EXTRA-ORDINARY REGION thiving

connected and resilient

Greater Wellington Regional Council's Long Term Plan 2018-28 Ko Te Pae Tawhiti

Greater WELLINGTON REGIONAL COUNCIL TE Pane Matua Taiao

Contents

Overview	
He Whakarāpopototanga	5
Message from	
Greater Wellington Chair	6
Message from	
Ara Tahi Chair	
Our region	
Partnering with mana whenua	
Community Outcomes	
Setting our direction	14
2018-28 strategic priorities	16
Activities of Greater Wellington	
Ngā Mahi a Te Pane Matua Taiao	25
Environment –	
Те Таіао	27
Resource management	31
Land management	
Pest management	
Harbour management	
Biodiversity management	
What we will deliver – Environment key projects and programmes	37
Measuring performance	
Environment Prospective Funding Impact Statements	
Regional parks and forests –	
Ngā papa whenua	49
Our parks activity	52
What we will deliver – Parks key projects and programmes	53
Measuring performance	
Parks Prospective Funding Impact Statements	56
Water supply –	
Ngā puna wai	61
Our water supply activity	
What we will deliver – Water supply key projects and programmes	65
Measuring performance	
Water supply Prospective Funding Impact Statements	70
Flood protection and control works –	
Te tiaki me te arahi waipuke	75
Understanding flood risk	79
Maintaining flood protection and control works	80
Improving flood security	81
What we will deliver – Flood protection key projects and programmes	82
Measuring Performance	83
Flood protection and control works Prospective Funding Impact Statements	

Metlink public transport –	
Ngā Waka Tūmatanui	91
Metlink network planning and operations – an integrated and accessible network	
Rail operations – a high capacity rail system	
Bus and ferry operations – frequent, reliable bus and ferry services	
What we will deliver – Metlink public transport key projects and programmes	
Measuring performance	
Metlink public tranport Prospective Funding Impact Statements	
Regional leadership –	
Ngā kaihautū o te rohe	
Wellington Regional Strategy	
Emergency Management	112
Democratic services	112
Working with mana whenua and Māori	113
Regional transport planning and programmes	
Regional initiatives	115
What we will deliver – Regional leadership key projects and programmes	
Regional leadership Prospective Funding Impact Statements	
Financial Strategy	
Te rautaki ahumoni	125
Introduction to our	
Financial Strategy	124
Purpose and approach	126
Key Factors impacting our Financial Strategy	126
Infrastructure Strategy	
Te rautaki hanganga	145
Introduction to our Infrastructure Strategy	146
Introduction and approach	147
Principles	148
Asset approach	150
Significant infrastructure challenges and issues	
How much needs to be invested	
Assumptions and risks	
Assumptions and risks	
Water supply	101
Public transport	102
Flood protection	109
Protection	170
Parks	
Environmental science	
Harbours	
Appendix 1 - Technical appendices	
Lifecycle management	
Assumptions	
Ngā Whakaaro	201
Non-financial assumptions	
Financial assumptions	216

Council Controlled Organisations and Investments Tā te Kaunihera Rōpū me ngā Mahi Haumi	219
Financial information	
He pūrongo pūtea	247
Statement of significant accounting policies	248
Summary of rates and levies	
Funding Impact Statement	
Long-term plan disclosure statement for period commencing 1 July 2018	292
Audit Report Pūrongo Arotake	299
Your Regional Councillors Ngā kaikaunihera ā Rōhe	303

Why does this document matter?

The purpose of the Long Term Plan is to provide a long term direction for decisions and set out our priorities, programmes and projects for the region over a 10 year period and beyond. Long term plans are reviewed every three years and any changes will be addressed during the annual planning process.

This document contains important information including:

- The strategic context which outlines the outcomes we want for the region - our vision and our priority areas - and the things that are changing in our environment which we need to plan for
- The activities of the Council, i.e. those things we do to that contribute to the outcomes we want for the region
- How we fund each activity
- Council controlled organisations
- The financial and non-financial assumptions that helped guide our planning
- 10 year Financial Strategy
- 30 year Infrastructure Strategy

The following policies of Greater Wellington relevant to the Long Term Plan are contained in a separate volume:

- Revenue and Financing Policy
- Significance and Engagement Policy
- Treasury Risk Management Policy
- Rates Remission and Postponement Policies
- Policy on Development Contributions or Financial Contributions



Overview He Whakarāpopototanga

Message from Greater Wellington Chair

This Long Term Plan 2018-28 focuses on the need to continue making significant investment in our regional infrastructure. The package of projects and programmes we will be delivering over the next 10 years will be transformational for the region and will enable us to deliver on our vision of an extraordinary region which is connected, thriving and resilient.

This Long Term Plan 2018-28 focuses on the need to continue making significant investment in our regional infrastructure. The package of projects and programmes we will be delivering over the next ten years will be transformational for the region and will enable us to deliver on our vision of an extraordinary region which is connected, thriving and resilient.

Taking a leadership role across our region means we are never working alone – strengthening our partnerships is a key focus for Council as we look toward the future. We are working closer than ever before with Central Government and other key agencies as well as enabling our communities to play a larger part in the work, for example the Whaitua Committees dedicated to improving our water quality. Focusing on what really matters to the people who live in our diverse communities is a key consideration for us. Ensuring that we are all connected through an excellent public transport network, having uninterrupted access to drinking water, staying safe from the threat of flooding, protecting and enhancing the environment, improving the quality of our fresh water and planning well ahead for the potential impact of climate change across our region.

Each of these issues, and more, has been examined in detail and the recommendations for improvement in the plan have been closely debated by the community, our officers and at the Council table to deliver a robust plan which will lead our region through the next decade.

We are still adapting to the ongoing impacts from the Kaikoura earthquake in November 2016. These impacts heighten our awareness of what it is that we need to provide for a more resilient region to ensure we have a robust future.

The benefits that will flow from the plan will, of course, come at some cost. We have worked hard to



confine the rise in average residential rates for 2018/19 to 5.9 percent, or \$3.17 per month on average for ratepayers. Over the next decade average rates are set to increase by five percent each year as the momentum of investment continues.

In flood protection, for example, we're committing \$121 million to RiverLink, a package of flood protection, regional transport and urban renewal which will safeguard and catalyse Lower Hutt's economy, rightly focusing growth on its riverside CBD. A further \$62 million will be invested in flood protection improvements in Wairarapa and Kapiti.

Public transport will take its next great leap forward with the full roll out of a new and simplified bus network and fleet. In 2018 we introduced 250 brand new buses on our Metlink public transport network, which will be supplemented by another 90 early in 2019, including high-capacity double-deckers and electric buses. We've also allocated \$33 million to improve the Wairarapa Line and Capital Connection rail fleets over the next decade.

Add to that we've also allocated funding to the Let's Get Wellington Moving programme and it's clear we're investing in a connected region that continues to lead the way in public transport in New Zealand.

We've also learned from the lessons of the recent past that resilience is vital to our quality of life, which is why we are committing significant funding to protecting water supplies. Key investment will go ahead in seismic strengthening of several reservoirs and in bulk water supply to Porirua. Two alternatives are being considered to maintain supply following an earthquake: \$116 million is earmarked for a cross harbour pipeline or sourcing water from aquifers beneath Wellington Harbour which, if viable will be a much more costeffective solution.

