health and safety, major expenses, and lack of access.
	River Paths	From time-to-time asset failure is caused by erosion or slips, riverside or from adjacent properties. Failure risks include health and safety, walkway and cycleway closures, consequential remediation costs and the potential to adversely affect adjoining land.
	Porritt Stadium	Porritt Stadium is the only facility in the Waikato Region with an IAAF certified track. Failure risks include closure with no place in the Waikato to redirect people to and significant cost of repair.
	Retaining Walls	Council installs retaining walls in slip-prone areas across open spaces. From time-to-time, erosion or slips cause asset failure. Failure risks include health and safety, lack of access, and major expenses.
	Nursery water pumps and irrigation	If pumps and irrigation systems fail, there is a risk of losing plant stock, particularly over the summer months. Failure risks include financial consequences and business disruption, both for the Nursery and the units it supplies.
Hamilton Gardens	Bridges and boardwalks	Failure of a bridge or boardwalk at height or over water would pose a health and safety risk. Visitors would also not be able to access some areas of the gardens.
	Irrigation pumps	Failure of the pump system would result in plants not being able to be watered and water features not operating. This would incur costs to replace plants and impact the presentation of the gardens and customer experience.
	Jetty	Failure of the jetty would pose a health and safety risk and would also impact on the ability of the Waikato Explorer to drop off or pick up people from the Gardens by the river.
	Significant buildings – Pavilion, café, and public toilets	Failure of these buildings would impact on the ability of the Gardens to operate effectively and in some cases would pose a health and safety risk.
Cemeteries and Crematorium	Cremators and equipment (including electrics, gas connection /fittings and charging bier)	The crematorium is a city-wide and regional service. Mitigations are in place to cover in the short term if one of the cremators failed. If both cremators failed, this would have significant adverse effects on the operations of the activity and levels of service. There is limited casket storage space so carry over of caskets is limited for time and space.
	Chapels and crematorium building	Failure of the chapels would mean that services would not be able to be held on site at Hamilton Park Cemetery. Failure of the crematorium building would mean cremations would have to be done by other providers.

Asset Summary

Asset Group	Description	Depreciated Replacement Cost \$000s (At 30 June 2024)
Land	Parks and Recreation – Council has about 1,160 hectares of open space, approximately 10% of the city’s area, including 214 parks and reserves.	874,475
	Hamilton Gardens – the total land area covered by Hamilton Gardens (including the Municipal Nursery) is just under 44 hectares.	15,755
	Cemeteries & Crematorium – Hamilton Park Cemetery (32.4 hectares) Hamilton East Cemetery (3.2 hectares) and Hamilton West Cemetery (0.8 hectares).	5,043
Buildings	Parks and Recreation – buildings include facilities for public and staff use - toilets, changing rooms, depots/work sheds, dwellings, etc. The Municipal Nursery buildings include glasshouses, shade house sheds and staff facilities.	9,982
	Hamilton Gardens – buildings and significant structures throughout the Gardens.	6,187
	Cemeteries & Crematorium – buildings located at Hamilton Park Cemetery, including the chapels, crematorium, toilets, and other ancillary buildings, and one structure at Hamilton West Cemetery.	3,819
Park Type Infrastructure	Parks and Recreation – play spaces, park furniture, roads, carparks, paths, sports fields, drainage and irrigation, lighting, playing surfaces, and other built assets such as water features, bridges, pergolas and retaining walls, etc.	142,983
	Hamilton Gardens – similar assets to those listed above.	22,827
	Cemeteries & Crematorium – similar assets to those listed above, plus cemeteries specific assets such as memorial berms and beams, and ash walls.	5,551
Operational Assets (furniture and equipment)	Parks and Recreation	1,066
	Hamilton Gardens	85
	Cemeteries & Crematorium	759
Trees	Street and park trees.	n/a
Total Value		1,088,532

Critical Assets

Critical assets are those that have a high consequence of failure. Criticality is assessed against five impact categories: health and safety, compliance and regulatory, levels of service/service disruption, environmental harm, and financial impact. Mitigation measures are in place through ongoing asset renewal and maintenance programmes and operational plans and procedures.

Assets with the highest criticality across the parks and green spaces activities include:

Data Confidence

Asset data is used to inform operations and maintenance, capital, and renewal activities for infrastructure assets. Asset condition and performance information is not included in the following assessment.

