

Auckland Council's 30-year Infrastructure Strategy

Summary Document

July 2024

This document summarises the 2024 Infrastructure Strategy, which is published as part of the Long-term Plan 2024-2034. The Strategy has been prepared by, and is owned by, the Infrastructure Strategy team.

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1. Introduction to the Infrastructure Strategy

The Infrastructure Strategy provides the long-term (30+ year) view of Auckland Council's role in managing (along with others) the complex infrastructure system that supports the Auckland region. Auckland Council plans to invest \$295 billion in infrastructure over the 30-year horizon and infrastructure investment makes up 86 per cent of Auckland Council's total budget to 2034.





30+ year view of the significant issues impacting our infrastructure and principal options for managing those issues.

Creates transparency about our assets, what condition they are in, and what we plan to spend.

Supports robust decision-making in relation to our infrastructure.

Identifies significant decisions that Auckland Council will face in directing its infrastructure investment, which helps manage risk and improves long-term planning.

It is a legislative requirement.

The Infrastructure Strategy sets out:

- our plan to improve infrastructure system planning
- significant issues that will affect the infrastructure system in the coming decades
- the quantum of investment required for infrastructure to support growth, renewals and levels of service.

The Infrastructure Strategy is not required to provide a list of projects that will be funded over a 10 or a 30-year period. That is the role of the <u>Long-term Plan</u>, which sets out planned and forecast investment for the coming 10 years.

1.1 Benefits of an Infrastructure Strategy

Auckland Council is required by legislation to prepare and adopt a 30-year Infrastructure Strategy every three years, as part of its Long-term Plan. The 30-year infrastructure strategy provides many benefits, for both Auckland Council and the Auckland region.

By taking a 30+ year view, and identifying the significant issues for infrastructure, we can enable robust and transparent infrastructure decision-making for the future.

Auckland's infrastructure system operates within a hugely complex built and natural environment and serves a broad network of individuals, businesses, organisations, iwi and

communities. This context is constantly evolving, and our infrastructure system needs to evolve with it. Our strategy for infrastructure needs to account for significant uncertainty in the path ahead.

Strong population growth in Tāmaki Makaurau is likely to continue over the next 30 years and we need to make significant investment in existing and new infrastructure to support our daily activities and keep our region functioning well.

Most of the infrastructure that will support Tāmaki Makaurau over the longer term already exists. Infrastructure is costly, and the Auckland Council's financial capacity to deliver, maintain and operate infrastructure is limited. Auckland Council must balance its investment in new assets with maintenance and renewal of existing assets. Much of our infrastructure has been in place for a long time so it's important to ensure assets remain fit-for-purpose for changing communities and environments.

The Infrastructure Strategy brings these challenges together for all Auckland Council infrastructure.

1.2 Auckland Council's role in the infrastructure system

Auckland Council serves New Zealand's largest urban centre and the surrounding suburban and rural communities of Tāmaki Makaurau. Auckland Council is also responsible for protecting Auckland's unique natural environment.

Infrastructure is managed by Auckland Council group across seven portfolios: Transport, Three Waters, Community, Waste, Cultural and economic infrastructure, Urban regeneration and non-service infrastructure, and closed landfills.

Auckland Council seeks to ensure that public infrastructure in Auckland, both existing and future, delivers on public good principles, supports the four well beings (social, economic, cultural and environmental) and works towards the outcomes set in the Auckland Plan.

There are multiple roles for Auckland Council in the provision and management of infrastructure and related services, which include:

- coordinating land-use and infrastructure planning, including delivery and funding of infrastructure
- managing and operating infrastructure, including maintenance and the provision of services
- regulation of infrastructure and it's impacts, through designating, consenting, monitoring, and policy for infrastructure.

\$69 billion

The value of our infrastructure assets

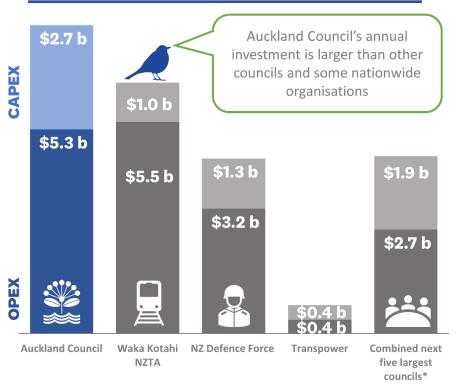
The scale of investment

\$295 billion over 30 years

Average of \$9.83 billion per annum over 30 years

Auckland Council is one of the largest infrastructure managers in New Zealand. While Auckland Council has a very significant role in infrastructure provision for Tāmaki Makaurau, other infrastructure providers, such as central government (e.g. for state highways) and the private sector (e.g. for energy, telecommunications), play a big part.

Actual expenditure 2022/2023



^{*} The five councils included are Christchurch City Council, Wellington City Council, Hamilton City Council, Tauranga City Council, and Dunedin City Council. This total does not include expenditure by associated regional councils.

Feedback loop

1.3 The Infrastructure Strategy Summary: Issues, Building Blocks, Planned Investment, and Actions



2. The strategy outlines four action areas to increase the robustness of infrastructure decision-making

Although funding is constrained and significant challenges exist, the Auckland Council's forecast investment in infrastructure in the coming decades is large. Auckland Council is responsible for a wide array of outcomes and our communities have high expectations of delivery. If we can continue to optimise our investment in infrastructure, we can achieve better outcomes, reduce cost, and provide the necessary infrastructure services for the communities we serve.