This is a comprehensive and ambitious plan driven in large part by what the community has asked of us and I invite you to read it. A clear direction has been set for the next decade. It only remains for me to thank the people of our extraordinary region for their part in its creation.

Crins heil

Chris Laidlaw

Message from Ara Tahi Chair



Me huri whakamuri Ka titiro whakamua

I a tātou e titiro whakamua ana mō tō tātou rohe me ō tātou tāngata, me titiro whakamuri tātou i te tuatahi, ka whakanui i ngā āhuatanga i tutuki ngātahi i a tātou, me te whakamaumahara i a tātou, i taea e tātou te whakarato i ngā tūmahi hao nui nā runga i tā tātou matapae ngātahi.

Ko te Ara tahi te wānanga rangatira o ngā hoa mana whenua e ono me te Kaunihera e arotahi ana ki ngā take rautaki ohu e pā ana ki a tātou katoa. Ka pai kē tō mātou hononga pakari me Te Pane Matua Taiao (Greater Wellington) mō te 25 tau. Mai i te wā i hainatia te whakaaetanga i te tau 1993, te wā i whakaae ai tātou ki ngā wawata tahi mō te takiwā, kua whakaratoa e tātou ngā tūmahi e tū whakahīhī ai tātou.

Kua eke te wā ki te titiro whakamuri - ki te whakatau i ō tātou tutukinga me te whakaaroaro i ō tātou hiahia mō te hononga ohu i ngā tau 25 e tū mai nei. Na te whakahoatanga, ka āhei tātou ki te whakamahere i ngā āhuatanga me whai, ki te waihanga i tētahi ao pūmau, ukauka hoki mō ngā rā ki mua.

Ka whai te Ara Tahi ki te whakapakari i te hononga kua whakahiatohia me te Pane Matua Taiao ki te:

- whakarite kei te kaha whakauru mātou ki roto i ngā korero whakataunga.
- whakarite ka möhiotia, ka hiahiatia hoki te ao Māori, kia āhei ai mātou ki te whai i ngā whāinga pai rawa atu mö te lwi Maori, whiti noa i ngā āhuatanga katoa i tö tātou takiwā – tö tātou taiao, he māramatanga ahurea whai hononga me tetahi öhanga pakari rawa.

Tāpiri atu, kei te haere tonu ngā mahi takitahi a ngā iwi manawhenua, hāngai tonu ki Te Pane Matua Taiao mō ngā tūmahi pērā ki ō tātou papa rēhia ā-takiwā, me te whakaruruhau i ō tātou hapori mai te pātanga o ngā mate whawhati tata noa ka puta. I mahi tahi tātou ki te hanga i tētahi ahunga ngātahi, hōkai tahi hoki, ki te whakahaerenga me te tiakitanga o ngā wai māori, me ngā mea katoa e ora ana i roto i te wai, mā ngā Komiti Whaitua. I te tau 2018, i whakaputaina e te komiti Ruamāhanga Whaitua tōna Mahere hukihuki Whakatinanatanga Whaitua, Te Awa Rua – ō- Porirua. Kei te kaha te haere o te Komiti o Whaitua me tā mātou tūmanako ki te kite i ngā kaunekenga o ētahi atu o ngā Komiti Whaitua i a mātou e ahu whakamua ana.

He mea tino whakahirahira ēnei tutukinga - he ahunga tapua mō tā tātou haerenga ngātahi.

I ngā tekau tau kua hori, i te arotahi kē te nuinga o ō mātou iwi ki ngā whakataunga kerēme o neherā o te Tiriti o Waitangi me te Karauna. I roto i ngā tekau tau e tū mai nei, kāre e kore ka oti tērā hātepe. Iā mātou e haere ana ki roto i te ao o te whakataunga muringa, e hiahia ana mātou kia tino pūmau tō mātou hononga, e mahi tahi ana mō ngā huanga kaupapa ngākau kotahi, e puta ai te ōhanga Māori hei take matua i roto i te ōhanga whānui o te takiwā.

Nā runga i tō mātou noho hei kaitiaki, e hiahia ana mātou ki te whakauru ki roto i ngā whakataunga e pā ana ki ō tātou whenua, ō tātou awa, tō tātou moana, me ō tātou kararehe kūwao. Ahakoa ko ngā pātanga o te āhuarangi panoni, ko te āhua rānei o tā tātou whakamahi i ngā wāhi wātea tūmatanui. He wā whakaongaonga tēnei na runga i ngā whaiwāhitanga hou kua puta nā runga i te hanganga ture me te manako ki te titiro ki ngā huarahi rerekē mō ngā mahi. Kare e kore, ka whaipānga ngā whakarerekētanga o nājanei me ngā rā ki mua, ki ngā hanganga ture, ki tō mātou hononga me Te Pane Matua Taiao hoki. Kei roto i tēnei ko Te Mana Whakahono-a-Rohe (ngā whakaritenga mō te whakaurunga ō ngā iwi) me te Ture Marine and Coastal Area (Takutai Moana Act) 2011. He whakaritenga e āhei ai te putanga o ētahi āhuatanga auaha mō te mahinga ngātahi. Ka mahi ngātahi Te Pane Matua Taiao me ngā Mana Whenua kia whai māramatanga ki te tikanga o tēnei mō te takiwā.

Ngā mihi

Māhinarangi Hakaraia

Look back and reflect So that we can move forward

As we look to the future for our region and our people we have to first look back on the past and celebrate what we have achieved together, and remind ourselves that, through our strong relationship, we have been able to deliver ambitious projects based on our shared vision.

Ara Tahi is the leadership forum of the six mana whenua partners and Council that focuses on the collective strategic matters that concern us all. We have enjoyed a productive relationship with Te Pane Matua Taiao (Greater Wellington) for 25 years. Since signing the Memorandum of Understanding in 1993, where we agreed on joint aspirations for the region, we have delivered projects that we can be proud of.

It is time to take stock - to acknowledge our achievements and to think about what we want the collective relationship to be for the next 25 years. As partners this will enable us to plan the next steps to build a secure and sustainable future.

Ara Tahi intends to build on the strong partnership we have developed with Greater Wellington to:

- ensure we are actively engaged and involved in decision making
- enable Te Ao Māori to be recognised and valued so that together we can achieve the best outcomes for Māori across all aspects of our region – our natural environment, a connected cultural understanding and a thriving economy.

In addition, individual mana whenua iwi have continued to work separately and directly with Greater Wellington on projects including our regional parks and protecting our communities from the impact of natural and other emergencies. Together we have worked to create a truly collaborative, catchment approach to the management and care of our fresh water, and the life that lives within it, through Whaitua Committees. In 2018 the Ruamāhanga Whaitua Committee released its draft Whaitua Implementation Plan, Te Awarua – ō- Porirua Whaitua Committee is well under way and we look forward to seeing the progress of the other Whaitua committees going forward.

These achievements mean a lot- they are a significant step in our journey together.