Asset Group	Asset Data Confidence Grade*	Comments
Park Type Infrastructure	C – Reasonably Reliable	The assets are recorded in the asset management system (IPS) and there are processes in place to manage this data. However, there are improvements to be made to data accuracy and reliability. A programme of work has been approved for a range of projects, including establishing spatial data for park type assets which will increase asset register accuracy and reliability, a mobile solution for in-field condition inspections, asset register improvement projects, and in in-field asset data validation tool.
Operational Assets	C – Reasonably Reliable	Most of these assets are recorded in the asset management system, (IPS), and there are processes around updating this data, however there are improvements to be made to data accuracy and reliability.
Buildings	B - Reliable	Buildings are recorded in the corporate asset management system and overall, the data is sound, however some data is estimated, and further improvements are required to improve data reliability.
*Data Confidence Grades (as per International Infrastructure Management Manual definitions): A – Highly reliable and accurate; B – Reliable with minor inaccuracies; C – Uncertain, 50% estimated; D – Very uncertain, significant data estimated; E – Unknown, all data estimated.		

Asset Lives

The useful lives of major asset classes are estimated as follows:

Asset Class	Useful Life (Years)
Buildings – structure/fit out/services	5-200
Plant and vehicles	3-15
Furniture, fittings, and equipment	5-50
Parks improvements	5-150

Asset Condition

Parks and Recreation

Asset condition and performance for Parks and Recreation assets is established through a combination of staff knowledge about our parks and their assets, and physical inspections undertaken by a parks and recreation engineering specialist. This information is used to develop a renewal programme, on a park-by-park basis.

A prioritised assessment of structural assets (e.g. footbridges, jetties, boardwalks, viewing platforms) was carried out in 2022/23 by a qualified parks specialist structural engineer and a qualified water structures specialist engineer and master diver. The condition of playgrounds was assessed in 2022 by an external playground specialist.

An upcoming programme of asset data enhancements includes a project to improve the digital capture parks asset condition data.

Hamilton Gardens

Staff carry out annual inspections of Hamilton Gardens assets, and several structural assets are included in the Parks and Recreation engineering inspections discussed above. Overall, the condition of the enclosed gardens and other non-building site/operational assets is moderate to very good and the Gardens meet or exceed visitor expectations.

The cafe and pavilion are currently being upgraded as part of the 2023 visitor centre precinct project, which includes developing a new visitor centre, upgrading our venue spaces, making improvements to the café, and establishing a clear and welcoming entry point into the Enclosed Gardens.

As the design for the new visitor centre utilises part of the Hamilton Gardens Pavilion, we'll also be improving our venue experience through enhancing the spaces in this building and enabling more options for our hirers.

Improvements to public toilets and other amenities to cater for growing visitor numbers are included in the 2024-54 capital programme.

Cemeteries & Crematorium

There are currently no significant issues with the performance of the cemeteries and crematorium non-buildings site and operational assets. The cremators undergo six-monthly servicing and maintenance, including combustion engineer's reports, which inform maintenance and renewal programmes.

The Park Chapel toilets require renewal, as they are very old, in poor condition and do not meet accessibility requirements. The chapel itself is moderately fit for purpose, however it is not a modern facility and at times does not have enough capacity to accommodate larger services.

Capital and Operating Expenditure – Indicative Estimates

Capital Expenditure

The estimated capital needs for the Parks and Green Spaces Activities have been prepared for the next 30 years. The forecasted capital expenditure from the year ending 30 June 2024 to 2034 has been included in the 2024-34 Long Term Plan.



Levels of Service

- The forecast level of service expenditure does not include any changes to levels of service. Funding included over the 30 years is to ensure we are meeting current levels of service and compliance requirements. Overall, residents and businesses can continue to expect:
 - Our parks and facilities within them to be accessible.
 - The city's ecosystems and biodiversity to be understood, protected, and restored.
 - The city's open spaces to be improved and protected to help mitigate against future threats, including climate change.
 - A timely response to requests for graffiti removal.
 - That we will invest in and enhance Hamilton Gardens to create new and unique experiences for our people and visitors.

- That our cemeteries and crematorium will be operated and developed in a sustainable way, and we will protect and provide access to information about our heritage cemeteries.
- That Hamilton Park Cemetery's services and facilities meet diverse customer needs.

Growth and Demand

- For Parks and Green Spaces Activities, infrastructure required to provide for growth is forecast through:
 - Population projections – Hamilton is a growing city and population projections indicate this growth will continue.
 - Geographic demand and the long-term settlement pattern for the city.
 - Demographics – an increasingly diverse population means our facilities need to cater for a wider range of activities and users.
 - Changing recreational trends – sports participation rates and preferences are constantly changing. Change in leisure trends influences the services and facilities we provide.
 - Social and economic factors – social and economic factors influence recreation and leisure participation choices.
 - Climate change – the weather effects of climate change impact on demand for our facilities (indoor vs outdoor facilities) and pose risks for our assets.
 - Seasonal and peak demand – some of our facilities experience increased demand at different times of the year.
 - Strategies, policies and plans.
 - Targeted supply and demand studies.
 - Engagement with government departments, neighbouring councils, and other agencies on future infrastructure requirements.