Auckland Council needs robust asset management and well-informed decision-making to face up to the significant issues that our infrastructure system will be responding to over the long term. The following long-term issues for infrastructure were endorsed by the Planning, Environment and Parks Committee in March 2023:



These issues are outlined in further detail in section 3 of this summary. We need to respond to these issues and achieve better infrastructure outcomes through continuous improvement to our asset management and transformation of our current systems. We will do this through the following headline actions:

Building a vision for infrastructure, in partnership with mana whenua, as this is a current gap in our group direction. This will provide clearer direction. Improve strategic asset management Actions to improve our asset management plans and data so they consistently look over the horizon and are linked to risk and levels of service. This will better inform budget setting. Deliver advanced infrastructure investment prioritisation Further develop, embed and leverage our investment prioritisation processes as part of decision making. This will improve our strategic alignment, transparency of decision-making and return on investment.

Some of the issues we are facing require fundamental changes to our financial and asset planning methods. We need to develop best-practice use of evidence and policy to support this transformation.

More detail about the asset management actions and how they will be implemented can be found in Section 3A of the Infrastructure Strategy.

2.1 Tools to get the basics right

Our work since the 2021 Infrastructure Strategy on the four action areas above has created tools, or enhanced existing tools, that Auckland Council is using to get the basics right. You can read more about these tools in <u>Section 3A of the Infrastructure Strategy</u> (from page 44).

A focus on growing asset management maturity

Improving Auckland Council group's asset management practices will help to ensure we are getting the best return on our infrastructure investments. The maturity and strategic alignment of infrastructure planning varies across the Auckland Council group. Generally, the infrastructure portfolios that manage the largest asset bases and greatest levels or risk, are more mature in their asset management practices.

Figure 1: Indicative asset management maturity of Auckland Council infrastructure providers using the Treasury's Asset Management Maturity Framework



All of Auckland Council's infrastructure portfolios are building maturity in their asset management systems by focusing on the condition of their assets, the quality of their data and understanding need over 30 years (plus).

The investment hierarchy and a focus on operational expenditure

When Auckland Council decides to build new infrastructure, we incur additional ongoing operating, maintenance, and renewal costs. When choosing whether and how to invest in new infrastructure, it is important to consider the full range of alternatives. Preference should be given to options with lower long-term costs according to the investment hierarchy (below).

Figure 2: Infrastructure Investment Hierarchy (Tāmaki – Whenua Taurikura, Auckland Future Development Strategy 2023-2053, adapted from Rautaki Hanganga o Aotearoa 2022 – 2052 New Zealand Infrastructure Strategy)

Lower Cost	\$	Integrated planning	Coordinating investment and planning to enable growth, encouraging efficient and cost-effective infrastructure solutions, investment, and delivery.
ost	\$\$	Demand management	The adoption of a variety of tools such as pricing and the provision of information to encourage more efficient use of transport and other forms of infrastructure.
Higher	\$\$\$	Best use of existing system	Improving the performance of Auckland's infrastructure (including when we look after our existing assets) can help provide a better service.
her Cost	\$\$\$\$	New infrastructure	Careful investment in new infrastructure that provides the greatest return (including investments that increase resilience and serve multiple functions).

Money spent on operating expenses and renewals needs to be scrutinised as carefully as money spent on new infrastructure. We expect that operating expenses will continue to make up roughly half of infrastructure investment and should grow over the 30+ year horizon. This will occur as Auckland Council services new growth by using existing assets more intensively and deprioritises investment in new assets according to the investment hierarchy.

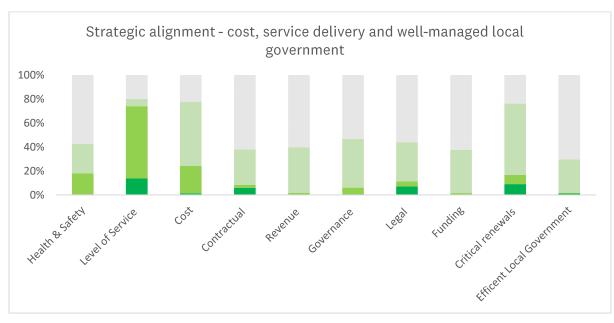
Better Investment prioritisation

Auckland Council has developed an Investment Impact Assessment tool to test whole-of-group investment against 18 criteria based on council priorities, strategic direction, and key risk areas.

The Investment Impact Assessment was established in 2021 for capital prioritisation and is now used every year to inform investment trade-offs. For the 2024 Long-term Plan, both capital and operational expenditure was assessed. While operational expenditure was included for the first time in 2024, this is not included in the figures below due to an insufficient level of granularity in this first year of assessment.

The Investment Impact Assessment evaluates investments across four categories of criteria:

- Service delivery criteria, which assess the extent investments are driven by health and safety, legal and contractual, maintaining levels of service, and critical asset maintenance and renewals.
- Financial criteria, which assess whether investments support revenue generation, funding arrangements, and cost escalation.
- Well-managed local government, which assess whether investments support governance and efficiency requirements.
- Strategic alignment criteria, which assess whether investments support Auckland Council strategic commitments and/or targets: including environment, climate mitigation and adaptation, Te Mauri o Te Wai, Māori outcomes, equity, community wellbeing, and growth.





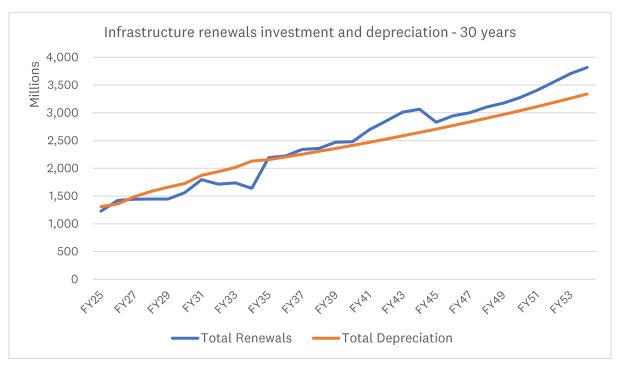
The charts above show how Auckland Council group capital investment for the 10-year Budget scores against all 18 criteria. If an investment scores a 5 (dark green in the charts above), this means the investment is strongly aligned to that criterion. Conversely, if an investment scores a 1 or 2 (light grey in the charts above), this means the investment does not align or has low alignment with that criterion. Each column in the charts above shows the percentage breakdown of how investments score against a criterion from 1 to 5.