In the past decade, most of our iwi have had a major focus on settling our Treaty of Waitangi historical claims with the Crown. Within the next decade, that process is likely to be completed. As we move into the post settlement world, we want our relationships to be one of true partnership working together on areas of mutual benefit where the Māori economy becomes a key player in our wider regional economy.

As kaitiaki we want to be involved in the decisions that affect our land, our waterways, our ocean and our wildlife. Whether it is the impact of a changing climate or the ways we use our public spaces. This is an exciting time as legislation provides new opportunities and the need to work in different ways. Current and future changes to legislation are likely to impact on our relationships with GW. This includes the Te Mana Whakahono-a-Rohe (iwi participation arrangements) and the Marine and Coastal Area (Takutai Moana) Act 2011 provisions that enable new innovative ways of working together. Mana whenua and Greater Wellington will work together closely to understand what this means for the region.

Ngā mihi

Mahinarangi Hakaraia

Our region

Our region covers 8,111km2 of the lower North Island – the northern boundary goes from north of Ōtaki on the west coast across to north of Castlepoint on the east coast. We have a coastal marine area of 7,867km2 with almost 500km of coastline.

Around 500,000 of us call this extraordinary region home.

We are an ethnically diverse region with a rich culture. Throughout our region we have many diverse communities. There are six mana whenua partners in our region who have kaitiaki roles and responsibilities over the land, waterways, animals and birds in their respective rohe. We are all connected and we live, work and play in a variety of places within our region.

Our region includes:

- The farms of southern Wairarapa
- The market gardens of the Kāpiti Coast
- The vineyards of Martinborough and Gladstone
- Seventeen mana whenua and 15 Church and mātāwaka marae located on the coast and inland
- Coastal communities such as Raumati Beach and Riversdale
- The lifestyle properties in our rural areas
- Suburban homes
- Small businesses
- Small villages and thriving towns
- Our busy, compact, capital city

Our role in the greater Wellington region

Greater Wellington is responsible for a wide range of activities that contribute to the overall wellbeing of the Wellington region.

We operate in the following key areas:

- Provision and management of regional infrastructure and services
 flood protection assets that protect urban populations and productive rural land; a secure supply of safe, high-quality water; regional parks; harbour navigation and safety; delivering Metlink public transport services to the regional population; as well as owning the train fleet and maintaining public transport assets including railway stations, bus and ferry shelters, signs, and Park & Ride facilities
- Sustainable management of natural resources (land, air, biodiversity and water) and control of pests to protect the resources on which our primary sector, export economy and quality of life are based
- Strategic planning for the region delivered through statutory instruments, such as the Regional Policy Statement, the Regional Land Transport Plan and the Regional Pest Management Strategy and also non-statutory instruments such as the Wellington Regional Strategy – the region's economic growth strategy.

Greater Wellington is guided by legislation, including the Local Government Act 2002 which directs local authorities to meet the current and future needs of communities for good-quality infrastructure, services and performance of regulatory functions, in a way that is most cost-effective for households and businesses. The Local Government Act also requires local authorities to be accountable and to ensure that their decision-making processes are open to the influence and scrutiny of their communities.

For more detail on Greater Wellington's activities, see Section 2 of this document.

Partnering with mana whenua

Greater Wellington's relationship with mana whenua is guided by the Local Government Act 2002 and the Resource Management Act 1991. These Acts require Greater Wellington to recognise and provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu and other taonga and provide opportunities and resources that enable Māori to participate in decision making. The Resource Legislation Amendment Act 2017 provides for Mana Whakahono-ā-Rohe (Iwi participation arrangements).

The relationships between mana whenua and Greater Wellington provide a way for us to engage directly on the issues that matter. Two key documents set out how we work together – a Memorandum of Partnership, signed in 2013, established a structural and operational relationship between Greater Wellington and mana whenua, and a Māori Partnership framework (2016) which sets out how we will work together to achieve mutually beneficial outcomes.

There are six iwi who are mana whenua in our region and who have kaitiaki roles and responsibilities over the land, waterways, animals and birds in their respective rohe. Greater Wellington has established and maintains relationships with the six mana whenua who are:

- Ngāti Kahungunu ki Wairarapa (represented by Ngāti Kahungunu ki Wairarapa Charitable Trust)
- Taranaki Whānui ki te Upoko o te Ika (represented by the Port Nicholson Block Settlement Trust)
- Ngāti Toa Rangatira (represented by Te Rūnanga o Toa Rangatira Inc)
- Te ĀtiAwa ki Whakarongotai (represented by Ātiawa ki Whakarongotai Charitable Trust)
- Ngāti Raukawa ki te Tonga (represented by Ngā Hapū ō Ōtaki)
- Rangitāne o Wairarapa (represented by Rangitāne o Wairarapa Inc)

We have a number of ways that we work with mana whenua and Māori of the region.

- Ara Tahi is a leadership forum of the six mana whenua partners and Greater Wellington. Ara Tahi was established as a collective mana whenua forum in 1993 initially as a Māori advisory group and more recently to focus on strategic matters of mutual concern.
- Council committees and advisory groups Appointed members, nominated by Ara Tahi or directly by mana whenua iwi, are involved in Council decision making (e.g. Environment, Finance, Risk and Assurance and Sustainable Transport Committees have appointees nominated by Ara Tahi, and the Wairarapa Committee; Hutt Valley Flood Management Subcommittee; and Te Kāuru Upper Ruamahanga River Floodplain Management Subcommittee have appointees nominated directly by mana whenua iwi.)
- **Te Upoko Taiao** the Natural Resources Plan Committee is another committee that oversees Greater Wellington's regulatory responsibilities in relation to resource management, including the review and development of regional plans. It comprises six elected Greater Wellington Regional Councillors and six appointed members from the region's mana whenua.

Direct **relationships with mana whenua** – on individual issues or programmes of work specific to one mana whenua partner, we work direct with the iwi concerned.

Community Outcomes

Community outcomes reflect the ambitions of the people who choose to live in our region. We developed with you the following community outcomes for previous Long Term Plans. We believe they are still as relevant now as they were then as important outcomes for our region.

Greater Wellington aims to improve the quality of life of residents through our groups of activities by contributing to the achievement of the following outcomes:



The ways that our activities contribute to each of the outcomes is detailed further in the activity group sections.

Setting our direction

In making progress towards our vision, for the period 2018-28 we've identified four priority areas which we know are important to the region and where we are able to have the greatest influence. These strategic priorities enable us to focus on the things that matter and place our resources where they will have the greatest impact.

Community Outcomes

Vision

An extraordinary region – thriving, connected and resilient

2018-28 Strategic Priorities



Measuring progress towards the Community outcomes

Community outcome indicators provide a long-term picture of whether we are progressing in the right direction towards these outcomes.

The Wellington Region Genuine Progress Index (GPI) provides a useful way to measure the region's well-being, by counting beneficial activities as positive, harmful activities as negative, and provides a systematic way to integrate economic issues with environmental, social and cultural concerns. We have been collating data since 2000 and there is now a wealth of rich data for us to draw upon. We have identified a number of individual indicators from the GPI as well as several combined indices that are closely aligned with Greater Wellington's community outcomes, and intend to use these where possible to show long-term progress in the right direction towards these outcomes. We have identified some opportunities for enhancement of this index to ensure the information remains a useful resource in measuring the region's wellbeing and in particular how well we are performing against our community outcomes.