Renewals

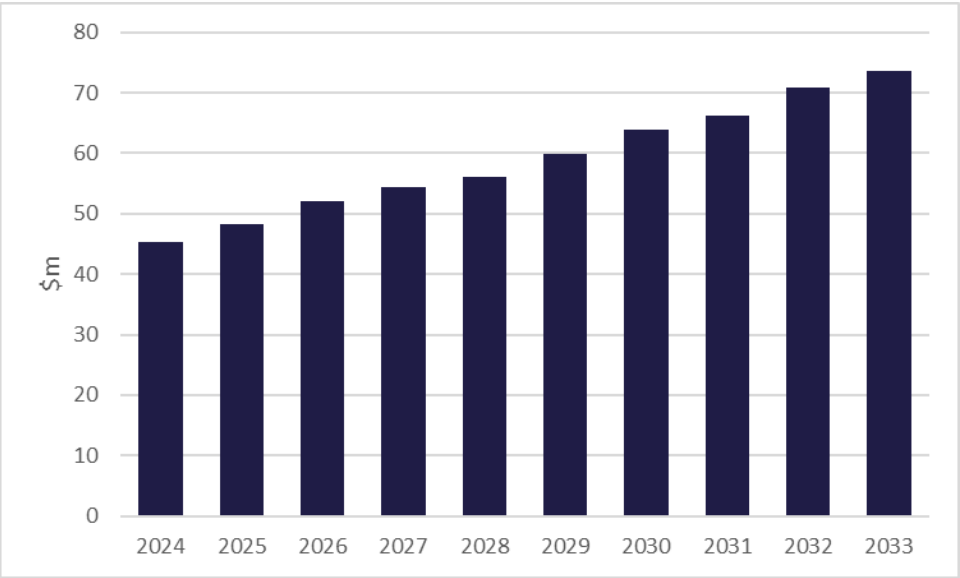
- The renewal budgets for Years 1-3 are based on a medium risk profile. Years 4-10 carry a higher risk profile. There is some in-built resilience to help deal with unexpected shocks and to reprioritise works appropriately.

Operating Expenditure

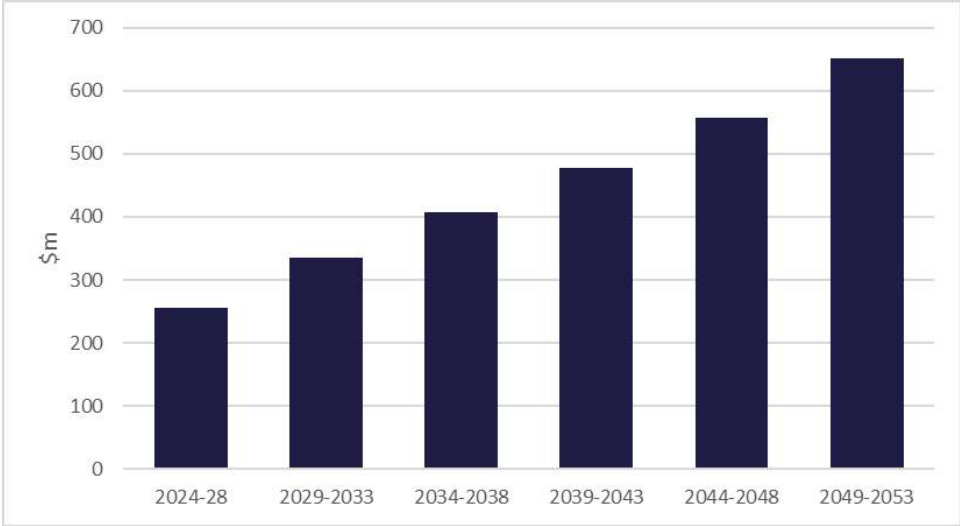
The forecasted operating expenditure from the year ending 30 June 2024 to 2034 has been included in the 2024-34 Long Term Plan. Estimated expenditure beyond 2034 is based on the Year 10 forecast and adjusted for anticipated future growth of the city.

Operating expenditure includes indirect costs to provide the service to the community such as depreciation, interest costs and overheads. Forecasted operating expenditure is shown as gross costs.

Parks and Green Spaces – forecasted yearly operational expenditure 2024-34 Long Term Plan



Parks and Green Spaces – forecasted operational expenditure – five yearly periods 2024-53



COMMUNITY AND EVENT FACILITIES

This category of infrastructure activities includes aquatic facilities, community facilities, Te Kaaroro Nature Precinct (Hamilton Zoo and Waiwhakareke Natural Heritage Park), Libraries, Waikato Museum, and H3 premier event venues (Claudelands, Seddon Park and FMG Stadium Waikato).