The relatively low percentages of investments achieving scores of 4 and 5 show that there is room for improvement in how we invest according to our strategic priorities. Refer to "<u>Staff Advice to Support the Mayoral Proposal</u>" for more information on the Investment Impact Assessment criteria and score definitions.

Sustainable asset renewals

Through wear and tear, the value of most infrastructure assets decreases over time. This reduction in value is recorded as a depreciation expense, which continues year on year until the asset has reached the end of its useful life and needs replacing. The replacement of old and worn-out assets is known as renewals. The Infrastructure Commission suggests that 60% of capital infrastructure investment needs to go to renewing existing assets, not building more.

Over the 10-year Budget Auckland Council plans to invest more than \$15.4 billion renewing infrastructure assets. Over the same period, council assets will depreciate by around \$16.7 billion (including City Rail Link).



Feedback received from the public consultation on the Long-term Plan confirmed that looking after our infrastructure systems is a priority for our community.

The forecast for renewals investment over 30 years shows that Auckland Council is increasing its focus on renewals and is working towards sustainable renewals investment. Analysis of the 2024 Long-term Plan shows that all critical renewals are included in the budget.

Management of risk

The seven infrastructure issues described in this strategy, alongside other issues, represent significant risks and uncertainty for Auckland Council's infrastructure portfolios. As such, good risk management is critical for how we manage our infrastructure.

Auckland Council has an established approach to risk management which includes:

- an enterprise risk management framework
- an integrated and strategic approach to risk transfer (insurance)
- clear oversight of risk.

Quality risk information supports good decision-making and enables Auckland Council to take advantage of opportunities and innovation to deliver necessary change in our infrastructure systems.

Risk management is also built into the way that we manage our assets, particularly with our focus on critical parts of our infrastructure system where failure poses significant risk.

2.2 Other progress since our last strategy

Some of the other key achievements since the 2021 strategy include:

- Completion of the Strategic Investment Framework in 2022, which sets expectations for how infrastructure investment will align with council strategy.
- Group-wide annual review of asset management planning was established in 2022.
- Progress has been made on Auckland Council's understanding of infrastructure resilience, critical assets and dynamic adaptive pathway planning (DAPP).
- Clearer direction has been provided to infrastructure providers through the <u>Water Strategy</u> and the <u>Future Development Strategy</u>, including work on the characteristics of infrastructure needed for the future, and the relative costs of infrastructure in relation to distance from the city centre.



3. The issues the infrastructure system needs to navigate

We have scanned the long-term infrastructure environment to understand the key issues for infrastructure now and into the future. We have identified seven significant issues that our infrastructure system needs to respond to in the long term. These issues were endorsed by the Planning, Environment and Parks Committee in March 2023.

The table below sets out the significant issues, what they mean for infrastructure and our actions to address them. More detail, including Auckland Council commitments, current response, and issue challenges, can be found in <u>Section 2 of the Infrastructure Strategy</u> (from page 24). The actions to respond to the issues are set out in greater detail in <u>Section 3B</u> (from page 56).

We need to consider our investment and management of infrastructure through the lens of these issues and ensure we prioritise those investments that will meet the challenges posed. The significant issues for infrastructure change over time as our response to issues mature, and other issues become more critical.

Some of the issues we invest against (for example health and safety) are already mature, and system change has already occurred.



Emissions reduction

Throughout its lifecycle, infrastructure is a significant contributor to greenhouse gas (GHG) emissions in Tāmaki Makaurau. Infrastructure has an important role to play in the transition to net-zero emissions by 2050, particularly when we consider the whole-of-life GHG emissions of infrastructure assets.

Actions:

- Standardise and implement emissions accounting to measure lifecycle emissions across Auckland Council group.
- Ensure asset management plans demonstrate how planned investment avoids and reduces whole-of-life greenhouse gas emissions.



Resilience

Infrastructure needs to be future-proofed and resilient, so it can continue to serve people as we face changing climate conditions and an increase in natural hazards. Actions to prepare for climate change and natural hazards are vital to the asset management cycle of infrastructure.

Actions:

 Identify those areas where natural hazards make it necessary to change the assumptions used for infrastructure planning. Input into changes to financial

- systems to accommodate options to communicate uncertainty associated with triggers and options.
- Respond to emergency management legislation in a coordinated and consistent manner across Auckland Council group.



Growth

The projected population growth for Tāmaki Makaurau is significant. Supporting growth requires us to work together and ensure we have a clear understanding of where and when investment in planning and infrastructure should be made.

Actions:

- Coordinate infrastructure investment and planning in the spatial priority areas to drive regenerative, climate-positive, and innovative solutions.
- Develop consistent practices across the Auckland Council group for infrastructure providers' contribution to, and use of, land-use modelling.



Funding

There continues to be a gap between the funding available through existing mechanisms, and funding required to deal with the issues facing our infrastructure. It is essential that the council makes decisions for current and future communities to ensure efficient infrastructure investment that maximises every infrastructure dollar spent.

Actions:

- Use the investment hierarchy as a basis for prioritising infrastructure funding.
- Advocate to central government for a wider range of funding tools.



Equity

Infrastructure plays a central role in community wellbeing and investment provides an opportunity to address inequity and reduce the disparity of outcomes currently experienced by some communities.

For Tāmaki Makaurau to be a place where people continue to want to live and work, all Aucklanders must have the opportunity to succeed and to share prosperity.

Actions:

- Further develop the Auckland Council group definition of equity, including identifying infrastructure characteristics and types of infrastructure investment.
- Embed consideration of equity in infrastructure prioritisation processes, programmes and projects through the development of a decision-support tool.