2018-28 strategic priorities

Greater Wellington has identified four key priorities for the Wellington region over the next 10 years. Making a difference in these areas is a high priority for us as well as addressing any issues that might be preventing us from achieving our goals in these areas. The community has also told us that they think these are the right priorities for the region.

Climate change

Underpinning all our work is the consideration of climate change. As well as responding to climate change risks through adaptation planning, Greater Wellington is committed to mitigating the effects of climate change by reducing greenhouse gas emissions across all its areas of influence, helping to create the conditions for a smart, innovative, low-carbon regional economy.

Our response to climate change is themed throughout the Long Term Plan, given the significance this will have on the region now and into the future. In the Assumptions in Section 5 we have provided an outline on how we are anticipating adverse events and climate change may impact on the services we provide and how we plan to respond to those.

Fresh water quality and biodiversity

The quality of the fresh water in our rivers, lakes and streams is maintained or improved, and our region contains healthy plant, bird and wildlife habitats.

Water supply

The bulk water supply infrastructure consistently delivers high-quality drinking water to the four city councils (Porirua, Hutt City, Upper Hutt and Wellington).

Regional resilience

Our infrastructure is resilient to adverse events and supports our region's economic and social development.

Public transport

The Wellington region has a world-class integrated public transport network.

Fresh water quality and biodiversity

What we will be doing

- Working with others to protect our waterways
- Establishing and setting water limits through our Whaitua
- Programmes to eradicate pests
- Greater focus on community education and involvement
- Key Native Ecosystem
 programme

What we will deliver

- A new Natural Resources Plan to guide our work
- A reduction in pests
 our region
- Waterways safe for recreational use
- Greater community
 involvement in our work

The impact our work will have

The quality of the fresh water in our rivers, lakes and streams is maintained or improved, and our region contains healthy plant and wildlife habits.

The quality of our waterways has an impact on our health and wellbeing, and it's also fundamental for the tourism industry and our region's economic prosperity. It's no secret that the rivers, lakes and streams in our region are important to the entire community. We recognise Te Mana o te Wai (the integrated and holistic wellbeing of a fresh water body) in the management of fresh water.

There is growing demand for water from our urban and suburban populations as well as the farming sector. Population growth is also likely to increase the pressure on our region's indigenous biodiversity. Increased sedimentation and contamination of waterways as a result of the earthworks associated with new developments, coupled with ageing stormwater and wastewater infrastructure and the intensive management of rural land can impact on the health of aquatic ecosystems. Urban expansion and rural intensification can increase the fragmentation of remaining habitats, reducing their viability and ability to support indigenous biodiversity. Better understanding of these potential impacts and efficiently managing water use to more sustainable levels are key concerns for Greater Wellington.

We are working closely with mana whenua iwi and our communities through whaitua committees (catchmentbased collaborative committees) to establish limits for water management. We are better able to protect our natural resources through partnerships and collaborative management – developing new ways of working in our shared backyard.

We recognise the importance of our special areas – the region's forests, lakes, coastal areas, wetlands and harbours – and ensure we have policies to manage any threats to their ecological health. Our aim is to eradicate pests in our region so that native plants, animals and fish can thrive. We are adapting our approach to protecting natural assets - everyone in the community has their own part to play and we will be placing more focus on education and community involvement as we look to the future.

Regional resilience

What we will be doing

- Investigate and plan for flood protection including impacts from climate change
- Ensure all of our infrastructure is fit for purpose
- Support the region's ability to cope with emergencies
- Explore and develop economic growth initiatives

What we will deliver

- Complete RiverLink
- Flood management plans completed and implemented
- Improved ability of WREMO and utility companys' to respond to emergencies
- Investment plans that grow the economy and resilience of the region

The impact our work will have

Our infrastructure is resilient to adverse events and supports our region's economic and social development

Being prepared for the future is a theme that runs through everything we do at Greater Wellington. When we talk about a resilient region we mean building communities that are robust and equipped to withstand adverse events, including significant financial shocks, the effects of climate change, flooding and earthquakes.

Greater Wellington influences the resilience of the region in three ways. One way is through the resilience of the infrastructure we own and manage on behalf of the region, including water supply and public transport. Another is through co-ordination. Resilience often requires working together, and Greater Wellington co-ordinates a number of regional efforts to improve resilience, including the Wellington Region Emergency Management Office, the Wellington Lifelines Engineering Project and the Wellington Region Investment Plan.

Greater Wellington also has specific responsibility for managing the risk of flooding from streams and rivers. Floods are one of the region's most significant natural hazards and have the potential to cause both economic and social hardship. As weather patterns change and become more unpredictable, we anticipate more frequent and intense rainfall events and higher river flows. As the region's population grows, there may be pressure to intensify development in flood prone areas.

Historically, our approach to flood protection had a strong engineering focus. While we remain committed to protecting communities from flooding, we are now working with iwi, communities and councils to achieve greater social, economic and environmental outcomes from flood protection work.

Water supply

What we will be doing

- Maintain a continuous supply of drinking water
- Replacement maintenance of infrastructure
- Planning for future demand

What we will deliver

- Water Safety Plan
- Infrastructure that meets future growth
- Future proofed water supply options

The impact our work will have

The bulk water supply infrastructure consistently delivers high quality drinking water to the four city councils (Porirua, Hutt City, Upper Hutt and Wellington)

We all know a safe and resilient water supply is essential to our health and wellbeing. It's also crucial for our region's economic prosperity. High-quality drinking water protects the community from water-borne illnesses, while a consistent supply supports residential and commercial development and the local economy.

Our current infrastructure has served us well for many years, the challenge is ensuring it keeps pace with changing expectations and is fit for the future. Some significant assets are nearing the end of their economic lives. We need to determine the most cost-effective time to replace them, without compromising the performance of the water supply network.

We also need to improve resilience. Older parts of our infrastructure are less able to withstand shocks and there's limited redundancy in the bulk water network and limited local water storage. We're working with Wellington Water and the other councils to ensure that after a major earthquake (or other event) people will have access to clean, drinkable water as quickly as possible.

Following the Havelock North water contamination incident and detection of bacteria in the Waiwhetu aquifer, we reviewed our water treatment processes and made changes to how we treat water extracted from the Waiwhetu aquifer. We'll continue to review and enhance our treatment processes to ensure we maintain a water supply that is safe to drink.

In the longer term, changing rainfall patterns, increased drought and rising sea levels are expected to put pressure on the water supply. Meanwhile, population growth will increase demand for drinking water. In planning to manage demand, we are working with Wellington Water and considering capital works alongside non-asset solutions, such as water conservation education and water metering.

Public transport

What we will be doing

- Developing improved digital information
- Renewal work on the Wellington metro rail track
- Put in place the new Wellington City bus network
- Developing integrated fares and ticketing
- Investigating new trains to service Wiararapa and Captial Connection lines

What we will deliver

- Cleaner and smarterways to travel by public transport
- Optionsthat meet the changing needs and wants of the region
- Improved services across the network (with support from central government)

The impact our work will have

The Wellington region has a world-class integrated public transport network.