These facilities support and strengthen the community, encourage an active lifestyle, and promote economic growth through attracting events and visitors to the city:

- Hamilton City Council is the main provider of public aquatic facilities in Hamilton. Council owns and operates Waterworld and Gallagher Aquatic Centre and partners with five educational institutions to provide additional swimming space in summer.
- Community Facilities include Council-owned community centres, halls and bookable spaces that are primarily used for community-based activities. Community Facilities serve a variety of functions, providing opportunities for community development and connection, places for social services, and hubs for community art, culture, sport, recreation, education, and information.
- Hamilton City Libraries provide services and programmes that promote literacy and learning through a network of seven libraries and the libraries' online offerings.
- Te Kaaroro Nature Precinct includes Hamilton Zoo and Waiwhakareke Natural Heritage Park. Hamilton Zoo is home to more than 450 animals and hosts New Zealand's largest walk-through aviary for native birds and plants. Waiwhakareke Natural Heritage Park is New Zealand's largest inland restoration project and provides an urban ecological paradise for native flora and wildlife. Waiwhakareke is a significant site for Tangata Whenua, with a rich cultural history.
- On the banks of the Waikato River, in the heart of Hamilton's south-end cultural precinct, Waikato Museum Te Whare Taonga o Waikato has 13 galleries featuring a dynamic public offer of both permanent and temporary exhibitions and programmes. The museum collects, cares for and shares material culture, visual art and taonga of the Waikato area and iwi/hapuu who whakapapa to the Tainui Waka, to tell local stories and narratives about our people and our city, region, and our place in the world.
- H3 attracts and delivers a diverse range of quality events within three Council-owned facilities (Claudelands, Seddon Park and FMG Stadium Waikato). This activity is operated on a commercial recovery basis, generating business within a very competitive environment, balanced with the need to support community outcomes.

Focus Areas

- Renewal of assets aging assets at Waterworld, including the steam room and sauna which are currently out of service, and refurbishing the changing rooms to meet our whanau, rainbow, and accessible community needs.
- Construction of a fit for purpose community facility to serve the northwest of the city via Pukete Neighbourhood House.
- Further work to better understand the supply of community facilities across the city (Council and non-Council) and the demand for these facilities.
- Continuing to move to a community hub model for libraries by extending Hillcrest Library, a project that also caters for growth in the south of the city.

- Investing in Hamilton Zoo and H3 to make the most of what we already have, prioritising the renewal of aging assets.
- Continued development of Waiwhakareke Natural Heritage Park, including a predator proof fence, soft-release aviaries and habitat needs required to introduce native species to the park.
- Continuing the journey of Te Kaaroro to be a truly modern conservation centre that embraces both ecological restoration and wildlife conservation; and growing the profile of Te Kaaroro to contribute significantly to local and regional tourism.
- Upgrading the Waikato Museum building environment to ensure critical climate control is modernised to industry standards.
- Looking after and maintaining our existing infrastructure.

Asset Summary

Asset Group	Activity	Assets	Depreciated Replacement Cost \$000s (At 30 June 2024)
Buildings	Aquatic Facilities	Waterworld: Waterworld complex, toilet block, hydrotherapy pool, outdoor lido pool.	25,388
		Gallagher Aquatic Centre.	2,349
	Community Facilities	Celebrating Age Centre, ATC Drill Store, Yendell Park Building, Caro Park Clubrooms, Hamilton Amateur Radio Club, Hamilton Park Cemetery Riding for the Disabled buildings, Norris-Ward Arts Centre, Old St Peter's Hall and Reid Studio, Settlement Centre Waikato, Enderley Community Centre, Fairfield Hall, Flagstaff Park Sports Clubrooms, Frankton Railway Hall, Metro Judo Hall.	28,008
	H3	Claudeland's Events Centre: Claudeland's Arena, Claudeland's Conference & Exhibition Centre, The Grandstand, Holman Stand, auxiliary buildings and open spaces.	86,239
		FMG Stadium Waikato: Brian Perry and East Stands, No. 1 Field, Mill Street Field, Willoughby Park, and Beetham Park.	40,406
		Seddon Park: Cricket oval, player facilities, practice nets, pavilion, camera platforms, storage, and auxiliary buildings.	11,228
	Te Kaaroro Nature Precinct	Entry precinct, 'people' and service buildings, animal enclosures and structures, access and site assets.	20,891
	Libraries	The Central Library, Te Kete Aronui library hub in Rototuna, and five community branches at Dinsdale, St Andrews, Glenview, Chartwell and Hillcrest.	36,023
	Waikato Museum	Waikato Museum building, ArtsPost and Beale Cottage.	9,804
Operational Plant and Equipment	Aquatic Facilities	Pool equipment, furniture, water quality assets, technical, gym, play and aqua education equipment.	7,272
	H3	Furniture, technical and turf equipment.	12,277
	Libraries	Furniture, technology and library equipment.	1,630
	Te Kaaroro Nature Precinct	Furniture, machinery and equipment including vet equipment.	1,203

	Waikato Museum	Furniture, technology and museum equipment	834
Collections	Libraries	Lending and heritage collections.	21,551
	Waikato Museum	Collections of artworks, taonga and objects.	41,377
Total			346,480

Data Confidence

Asset data is used to inform operations and maintenance, capital, and renewal activities for infrastructure assets. Asset condition and performance information is not included in the following assessment.