Te Ao Māori

There is no clear vision for infrastructure that is built from a foundation of mātauranga Māori (Māori knowledge), and Auckland Council does not have a clear understanding of what Māori infrastructure is. A desired state of infrastructure systems, including manaenhancing and mauri-enhancing, should be developed so that infrastructure can contribute to Māori aspirations.

Actions:

- Develop an Auckland Council group definition of 'Te Ao Māori infrastructure'.
- Partner with Māori in direction-setting for Auckland Council's infrastructure by developing a vision for infrastructure that is based on mātauranga.



Environmental degradation

Construction and operation of infrastructure puts pressure on the environment. It is our responsibility to ensure that we reduce negative impacts.

Infrastructure investment can contribute to enhancing the environment and regenerating environmental systems to ensure that the natural environment is preserved, protected and cared for, both for its intrinsic value and to sustain life for future generations.

Actions:

- Develop a consistent approach to assessing and incorporating environmental impacts within Auckland Council group infrastructure decision-making.
- Embed the consideration of green infrastructure within the options analysis in council group business case processes, including making checks against green bond and loan eligibility criteria.

4. The significant decisions on the horizon

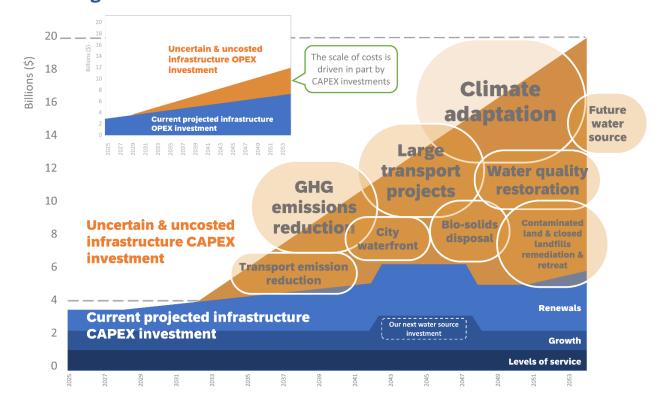
<u>Section 5 of the Infrastructure Strategy</u> (from page 157) sets out the significant infrastructure investment decisions that Auckland Council foresees in the next 30 years. These decisions are required to address long term challenges and span the 30 years of this Infrastructure Strategy and beyond. Identifying these decisions now allows us to plan for investment responses that are timely and that can realise the most benefits for Aucklanders within funding constraints.

There is a large degree of uncertainty around these future significant decisions, the costs and the circumstances to which they relate. The decisions described in the Infrastructure Strategy and summarised below, represent Auckland Council's current understanding of the options available and corresponding implications. As we come closer to the decision points, and get a better understanding of the solutions, these decisions will become clearer.

Approximate costs are indicated for each of the decisions identified. These costs are presented <u>in addition to</u> Auckland Council's most likely investment scenario (which represents Council's projected infrastructure investment) to illustrate the potential scale of these investments when all considered together.

These significant decisions could require an 'order-of-magnitude' change to Auckland Council's capital spend. However, the costs identified have a large degree of uncertainty in relation to the likely investment demand, the scale of associated costs, and who will bear those costs. Other parties, such as central government, may be involved in meeting these additional costs. Many of the decisions identified will also be addressed through a combination of approaches (not simply capital investment) including regulatory or demand management options.

4.1 The significant infrastructure investment decisions



Adaptation to climate change

How will Auckland Council plan, fund and respond to the impacts of climate change, including flood risk to infrastructure, communities, and the natural environment?

Timeline	1-30+	Cost	> \$50	Decision	Within the next 1-2 years
imicuite	years	Cost	billion	point	and ongoing

Greenhouse gas emissions reduction

How quickly will Auckland Council meet its Greenhouse Gas (GHG) emissions reduction goals?

Timeline	1– 30+ years	Cost	> \$50 billion	Decision point	Within the next 1-2 years and ongoing
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Reducing vehicle kilometres travelled

To what degree will Auckland Council invest to reduce vehicle kilometres travelled?

Timeline	Over the next 20 years	Cost	\$10-25 billion	Decision point	Within the next 10 years
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Seismic strengthening

How will Auckland Council respond to seismic strengthening requirements across its property portfolio?

Timeline	Before 2050	Cost	< \$1 billion	Decision point	Within the next 2 to 5 years
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Major transport projects

To what degree will Auckland Council invest both directly and indirectly in major transport projects alongside central government?

Over the next 10 s 30 year	co Cost	> \$50 billion	Decision point	Within the next 2 to 30 years
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Waterfront

How will Auckland Council coordinate, plan, manage and fund several discrete waterfront actions in a cohesive manner?

Over the next 10 to

next 10 to 20 years Cost > \$50 billion

Decision point

Within the next 5 years

Closed landfills and contaminated land

How will Auckland Council manage closed landfills and general contaminated land from degradation and potential contamination spread?

Timeline

Over the next 30 years

Cost \$1-5 billion

Decision point

Within the next 2 to 5 years

Te Mauri o te Wai / Te Mana o te Wai

How will Auckland Council deliver Te Mauri o te Wai (the life-sustaining capacity of water) / Te Mana o te Wai (the vital importance of water)?

Timeline

Over the next 10 to 15 years

Cost \$1-5 billion

Decision point

Within the next 2 to 10 years

Bio-solids management

How will Auckland Council manage future bio-solids when the central interceptor comes online and when Puketutu Island reaches capacity?

Timeline

Over the next 10 to 15 years

Cost

< \$1 billion

Decision point

Within the next 2 years

Auckland's future water source

How will Auckland Council source drinking water when demand exceeds the approved Waikato water take?