We are focussed on becoming a smarter, cleaner region by encouraging more people to travel by bus, train and ferry, especially at peak times.

For the last decade, we have made large catch-up investments to improve rail services. Our attention is now on the transformation of bus services, while consolidating rail services and improving customer service across the network.

Ageing rail network infrastructure remains an issue, particularly for the Wairarapa line. We also expect more frequent and severe weather events and are planning infrastructure improvements to mitigate the effects of weather events on coastal and low lying parts of the public transport network.

Per capita we have the highest number of public transport users in the country. As our population ages and more commuters choose sustainable transport options, we anticipate that the use of public transport will increase. At the same time, the needs and expectations of customers are changing. The emergence of new technologies presents both challenges and opportunities for public transport. New, lower cost modes of travel are emerging, along with a digital transit market place, giving customers more travel options. Completion of major roading projects will also provide improved options for car travel within the next 10 years. To retain and grow patronage, public transport will need to compete effectively against both existing and new modes of travel.

To remain the preferred choice of travel for people, particularly at peak times, we must deliver faster, affordable, more frequent and reliable services, while at the same time balancing demands for increased levels of service against affordability for ratepayers.

We are planning for...

The region will continue to be at risk from adverse events, including earthquakes. Events that are driven primarily by climatic factors such as floods, erosion, slips, pest incursions etc will increase. This will impact on the region's infrastructure, vulnerable communities (particularly those near the coast or on flood plains) and our ability to access services.

ADVERSE EVENTS AND CLIMATE CHANGE

Economic projections suggest the Wellington Region will maintain its importance for the national economy. Employment numbers are expected to increase by 3-4,000 per year (1.2 percent). Tourism will also be a source of economic growth.

The combined impact will increase demand in the region for our services. The Māori economy will play an increasing role in our region as the Treaty settlement process is complete.

Increases in urban growth and intensification could lead to increased pressure on our services and the environment. There will be pressure to ensure that mana whenua values, and approaches to land use and management, influence the challenges presented by a communities' desire for growth and intensification.

LAND USE AND THE

ENVIRONMENT

ECONOMIC

GROWTH

Any changes to key legislation will affect how and what we do. For the region, any law changes could affect the ways we utilise land, the allocation of water, the management of key infrastructure or the cost of providing services and the ways we engage with mana whenua.

GOVERNANCE

22

CHANGES IN OUR POPULATION

The region's population is projected to increase from around 504,000 in 2017 to 538,000 by 2027 and 596,000 by 2047. The ageing of the baby boom generation and increased life expectancies means those aged 65+ will make up a larger proportion of the region's population. These changes will impact across the services we deliver.

CHANGES IN TECHNOLOGY

SOCIAL

CHANGE

Technological innovation will increasingly impact the Wellington region as a whole both at an individual and organisational level. How we manage our services, infrastructure and communications with the community needs to keep up with technological changes and the way people use technology in their daily lives. There are projected changes to modes of transport, the ways in which we work and how we send and obtain information.

Our society is becoming more culturally and ethnically diverse. The ways that we work, play and travel are changing. The way people want to interact with us and one another is likely to change, particularly with changes in technology and social media.

We will continue to work with our mana whenua through Memoranda of Partnership or other mechanisms. We will strengthen our relationships and work collaboratively with district and city councils and central government. Volunteers who chose to give their time and skills will continue to play an important part in what we do.

PARTNERING

Ten year average percentage spend of activity groups

Metlink Public transport -Ngā Waka Tūmatanui





Section two

Activities of Greater Wellington Ngā Mahi a Te Pane Matua Taiao



Environment – Te Taiao



TOTAL OF GREATER WELLINGTON EXPENDITURE

10 PERCENT

Priority Area

Fresh water quality and biodiversity

The Environment group includes five activities:

- Resource management
- Land management
- Biodiversity management
- Pest management
- Harbour management

What we do

Greater Wellington is responsible for regulating the use of the region's natural resources. We do this through regional policies, plans and resource consents. We help the community to manage and restore ecosystems and manage land sustainably. We monitor and report on the state of the environment, manage environmental threats like pest plants and animals, and provide a 24-hour pollution response service. We also look after the region's harbours.

Greater Wellington is one of many entities who have a role in looking after our environment.

We are a regulator and also a provider of services. We invest in environmental assets and services because they matter not only for the communities in our region but for all New Zealanders.

Our environment is important to us all. It is our home, our playground, the air we breathe, the water we drink. We all have a duty of care: to protect our waterways, soil, air, flora and fauna and to ensure that our children and grandchildren will be able to enjoy our environment in the same way that we do.

The work programme that is within our Environment activity group supports our priority area of **fresh** water quality and biodiversity.

Contribution to our Community Outcomes

Our environment activities primarily contribute towards achieving the following Community Outcomes.

They contribute to a **healthy environment** by:



- Regulating and monitoring the use and development of the environment to ensure that our natural and physical resources are managed sustainably
- Working with the community on initiatives to protect and restore the environment such as pest management and ecological restoration
- Advising landowners and businesses on practices that reduce the environmental impact of their activities and improve the quality of water in our waterways

Our environment activities also contribute towards achieving a **resilient community** by:



- Adding to our understanding of the impacts of climate change
- Regulating and monitoring the use and development of the environment, taking account of the impacts of climate change

Our environment activities also contribute towards achieving a **strong economy** by:



- Working with landowners to enhance the prosperity and security of the farming sector by developing plans to prevent soil erosion and managing pests that threaten farm productivity
- Supporting commercial shipping by monitoring commercial ships arriving and departing from Wellington and providing navigational aids in our harbours

Working with the community on initiatives to

Supporting the recreational use of our region's waters by providing navigational aids and water

Initiating the whaitua committee programmes – committees made up of local community members, mana whenua representatives, local council representatives and Greater Wellington representatives who have been tasked with recommending ways to maintain and improve the

Our environment activities also contribute towards achieving an **engaged community** by:

protect and restore the environment

safety education

quality of our fresh water



Advances in technology

We expect that the increasing pace of innovation in technology will have an impact on the work we do under this activity. We rely on technology to get us about, and to capture data that support the decisions we make about the environmental sustainability of the region.

Challenges we face

As outlined in Section 1, Greater Wellington has made assumptions about matters that are likely to impact the region and how we plan our work. How some of those assumptions may impact this activity group is outlined below.

Impact of population growth

Our population is projected to increase, and it will be characterised by an increase in people aged over 65 with a corresponding increase in life expectancy. This is likely to result in greater pressure on the ways we use our land, pressure for housing and other development, loss of ecosystems and habitats, contamination of waterways and waterbodies and loss of biodiversity.

Adverse events/ climate change

The impacts from adverse events and climate change affect many areas of work within the Environment Activity group, including the expected change in temperature, rainfall and storms.

The impacts of climate change on indigenous biodiversity are largely unknown but it has the potential to change current pest composition of the region. The arrival of new pests to the region would require additional investment or re-prioritisation of existing biodiversity management funding.