Asset Group	Asset Data Confidence Grade*	Comments
Buildings	B - Reliable	Buildings are recorded in the corporate asset management system and overall, the data is sound, however some data is estimated, and further improvements are required to improve data reliability.
Operational Plant & Equipment	H3: B - Reliable	H3 data is stored in the Momentus fixed asset register. There is a high level of confidence that the data is accurate and complete. Work is ongoing to further validate asset data to maintain this level of confidence.
	Other activities: C – Reasonably reliable	Most of these assets are recorded in the asset management system, (IPS), and there are processes around updating this data, however there are improvements to be made to data accuracy and reliability.
Park Type Assets	H3: B - Reliable	H3 data is stored in the Momentus fixed asset register. There is a high level of confidence that the data is accurate and complete. Work is ongoing to further validate asset data to maintain this level of confidence.
	Other activities: C – Reasonably reliable	The assets are recorded in the asset management system (IPS) and there are processes in place to manage this data. However, there are improvements to be made to data accuracy and reliability. A programme of work has been approved for a range of projects, including establishing spatial data for park type assets which will increase asset register accuracy and reliability, a mobile solution for in-field condition inspections, asset register improvement projects, and in in-field asset data validation tool.
Collections	Libraries Lending Collection: A – highly reliable	The Lending Collection is recorded in the Library Management System (Kōtui). Sound and robust policy and processes are in place.
	Libraries Heritage and Archives Collection: C – reasonably reliable	Staff are currently transitioning all heritage-archival collection data into Vernon (a process anticipated to take 10 years). The heritage-print collection is managed through the Library Management System and sound policies and procedures are in place.
	Museum Collection: B – reliable	All collections are recorded in the Vernon Collection Management System (CMS) with condition data and asset attributes.
*Data Confidence Grades (as per International Infrastructure Management Manual definitions): A – Highly reliable and accurate; B – Reliable with minor inaccuracies; C – Uncertain, 50% estimated; D – Very uncertain, significant data estimated; E – Unknown, all data estimated.		

Asset Lives

The useful lives of major asset classes are estimated as follows:

Asset Class	Useful Life (Years)
Buildings – structure/fit out/services	5-200
Plant and vehicles	3-15
Furniture, fittings and equipment	5-50
Library books	3-14
Parks improvements	5-150
Zoo animals (acquisition costs)	10

Critical Assets

Critical assets are those that have a high consequence of failure. Criticality is assessed against five impact categories: health and safety, compliance and regulatory, levels of service/service disruption, environmental harm, and financial impact. Mitigation measures are in place through ongoing asset renewal and maintenance programmes and operational plans and procedures.

Assets with the highest criticality across community and event facilities activities include:

Activity	Asset Type	Why it is Critical (consequence of failure)
Aquatic Facilities	Pool plant	Health and safety of staff and customers. Service disruption including pool closure (depending on asset failure).
	Buildings (structures, main power supply. HVAC, hydrosides)	Catastrophic failure during use or opening hours could cause harm to staff or the public. Potential loss of public confidence due to pool closures. Lack of available pool space in Hamilton. Revenue impacts.
Community Facilities	Community facility buildings	In times of Civil Defence Emergencies, our larger community facilities may be required for community support services or accommodation. Catastrophic failure during use or opening hours could cause harm to members of the public and users of the facility. Closure of facilities would result in a reduced level of service on a local level and reduce the number of programmes and events offered.
Libraries Libraries website	Heritage Collection and HCC Archives	Irreplaceable loss or damage to unique items critical to the historical record of the city. The risk of legal challenge if obligations under the Public Records Act are not being met.
	Library buildings	If there was catastrophic failure, there could be harm or loss of life to staff or members of the public. Closure of libraries would result in a reduced level of service on a local level and reduce the number of programmes and events offered.
	Central Library fire control and climate	Failure would put valuable Heritage material/ archives at risk. Irreplaceable loss or damage to unique items critical to the historical record of the city.