Timeline

20 to 30 years

Cost

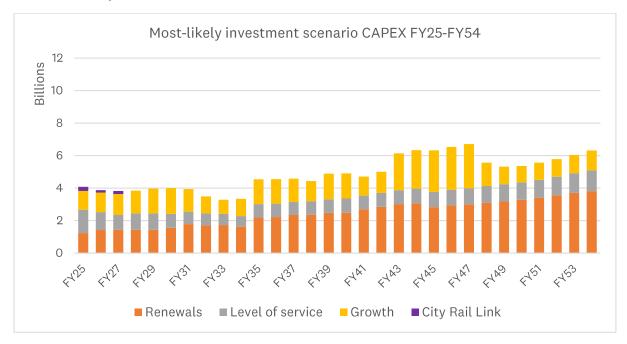
\$5-10 billion Decision point

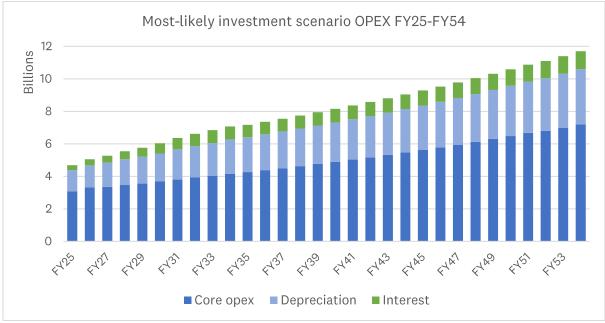
Within the next 2 years

5. The long-term outlook for infrastructure

This section outlines planned investment over 10 years and most-likely investment over years 11 to 30 for each of council's infrastructure portfolios (transport, three Waters, community, waste, cultural and economic infrastructure, urban regeneration and non-service infrastructure, and closed landfills).

The most likely scenario for capital and operational expenditure across Auckland Council's infrastructure portfolios is summarised in the charts below.





Operating expenditure represents a significant proportion of our total infrastructure investment over the forecast period. Over the 10-years of the Long-term Plan, the planned investment required to operate our infrastructure assets increases from 42 per cent to 55 per cent of Auckland Council group's total investment.

Confidence in investment forecasts is higher in the short-term where many projects have detailed costings and have been awarded contracts. There is significantly less certainty of project costs in the medium to long terms, and as such, costs are typically an 'order-of-magnitude' estimate.

The following assumptions have been made for the most likely scenario:

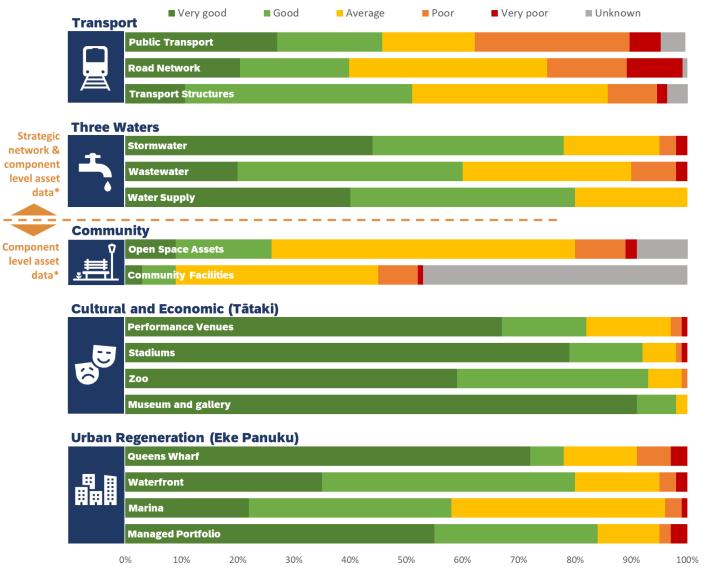
- **Growth** we assume growing demand for infrastructure services, including projected population growth, priority locations for growth and funding for growth.
- **Levels of service** we are planning for the long-term maintenance of most levels of service but issues such as climate change will present a considerable challenge.
- **Asset life** we make assumptions about the useful life of relevant asset classes for renewals and maintenance planning.

5.1 Portfolio overviews

The most likely scenario for capital and operational investment broken down by infrastructure portfolio is summarised below showing billions of dollars invested.

			10-year capex (\$b)	10-year core opex (\$b)	30-year capex (\$b)	30-year core opex (\$b)
	Transport	Roads and footpaths	8.3	3.0	53.7	70.8
A		Public transport	6.3	14.2		
		Wastewater	8.1	2.9	28.1	10.8
-	Three Waters	Water supply	5.7	1.2	25.5	4.3
		Stormwater	3.0	1.3	9.9	6.2
	Community	(including coastal)	4.4	8.3	22.1	33.2
	Waste		0.2	2.4	0.7	11.9
B	Cultural and economic infrastructure (Tātaki Auckland Unlimited)		0.6	2.1	2.4	7.9
	Urban regei	neration (Eke Panuku)	0.9	0.9	2.5	3.2
	Closed landfills		0.1	0.1	0.2	0.3
	Infrastruct	ure Strategy total	37.6	36.4	145	148.7
	Other coun	ncil services (non- ure)	1.1	11		
	Financial S	strategy total	38.7	47.4		

The condition of our infrastructure assets



^{*} Strategic network and component level asset data is a more mature level of asset management data and planning.

Renewals programmes for key infrastructure portfolios have been planned to manage the condition of Council assets and are described in more detail in the Section 4 of the Infrastructure Strategy, which includes information about asset condition for the full list of portfolios.

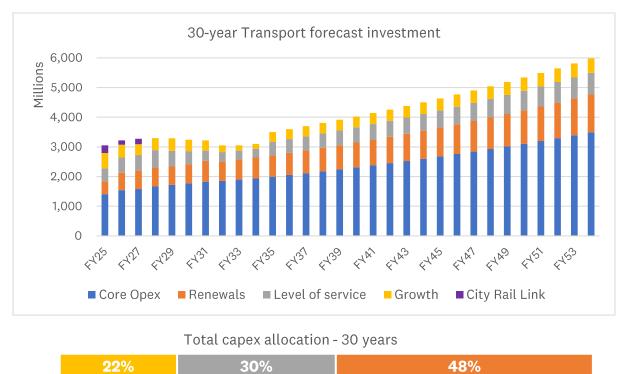
The following sub-sections provide a brief overview of the 30-year outlook for Auckland Council group's infrastructure portfolios. A more detailed overview of each portfolio can be found in Section 4 of the Infrastructure Strategy (from page 81). The asset values included in the portfolio overviews below provide the depreciated value of assets and does not include land (other than community open space land).