Increasing temperatures may also affect the viability of native species. Sea level rise will also impact on a number of our region's important coastal ecosystems as well as low lying estuaries and wetlands. It will put pressure on farm economic performance which could affect investment levels in the land management programmes.

Planning for the future

Our long-term approach is to use a combination of regulatory and non-regulatory mechanisms and our work will be based on best practice science. We will also work with landowners, other key stakeholders and the wider community to improve outcomes. We recognise the need to manage catchments as a whole and that land use throughout a catchment affects the water quality within it.

A key opportunity for us is finding ways to work better with all of our communities. Greater Wellington, along with other local authorities across the country, has been moving to a more collaborative way of working with communities. This means moving away from a heavily compliance based approach to one that encourages and supports people and communities to make better environmental choices in partnership with us.

Greater Wellington will continue to review what we do and how we do it so that we can support our communities to make the changes that will benefit our natural environment:

- We will concentrate on supporting our communities as we all look after our environment. While we will continue to have a regulatory compliance and enforcement role, we believe that we can achieve the best environmental outcomes long term by working with people so that we understand their concerns and they understand what Greater Wellington is required to do
- We will recognise and provide for the role of mana whenua across our broad range of activities
- We will continue to look for opportunities to partner with other agencies that have resources and expertise so that we can collectively develop initiatives that will lead to positive environmental outcomes

- We need to consider how we can simplify our resource management planning processes so that they are easy for the community to engage with
- We will focus on making our science and monitoring more useful for communities, and involving communities, so that they can use the information gathered to create environmental change
- We will continue to support the whaitua committee programmes – committees made up of local community members, mana whenua partner representatives, local council representatives and Greater Wellington representatives who have been tasked with recommending ways to maintain and improve the quality of our fresh water
- We will continue to work alongside landowners so they will be ready to comply with new rules proposed under our proposed Natural Resources Plan when it comes into effect, for example riparian and wetland programmes.

Strategies and plans that guide our work

Our work in the environment group of activities occurs within a national framework. National Policy Statements are set by central government, and our regional plans and policies must give effect to them. District plans, in turn, are required to give effect to our Regional Policy Statement. We work to ensure that strategies and polices align nationally, regionally and locally so that what we are doing on the ground will achieve positive environmental outcomes. We will continue to have a role in advocating to central government on environmental issues from a regional perspective and ensure that we have robust and stable policy frameworks that are making a real difference to what is happening in our environment.

Our policies and plans that relate to this group of activities are:

- Wellington Regional Policy Statement identifies regionally significant issues around the management of the region's natural and physical resources. It sets out what needs to be achieved (objectives) and the way in which the objectives will be achieved (policies and methods)
- Regional plans (Regional Coastal Plan, Regional Fresh water Plan, Regional Soil Plan, Regional Air Quality Management Plan, Regional Plan for Discharges to Land) – these plans identify issues, objectives, policies and methods (including rules) to promote sustainable management of the regions natural resources. They will be replaced by the proposed Natural Resources Plan when it becomes operative
- Resource Management Charging Policy 2015– describes the charges that are payable to Greater Wellington for a range of resource consent services, including processing and monitoring resource consent applications

- Regional Pest Management Strategy 2002–22: developed under the Biosecurity Act 1993 and includes management programmes for pest plants and animals which have the potential to impact on the region's economy, environment, human health, recreation or Māori culture and traditions
- Greater Wellington Biodiversity Strategy provides guidance for policy and decision making, resource allocation and on the ground projects relating to biodiversity management in the region
- Wellington Region Navigation and Safety Bylaws 2009 promotes the safe usage of the harbours and waters of the region.
- Port and Harbour Marine Safety Code Compliant Safety Management System – provides a safety system to cover all users of Wellington Harbour.

Resource management

Policy framework

Under the Resource Management Act 1991 (RMA), we must prepare a Regional Policy Statement and a Regional Coastal Plan and may prepare other regional plans. The purpose of the RPS is to provide an overview of the resource management issues of the region and policies and methods to achieve integrated management of the natural and physical resources of the region. Regional plans help us carry out our functions to achieve the purpose of the RMA - to promote the sustainable management of natural and physical resources. They contain rules that permit and control resource use through the resource consent process. Greater Wellington's current Regional Policy Statement was made operative in 2013. Greater Wellington also has five regional plans coastal, air quality management, discharges to land, soil and fresh water. A review of the regional plans has resulted in the proposed Natural Resources Plan being developed. Hearings for this plan are currently underway and we expect the plan to become fully operative in the next three years. The plan is our key initiative for addressing our fresh water quality objectives.

In 2011 central Government introduced the National Policy Statement for Fresh water Management. This requires regional councils to establish both quantity and quality limits for fresh water and to include these limits in regional plans. To achieve this Greater Wellington established the whaitua process, which directly involves mana whenua and local communities in the development of quantity and quality limits for fresh water resources within each of the five regional catchment areas, known as whaitua. This process started in 2014 and will be complete by 2025.

Resource consenting service

The RMA requires Greater Wellington to process all applications to use natural resources, e.g. abstracting water, discharging into water, discharging into air and certain types of land and coastal use. Consents must be obtained for resource use unless an activity is "permitted" by a regional plan or directly by the RMA. The RMA provides detailed procedures to be followed in processing resource consents.

In recent years, Greater Wellington has typically processed 500 -700 consent applications per year, and mana whenua are consulted on a significant number of these. Of these applications about 3 percent are processed as notified consents, where affected parties may make a submission and the decision goes through a formal hearing process. Greater Wellington provides increasing support to consent applicants to develop pre-application plans. This assists applicants to provide the necessary information for us to assess the impacts on natural and physical resources and people. It also helps applicants to develop effective strategies and practices to manage impacts.

We are focused on streamlining our consenting processes and making them more accessible for applicants.

Compliance and enforcement

Greater Wellington carries out compliance monitoring as an essential part of its consenting responsibilities. We manage compliance monitoring through a risk-based Strategic Compliance Programme. This programme focuses compliance monitoring resources on those activities which carry the greatest potential risk to our natural and physical resources and communities. This varies according to the nature of the consented activity and ranges from a detailed compliance monitoring schedule to the consent holder undertaking self-monitoring and preparing a report for audit by the Council. Consent holders receive information about their compliance performance and Greater Wellington produces reports on compliance performance across all natural resource activity areas (e.g. abstracting water, waste water treatment plants, agricultural discharges). Greater Wellington has carried out an average of 1,400 compliance inspections per year over the past eight years.

Pollution prevention and control

Greater Wellington operates a 24-hour pollution and incident response service for both environmental and public health purposes. This includes investigation of all reported environmental pollution incidents and cleaning up whenever possible. Pollution incidents include contaminated waterways, dust, sediment and, most commonly, odour. The service includes responding to complaints about activities which might not meet the regional planning rules and helping to ensure such activities meet environmental regulations. We are also taking a more proactive approach to pollution prevention through the Take Charge programme (a pollution-prevention programme for businesses), industry engagement and education campaigns.