	control for heritage and Council archives	
	Library Management System (LMS)	The LMS is critical to the delivery of Library services as it contains all the libraries' circulation, customer, and bibliographic data.
	Libraries website	The website is an information gateway for library services, and how the public gain access to e-Materials.
Te Kaaroro Nature Precinct	Buildings & Structures – staff and public buildings	Catastrophic failure could result in harm or loss of life to staff or members of the public. Failure may impact on the ability to deliver core customer service and animal operations. Potential financial impact.
	Buildings & Structures – animal houses (Tigers and Chimps)	Failure may impact on the ability to deliver animal husbandry or may result in an incident such as breach of containment and serious harm to people. Risk of prosecution by regulatory authorities, e.g. Worksafe and/or Ministry for Primary Industries (MPI).
	Animal Enclosures - Dangerous Animal (Category 1&2)	Any breach of containment internally or externally is a critical risk for the Zoo as public safety could be compromised.
	Infrastructure - Utilities	Failure of infrastructure utilities may impact on the ability to deliver core customer service, and animal operations. Prolonged outage may result in failure of communication system, power fences for containing dangerous animals, animal climate control and incubators, failure to meet husbandry and health standards, etc.
	Boundary fence	Potential breach of Zoo containment facility. Risk of prosecution by regulatory authority (MPI).
	Operational plant and equipment – fire arms, vet equipment, animal life support systems, PA system, vehicles, RTs.	Compromised health and safety of people and animals.
Waikato Museum	Museum collection	Loss or damage of irreplaceable and unique cultural assets. Loss of trusted status as kaitiaki on behalf of Hamilton and region Reputational damage could result in the withdrawal of loans, impacting public offer.
	Public Art (Including Ralph Hotere Founders Theatre Mural)	High costs associated with repairs; however, components may be replaced Loss or damage to a significant, unreplaceable artwork Reputational risk to the Council.
	Museum building	Catastrophic failure of the building/s or part of could result in harm or loss of life. Could result in loss of collection. Closure of the Museum building would mean that there would be no significant museum and art gallery in the region. Reputational risk.
	Waikato Museum fire control and climate control for collections and building	Failure would put valuable collections at risk. Irreplaceable loss or damage to unique items critical to the historical record of the city. Risk of harm or loss of life in the case of fire.

	Vernon Collection Management System (CMS)	The CMS is critical the delivery of Museum services as it contains all the information about the objects including donor information, provenance, value, condition and photographic record.
H3	Buildings and utilities	Failure of utilities could lead to cancellation of or disruption to events. Claudelands and FMG Stadium Waikato are designated civil defence centres and a back-up site for Te Whatu Ora Health NZ. This adds to their criticality as they need to be maintained in a way that ensures they are available if required in the event of a disaster.
	Turf, wicket blocks, practice nets and fields	Cricket assets meet the required standards for required to host international cricket events. Failure to maintain these assets to this standard would result in loss of events which in turn would lead to loss of economic benefit to the city.
	Field infrastructure – irrigation, drainage	Field infrastructure is essential to maintaining the cricket pitch at an international standard. Failure of the infrastructure would result in deterioration of the cricket pitch.
	Sports lighting	Sports lighting must be maintained to a standard required for broadcast. Events are held outdoors at FMG Stadium Waikato and Seddon Park and require lighting for events to be held in evenings. Failure to maintain it to this standard would result in loss of business and reputational damage.
	Equipment – scoreboards, floors, goal posts, covers, ropes, nets, staging	Sports equipment is essential to being able to host events. Failure to maintain the equipment to an international and sporting code standing will result in loss of business, reputational damage and potential injury.
	IT network	The IT network is critical to the operation of the venues with multiple venue systems running over the network, e.g. air conditioning, internet.
	Systems - Momentum	This system is used for all event and financial information and failure of the system will result in loss of critical information for running of events and financial information.

Asset Condition

Aquatic Facilities

Built in 1997, Gallagher Aquatic Centre requires a regular programme of renewals to maintain it in reasonable condition. The building is fit for purpose, but more capacity will be required to meet projected demand.

In 2045 Waterworld will be over 70 years old. While a range of individual assets and parts of the building will have been replaced over the intervening years, several of the structural building elements are likely to require significant investment in future years.

Libraries

Overall, our library buildings (with the exception of the new library, Te Kete Aronui) are in moderate condition, with construction ages ranging from 1960 to 1992.

Apart from Te Kete Aronui, only Dinsdale Library was a purpose-built library, with the others reconfigured from former shops, banks and department stores. Although renewals are carried out on a scheduled basis, there are performance issues that remain, for example capacity to accommodate programmes and services, and configuration limitations.

An extension to Hillcrest Library, our third busiest yet second smallest library, is included in the Long Term plan.

Community Facilities

Overall, the community facilities buildings are ageing and in poor condition. The majority are only moderately fit for purpose. Significant investment is required to ensure they continue to provide or increase community benefit.

Waikato Museum

The overall condition of the Museum building is moderate to good. An upgrade of the building environment is included in the Long Term Plan, to ensure critical climate control is modernised to industry standards. The Victoria Street entrance capital works included in the previous Long Term Plan have been deferred due to capital constraints.

The ArtsPost building is in average condition, with required seismic upgrade works scheduled for 2028/29. Beale Cottage, a site of historic significance, is currently unoccupied and is in poor condition.

Te Kaaroro Nature Precinct

The 2021-31 Long Term Plan included a significant increase in renewal funding, addressing many years of underfunding and enabling several projects that were deferred from previous Long Term Plans.