Transport		Asset value \$27 billion
	Road pavement, streets and structures	\$22.71 billion
	Parking and other	\$2.60 billion
	Public transport	\$1.76 billion
	Other	\$0.12 billion

In Tāmaki Makaurau, land transport infrastructure and services are predominantly planned, funded and delivered by Auckland Transport, New Zealand Transport Agency (NZTA / Waka Kotahi) and KiwiRail. Auckland Council and the NZTA administered National Land Transport Fund (NLTF) are the primary providers of funding.

Auckland Transport must deliver its programmes in line with the direction set by Auckland Council and central government (via the Government Policy Statement on land transport). Central government and Auckland Council priorities for transport include safety, resilience, maintenance, economic growth, mode shift and emissions reduction. Work is underway on an Auckland Integrated Transport Plan, which will look beyond the scope of the Long-Term Plan.

Congestion is a major challenge across the transport network, and this is expected to decrease slightly as new initiatives to manage demand come into effect from 2026. Forecast population growth will generally need to be managed with a primary focus on mode shift to public transport and active modes in preference to an expansion of the road network.



The most likely scenario for transport sets out a \$14.6 billion capital expenditure over 10 years and \$53.7 billion over 30 years. Renewals are expected to increase to approximately 60% of the Auckland Transport capital budget over the first 10 years of the forecast period, before reducing to approximately 40% in subsequent decades.

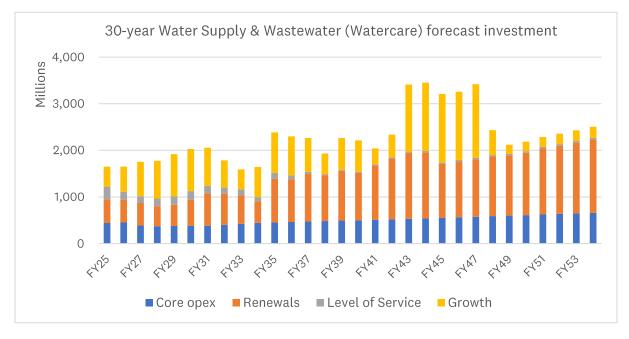
Three Water	Asset value \$22.2 billion	
	Water Supply (Water pipes, Dams, Water treatment plants, and Reservoirs)	\$6.6 billion (2023 valuation)
-	Waste Water (Wastewater pipes, Pump stations and Wastewater treatment plants)	\$9.0 billion (2023 valuation)
	Stormwater (Stormwater pipes, Channels, Pump stations and Stormwater treatment facilities)	\$6.6 billion (2022 valuation)

The period since the adoption of the 2021 LTP has been dominated by water services reforms. As part of the government's water infrastructure policy 'Local Water Done Well' the government and council have agreed a new model for Auckland, with Watercare to have financial separation from the council.

Our drinking water and wastewater services are largely provided through Auckland Council's delivery agency Watercare. Watercare is funded through its own charges (growth and volumetric charges), which are set by the Watercare board. Watercare owns, operates and maintains all assets associated with these services.

Council's stormwater infrastructure is managed largely by Healthy Waters. Auckland Transport is responsible for stormwater infrastructure within local road corridors.

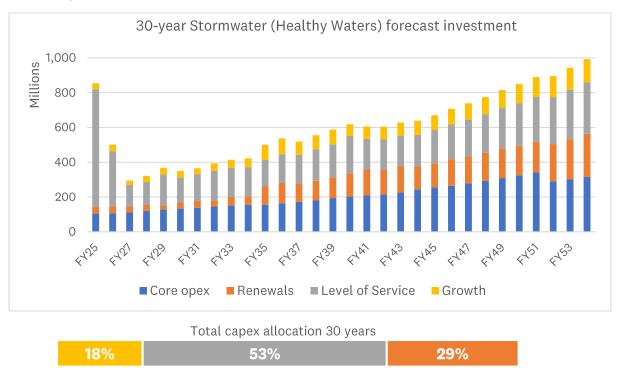
In 2022 Auckland Council adopted *Te Rautaki Wai ki Tāmaki Makaurau; The Auckland Water Strategy*. The Strategy provides eight strategic shifts required by Auckland Council to better realise Te Mauri o Te Wai (the life-sustaining capacity of water) including targets and reporting requirements for Auckland Council group to guide decision-making.



Total capex allocation 30 years

The most likely investment scenario for water supply and wastewater shows that:

- Operations at Watercare accounts for a significant portion of the total budget for each year in the early years and increases over time. Key drivers of this budget are depreciation and interest costs.
- Growth also has a significant impact on Watercare's budget. The growth investment is based upon the Council's growth projections. The majority of investment in growth is in large transmission pipelines and treatment plants.
- Asset renewals constitute 41% of capital investment in the first 10 years and 62% of capital investment in years 11-30. As part of an increasing focus on renewals, the Watercare board has established an SOI measure to identify the proportion of proactive vs reactive renewals.
- The Mangere wastewater treatment plant will be upgraded in FY34-37 to meet increased consent conditions and in FY42-44 there is a significant investment signalled to protect the entire treatment plant from sea level rise.