State of the environment monitoring

The RMA requires Greater Wellington to gather information necessary to carry out its regulatory functions, to monitor the state of the environment and measure the effectiveness of policy statements and plans and to make the information available to the public. We monitor rainfall, river flows, groundwater levels and quality, fresh water coastal water quality, air quality and soil quality. Our climate, flood and drought monitoring network provides critical information to help Greater Wellington develop better approaches to resource and emergency management in partnership with our stakeholders. Results of monitoring are published in technical reports, and annual data reports summarising state of the environment and when appropriate, trends. We also produce nontechnical summaries of our data for the public and display real-time data on our website. The monitoring information ensures a sound understanding of the state of the environment and contributes to robust and defensible resource management planning. We also conduct targeted studies to investigate significant resource issues identified through our general monitoring programmes.

Changes to what we will deliver

We are proposing some minor changes to how we work with the community to achieve better outcomes. We will also be increasing the level of science monitoring and are planning to invest in additional equipment as outlined in our Infrastructure Strategy.

We are proposing to extend soil mapping in the remainder of the Ruamāhanga whaitua to support the implementation of the proposed Natural Resources Plan. Soil mapping gives us important information that helps inform sediment management, nutrient management and riparian management.

We have established a citizen science programme to enable communities to participate in monitoring and implementation programmes to improve water quality.

We are implementing a mātauranga Māori / kaitiaki monitoring framework. This will support the implementation of the National Policy Statement on Fresh water Management and Te Mana o Te Wai and the delivery of the proposed Natural Resources Plan methods around cultural monitoring. We have been trialling a new kaitiaki monitoring framework with one of our mana whenua partners and plan to expand this programme over the next 10 years.

Land management

The land management activity seeks to manage the environmental impacts of the farming sector while ensuring the sector remains prosperous and secure. Inappropriate land management practices can directly affect soil erosion and soil health, water quality and the health of streams, rivers and the coast. Around one fifth of the land in the region is erosion-prone meaning that the land is likely to erode more quickly unless good land management practices are used. Climate change predictions suggest rainstorms may become more frequent and intense, causing greater damage to erosion-prone land in the future. Loss of land through erosion not only threatens the long-term prosperity and security of the farming sector, but can also exacerbate flooding and reduce water quality and the health of streams and rivers.

Greater Wellington delivers a range of programmes to encourage good land management practices. Our approach places a strong emphasis on voluntary services, supported by financial incentives (such as contributing to the cost of planting) to further encourage behavioural change. We actively work on initiatives that will deliver land management outcomes at the catchment level. Our activities include:

- Farm management plans implementation of long-term plans for farms with identified problems of soil erosion, including tree planting and other improvements
- Farm environment plans preparation of plans for managing the effects of intensive farming operations within priority catchments throughout the region, identifying options to mitigate nutrient and sediment discharges from properties in accordance with an overall catchment plan
- Catchment management schemes operation of six Catchment Management Schemes in liaison with their local Scheme Advisory Committees. These schemes protect local infrastructure from erosion and flooding problems affecting identified rural communities
- Soil conservation reserves rehabilitation of severely eroded land and control of pest animals within Greater Wellington's four Soil Conservation Reserves

- Akura Conservation Centre the supply of project materials, primarily poplars and willows and ecosourced native plants, for Greater Wellington's land management programmes
- Riparian planting providing assistance with riparian planting, nutrient and erosion and sediment control, in particular for the priority catchments of Mangatarere River, Taratahi/ Parkvale streams, Lake Wairarapa and Whareama River Estuary
- Providing assistance with erosion and sediment control, in particular for farms in the Taueru River, Kopuaranga River and Huangarua River priority catchments
- Advisory services providing advice on land management to landowners and the community.

These programmes and services support the achievement of several objectives of the Regional Policy Statement – soil erosion, natural hazards, water quality and healthy functioning ecosystems in rivers, lakes and wetlands.

Changes to what we will deliver

We have allowed for additional investment in the Riparian Programme in response to the proposed Natural Resources Plan implementation. In particular, assisting landowners with river and stream management for Category 1 and Category 2 sites listed in the proposed Natural Resources Plan, effective nutrient runoff management, and stock exclusion (all for the purpose of water quality maintenance and enhancement).

Pest management

Our pest management activity aims to reduce the impacts of pest animals and plants on the environment, economy, Māori and our communities, and make sure we are managing pests in the most effective way through a regionally coordinated response. Adverse impacts of pest plants and animals include: loss of native plants and animals, reduced productivity for farming and horticulture and public nuisance.

Greater Wellington takes a leadership role in this area. We are the regional pest management agency and prepare and implement the Regional Pest Management Strategy 2002-22 (RPMS) under the Biosecurity Act 1993. Following the changes to the Biosecurity Act and the National Policy Direction for Pest Management 2015, the current RPMS is under review. Following the review, pest management in the region will be guided by the Regional Pest Management Plan 2018-2038 (RPMP).

Our pest management activity includes:

- Regulation setting rules in the RPMS that help pest management action and prevent the propagation, sale and spread of pest species
- Inspection and monitoring undertaking inspections to ensure rules are adhered to and monitoring the effect of our pest management programmes
- Direct control undertaking pest control in special circumstances where there is direct regional benefit, such as pest organisms of limited distribution, of significance for human health or occurring at sites of high value
- Advice and education raising public awareness of the negative effects of pest species, the benefits of pests management programmes and providing advice to the public on the most effective and sustainable pest control options
- Providing support for community initiatives

 supporting public initiatives by providing information, control advice, staff time and some materials to undertake pest control
- Providing biosecurity services for territorial authorities and public – providing pest management service delivery to local councils and the public to control a range of pest plants and animals

 Biological control – contributing to the National Biocontrol Collective Research programmes and releasing and spreading biological control agents around the region. Biological control is most effective and often the only way to control widely spread pest plant species.

Under the RPMS we implement the Regional Possum and Predator Control programme. This programme controls possums in the areas where bovine tuberculosis was eradicated from the wild vectors (mostly possums) after a long sustained period of vector control under the National Bovine Tuberculosis Pest Management Plan by TBfree NZ.

Changes to what we will deliver

In 2016 Greater Wellington signed up to a partnership with Wellington City Council and the NEXT Foundation to progress the objective of making Wellington the first 'predator free (capital) city in the world'. As part of this initiative Greater Wellington is supporting a collaborative community-led programme called Predator Free Wellington. This is a long term (10+ years) investment. A trial is underway to make the Miramar Peninsula predator free that will provide critical data to determine future costs and completion timeframes.
Harbour management

Greater Wellington is responsible under the Maritime Transport Act 1994 for managing the region's harbours and coastal waters for navigation and safety purposes. We operate a 24/7 communication station at Beacon Hill in Wellington and provide and maintain navigational aids in our harbours. We also promote the safe use of harbours and coastal waters by educating recreational users and operating a harbour ranger service.

We undertake oil spill planning, training and response in conjunction with Maritime New Zealand, and planning and preparation both within Greater Wellington and by industry to prevent marine spill incidents. We also prepare and train to minimise environmental impacts when responding to incidents.

Changes to what we will deliver

There are no significant changes to current levels of service.