Te Kaaroro growth (both infrastructure and visitor growth), ageing assets, the high-risk nature of the site, and ever changing/increasing compliance costs continue to pose a challenge. As inspection practices mature, we are finding more issues to be addressed, and the condition and deterioration of our assets follows a different pattern to other activities due to the animals they house. Renewals at the Zoo site are still largely reactive, as we address a backlog of works and balance all these considerations.

Prioritising the renewal of aged assets with our overall development plan for the site will be our approach to maximise benefits for animals, staff and visitors.

H3

Building condition assessments indicate most of the buildings at Claudelands, FMG Stadium, and Seddon Park are in moderate to good condition. Due to the nature of the events business, our venues need to be maintained to a level that ensures they are competitive in the market. This means providing venues that have current technology, are safe, clean, comfortable and operate efficiently. A number of the buildings are aging and require regular renewal investment to meet required standards.

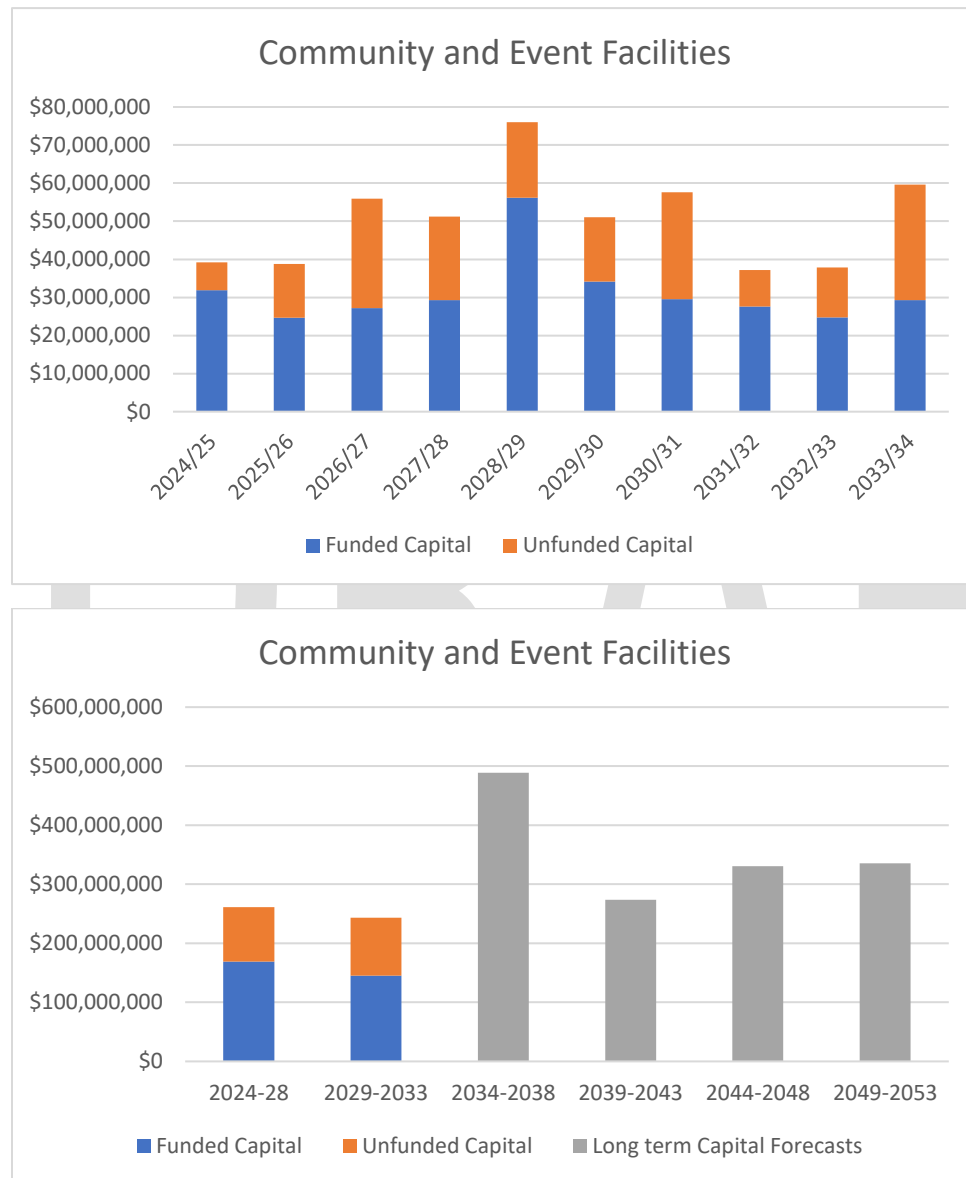
The Claudelands Grandstand (a boutique functions space) is currently closed. Remedial work is required to bring it up to the required seismic standard and address borer damage, with work beginning in Year 1 of the Long Term Plan.