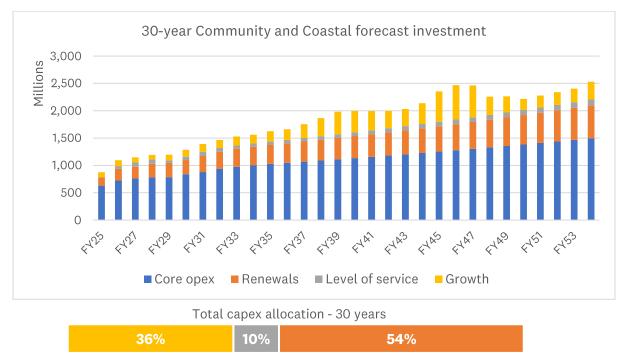
The most likely scenario for Healthy Waters shows that:

- Operations are a significant expense with depreciation as a key driver.
- Levels of service investments to address flooding and water quality issues are a significant driver of capital expenditure.
- There is a proportionally larger level of service component within the first decade compared to later decades for Healthy Waters, related to the Making Space for Water programme.

Community		Asset value \$14.7billion
	Open Space (Land)	\$10.8 billion
	Community Facilities	\$1.8 billion
	Open Space Assets	\$1.6 billion

Community assets contribute to the functionality of the urban environment and enable the delivery of regional and local customer-facing community services. The community portfolio also includes coastal assets which are associated with open spaces and other community facilities.

The council owns and operates a large and complex portfolio of community assets. As the portfolio of assets has grown over time to deliver services for Auckland's growing population, so too has the level of investment needed to support the portfolio. At the same time, many assets are ageing and require increasing investment to keep them in a satisfactory condition. The community portfolio budget pressures are compounded by due weather events and climate change impacts. At current funding levels it is not sustainable to maintain the extensive community portfolio.



Auckland Council is therefore seeking to transition away from the traditional way of delivering community services towards a more affordable, sustainable, and resilient investment practice focused on looking after priority assets, overall reduction of the existing portfolio, and making use of alternative service delivery models such as partnerships, grants and digital channels. Over time, the planned transition model will see ageing council-owned community assets that are not fit-for-purpose divested and critical asset renewal prioritised. Increased local decision-making alongside a proposed refined funding model for local boards will mean there will be a shift to more local asset management responsibility and planning tailored to local boards, and different community requirements.

Waste		Asset value \$115 million
	Kerbside wheelie-bins	\$22.4 million
2	Resource Recovery Network (includes recycling centres, and transfer stations)	\$41.1 million
	Onehunga Materials Recovery Facility (transfers to council ownership 1 July 2024)	\$49.1 million

Waste Solutions is the council team responsible for managing the Waste Portfolio including delivering council waste services and developing and implementing the strategic direction as set out in the Auckland Waste Management and Minimisation Plan.

Most of the waste in Tāmaki Makaurau (approximately 80 per cent) comes from commercial activity and is managed by private sector services and facilities. Auckland Council seeks to be a leader in relation to the 20 per cent of waste it is directly responsible for (largely generated by households).



19% 53% 28%

Total capex allocation - 30 years

The most likely scenario for investment in Waste Solutions over 30 years shows that operating expenditure is the bulk of investment from years 1-30, reflecting the significant waste and recycling collection services that are funded by Auckland Council.

Investment in the resource recovery network, Materials Recovery Facility, and food scraps programme is anticipated to support greater customer usage and improve waste diversion from landfill. Uncertainties in long-term waste targets have implications for achievement of the zero waste 2040 aspirational goal and the cost to Tāmaki Makaurau to manage its waste.

Cultural and Economic		Asset value \$1.45 billion
E	Theatre & Performance venues	\$628 million
	Museum and Gallery	\$244 million
	Stadiums	\$226 million
	Zoo	\$202 million
	Other assets	\$151 million

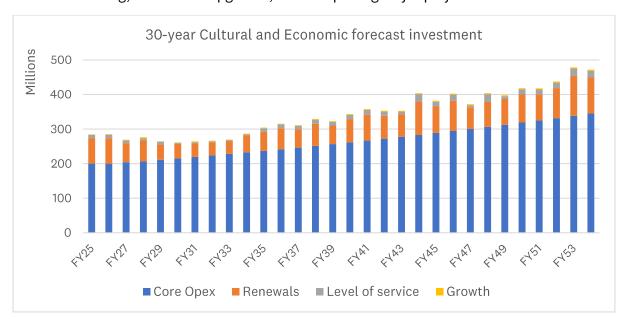
Cultural and economic assets are managed by Tātaki Auckland Unlimited (Tātaki) to support a co-ordinated, region-wide programme to deliver cultural, social and economic benefits for Tāmaki Makaurau.

Tātaki manages a portfolio of assets they inherited from the 2020 amalgamation of Regional Facilities Auckland and Auckland Tourism, Events and Economic Development. These assets include some of the most regionally significant arts, cultural and sporting facilities in Tāmaki Makaurau. Services are provided through these facilities and through partnerships with the arts and cultural sectors.

While Tātaki is looking at the potential to consolidate its stadium network, there is limited scope to adapt some of these assets in response to changing demand, especially where heritage protections are assigned.

Attendance at Tātaki programmes is assumed to continue to grow in the long term. Tātaki funding is assumed to shift to include greater funding from non-rates sources.

The proposed investment for the most likely scenario represents the level of funding required to maintain the cultural and economic portfolio. This includes addressing legacy renewals backlog, critical ICT upgrades, and completing major projects.