The East Stand at FMG Stadium which dates to 1958, had seismic strengthening work completed in 2020/21 to bring it up to standard. This is only likely to be an interim measure with the stand needing to be fully assessed and planning for replacement to happen within the next 10-15 years.

Capital and Operating Expenditure – Indicative Estimates

Capital Expenditure

The estimated capital needs for the Community and Event Facilities Activities have been prepared for the next 30 years. The forecasted capital expenditure from the year ending 30 June 2024 to 2034 has been included in the 2024-34 Long Term Plan.



Levels of Service

- The forecast level of service expenditure does not include any changes to levels of service. Funding included over the 30 years is to ensure we are meeting current levels of service and compliance requirements. Overall, residents and businesses can continue to expect:
 - Our aquatic facilities and libraries to be well used, providing quality customer experiences.
 - That our aquatic facilities will provide programmes that support safer water use.

- That we will continue to invest in and enhance Te Kaaroro Nature Precinct and Waikato Museum to create new and unique experiences for our people and visitors.
- Claudelands, FMG Stadium Waikato and Seddon Park to successfully attract and deliver a diverse range of quality events.

Growth and Demand

- For Community and Event Facilities Activities, infrastructure required to provide for growth is forecast through:
 - Population projections – Hamilton is a growing city and population projections indicate this growth will continue.
 - Geographic demand and the long-term settlement pattern for the city.
 - Demographics – an increasingly diverse population means our facilities need to cater for a wider range of activities and users.
 - Changing recreational trends – changes in leisure trends influence the services and facilities we provide, e.g. libraries are used increasingly as community hubs and library spaces need to be flexible to accommodate this.
 - Social and economic factors – social and economic factors influence recreation and leisure participation choices.
 - Climate change – the weather effects of climate change impact on demand for our facilities (indoor vs outdoor facilities) and pose risks for our assets.
 - Seasonal and peak demand – some of our facilities experience increased demand at different times of the year, e.g. aquatic facilities experience peak demand during summer, and in winter there is added pressure on lane space at the indoor facilities.
 - Changes in technology.
 - Visitor expectations – particularly for our activities operating in a competitive environment.
 - Strategies, policies and plans.
 - Targeted supply and demand studies.
 - Engagement with government departments, neighbouring councils, and other agencies on future infrastructure requirements.

Renewals

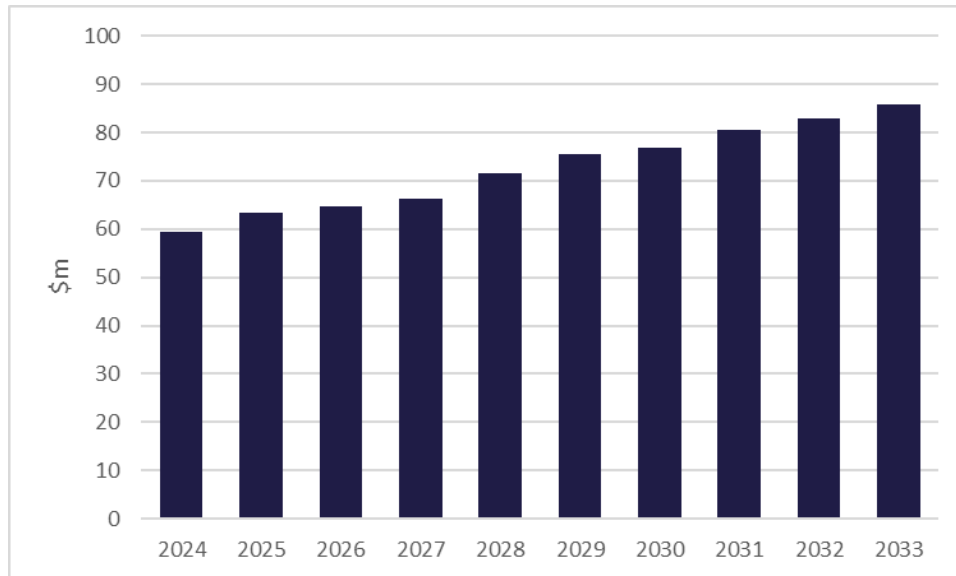
- The renewal budgets for Years 1-3 are based on a medium risk profile. Years 4-10 carry a higher risk profile. There is some in-built resilience to help deal with unexpected shocks and to reprioritise works appropriately.

Operating Expenditure

The forecasted operating expenditure from the year ending 30 June 2024 to 2034 has been included in the 2024-34 Long Term Plan. Estimated expenditure beyond 2034 is based on the Year 10 forecast and adjusted for anticipated future growth of the city.

Operating expenditure includes indirect costs to provide the service to the community such as depreciation, interest costs and overheads. Forecasted operating expenditure is shown as gross costs.

Community and Event Facilities – forecasted yearly operational expenditure 2024-34 Long Term Plan



Community and Event Facilities – forecasted operational expenditure – five yearly periods 2024-53