Total capex allocation - 30 years

3% 14% 83%

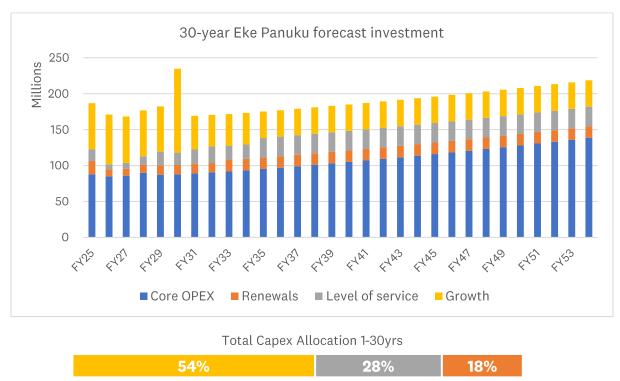
Urban Regeneration & Non-Service Infrastructure		Asset value \$2.6 billion
m m	Non-service portfolio (includes, commercial, future use, and transport)	\$1.1 billion
	Waterfront	\$842 million
	Town Centre	\$422 million
	Regional	\$140 million

Eke Panuku is Auckland Council's regeneration agency and has two core functions:

- lead urban regeneration across Tāmaki Makaurau with a focus on town centres and locations agreed by Auckland Council
- manage council property and assets that are not being used to provide a council service (such as the management and operation of the Westhaven, Viaduct and Silo marinas).

Eke Panuku does not generally own assets, instead it has a focus on managing asset portfolios on behalf of Auckland Council group. These asset values are formally accounted for as part of other Auckland Council portfolios including Community and Auckland Transport.

There are 935 assets in the Eke Panuku portfolio. They are widely diverse in both the nature and in the roles fulfilled by the underlying properties, and they are not acquired for investment purposes or to make a market return.



The most likely investment scenario shows growth will have a significant influence on the Eke Panuku budget over the 30-year outlook.

Closed Landfills

Asset value \$16 million



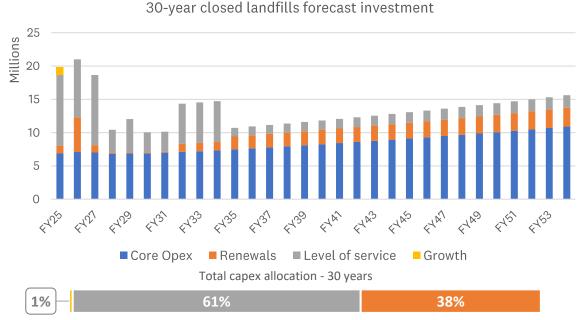
200 closed landfills, many of which are parks or reserves.

Closed landfill infrastructure is used to manage Auckland Council's closed landfill sites, including stability and discharges, to reduce risk and liability to people and the environment.

The closed landfills portfolio adopted an ageing asset base from the predecessors of Auckland Council and assets are being replaced gradually as they reach the end of their useful life. The closed landfills team manages and monitors approximately 200 sites which have been managed to varying standards under historical private and public ownership.

Management of each site aligns with legislation and reflects the potential level of hazard. Significantly, there are an estimated 80 landfills which are vulnerable to sea level rise and erosion. Investigation has started on these sites but the risks that these sites pose will require further consideration and response in the coming years.

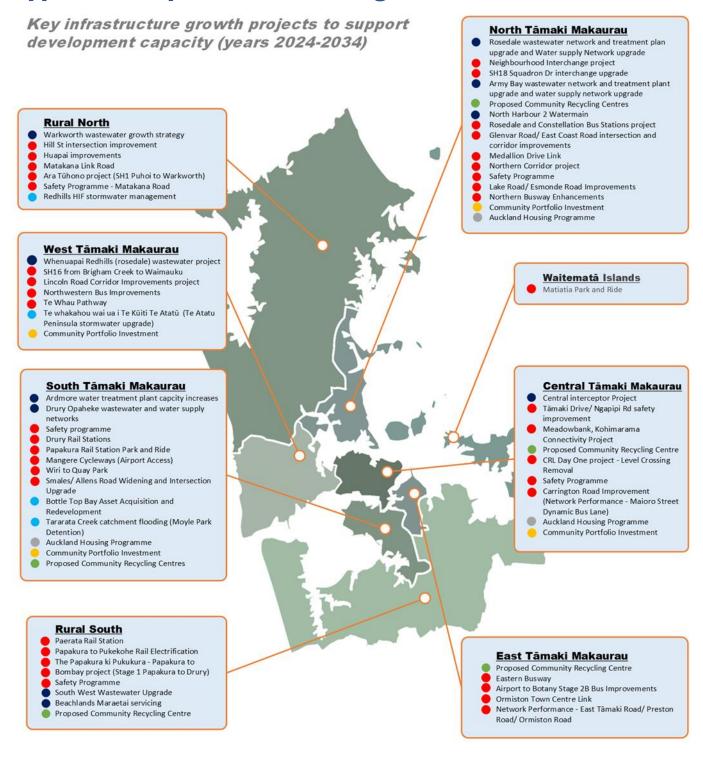
An improved asset management system is currently under development which will include better data management and will support better forward-planning and decision-making for issues such as remaining asset life, condition, performance and deferred maintenance.



The bulk of investment over the next 30 years will be operating expenditure. There will be an increasing proportion of investment in renewals from 2035. This reflects the primary focus of closed landfills in operating and maintaining existing assets and managing the deterioration of these assets.

Closed landfills is planning an extensive programme of level of service investments in the first 10 years. These relate to remedial works and upgrade projects that have been brought forward from later years. This reflects the need to investigate and develop strategies for coastal closed landfills, which is an emerging climate change related risk for council.

Appendix A: Capital investment for growth



Proposed Community Recycling Centre
East Tämaki
Silverdale
Mt Roskill/ Blockhouse Bay
Albany/ Rosedale
Mängere
Paptoetoe
Whitford/ Clevedon
Drury
South Resource Recovery Park

Transport Safety Programme
Mt. Albert Road
Ash St and Rata St
Takanini School Rd/ Manurewa Rd
Atkinson Avenue
Waiuku Rd Corridor
Glenfield Road
Onewa Road
Hibiscus Coast Highway

Auckland housing Programme Areas Roskill Development Oranga Development Tämaki Development Mängere Development Hobsonville Point Northcote Development Connected Communities

- New North Road Corridor
- Sandringham Corridor
- Ponsonby Corridor
- Mount Eden Corridor
- Manukau Corridor
- Ellerslie to Pakuranga Corridor