Biodiversity management

The biodiversity management activity aims to maintain and, where possible, restore biodiversity. Biodiversity loss in the region, as in the rest of New Zealand, has been dramatic. Less than three percent of the region's original wetlands remain and more than 120 different types of plants and animals are threatened with extinction. Biodiversity supports the healthy functioning of ecosystems which in turn provide essential, life supporting services such as purifying air and water.

Our biodiversity management activity is guided by our Biodiversity Strategy 2016, which is directed by the priorities of the New Zealand Biodiversity Strategy and the policy direction of the Regional Policy Statement (RPS). Our programmes are focussed on advocating for good biodiversity management, managing 54 sites totalling 48,139 hectares with the highest biodiversity values outside the Crown estate and supporting landowners to protect wetlands and other sites of significance.

Our biodiversity management activity includes protecting the highest value biodiversity areas in the region by managing a range of threats to their ecological health. These areas can be on Greater Wellington, territorial authority or private land. We actively manage sites and we also work with others by promoting the importance of managing our indigenous sites and providing ecological advice and support. We also support the Enviroschools Foundation to deliver environmental sustainability education programmes to schools across the region. Our key programmes include:

- The Key Native Ecosystem (KNE) programme. This programme aims to provide ongoing protection to maintain or restore the native plants and animals, as well as the ecological function by managing threats like pest plants and animals. Programme activities can include improving fish passage, excluding grazing stock, ensuring legal protection, undertaking revegetation and controlling pest animals and environmental weeds.
- Through our Collaborative Restoration
 programme we support multi-agency efforts
 to restore the biodiversity values of defined
 areas of the region. The overall objective of this
 programme is to restore important ecosystems
 by coordinating large restoration projects that
 involve multiple stakeholders. For example, we
 will work with Ngāti Kahungunu ki Wairarapa
 and Rangitāne o Wairarapa, and Department of
 Conservation and the other territorial authorities
 on the Wairarapa Moana and Te Rūnanga o Toa
 Rangatira Inc and others on Porirua Harbour.
 Financial support is also provided to smaller
 projects such as Pukaha/Mount Bruce.
- We provide advice and prepare **wetland management plans** setting out actions over three to five years to protect and enhance our remaining wetlands. We know these are important areas for our biodiversity and want to work with landowners so that we may better protect these special areas. This may include providing support for rural landowners for fencing and planting.

Changes to what we will deliver

Biodiversity is a priority area for Greater Wellington. While there are no significant changes to levels of service, the work programme in this activity area remains a key focus for us.What we will deliver – Environment key projects and programmes

What we will deliver - Environment key projects and programmes

	Year 1	Year 2	Year 3	Year 4-10
Resource management				
Whaitua Committee programme	•	٠	•	٠
Proposed Natural Resources Plan- finalisation and implementation	٠	•	•	•
Soil mapping	٠	•	•	•
Enabling catchment communities	•	•	•	•
Citizen science	•	•	•	•
Cultural monitoring framework	•	•	•	•

Land management				
Expand our farm environment plans in priority catchments	٠	٠	٠	٠
Farm management plans	•	٠	•	•
Riparian programme	•	•	٠	•
WRECI programme (funding and support for erosion prone land)	•	•	٠	•
Catchment management schemes	•	•	•	٠

Pest management				
Regional Pest Management Plan	•	٠	•	•
Regional Possum and Predator Control programme	•	•	•	•
Biosecurity services to territorial authorities and public	•	٠	•	•

Biodiversity management				
Key Native Ecosystem programme	٠	٠	٠	٠
Wetland Management programme	•	•	•	•
Collaborative Restoration project (Wairarapa Moana and Porirua Harbour)	•	•	•	•

Key assets

Our assets enable us to deliver our activities. The assets in this area are environmental monitoring and harbours management equipment. The Infrastructure Strategy contains more details on the assets relevant to this activity group.

How will we fund this activity?

Resource management

Resource management – policy and planning	100% general rate
Environmental science – state of environment monitoring	10-20% user charges 80-90% general rate
Resource Management – consents	100% consent applicants
Resource management – compliance and enforcement	100% consent holders *
Resource management – pollution prevention and control	100% identified polluters *

* Up to 100% general rate funded for investigations where a liable party cannot be identified.

Land Management

Farm plans	70% user charges, 30% general rate
Farm environment plans	50% user charges, 50% general rate
Wellington Regional Erosion Control Initiative	40% user charges, 30% Crown funded, 30% general rate
Land management advice	100% general rate
Land management, erosion schemes	50%-100% to be met from targeted or scheme rates or a direct contribution from both the direct beneficiaries, and the beneficiaries in the economic catchment area Up to 50% general rate
Soil conservation reserves	100% user charges
Akura Conservation Centre	100% user charges

Biodiversity management

Key Native Ecosystems programme	100% general rate
Biosecurity services for territorial authorities	100% user charges
Biodiversity management – other activities	100% general rate

Pest management

Regional Pest Management Plan	Up to 10% user charges, up to 10% subsidies, 80-100% general rate		
Regional Predator Control programme	40% targeted rate on all rural properties that are 4ha or more, assessed on a land area basis, 60% general rate		

Harbour management

Navigational aids and communications service	60% user charges (commercial shipping collected by CentrePort) and 40% general rate
Education; enforce maritime safety regulations	100% general rate
Pollution clean-up – oil	95% funded by Maritime NZ, 5% general rate
Pollution clean-up – other	100% user charges – charge to polluters; up to 100% generate rate if polluters cannot be identified and charged

For further information see our Revenue and Financing Policy 2018.

Measuring performance

Resource management

Lovel of convice	Performance	Performance targets					
Level of service	measures	Baseline (2017)	2018/19	2019/20	2020/21	2021-28	
Customer satisfaction	Level of overall satisfaction with consent processing services ⁽¹⁾	>4 when measured on a scale of 1 to 5	>4	>4	>4	>4	
Process resource consents in a timely manner	Percentage of non- notified resourced consents processed within statutory timeframes	100%	100%	100%	100%	100%	
Monitor compliance with resource consents	Rates of compliance for high risk activities ⁽²⁾ where historical compliance rates are below 80%	High risk activities <80% – Water takes – Earthworks – Municipal wastewater, water supply, and water races	>80%	>80%	>80%	>80%	
Effective response to environmental incidents	Rate of detection ⁽³⁾ and associated action taken on non- complying incidents ⁽⁴⁾	Establish baseline (%)	Maintain or increase against previous year	Maintain or increase against previous year	Maintain or increase against previous year	Maintain or increase against previous year	

On a scale of 1 (very dissatisfied) to 5 (very satisfied)
 The activities defined as high risk are potentially subject to change if risk profile changes
 'Detection' - a discharge or activity is attributed to a specific source (i.e. non-compliance by a specific person(s) is confirmed)
 This is only measured against those incidents in which environmental effects are rated minor or higher

Land management

Lovel of convice	Performance	Performance targets				
Level of service	measures	Baseline (2017)	2018/19	2019/20	2020/21	2021-28
Implement farm plans to reduce nutrient and sediment discharges from erosion-prone land	Erosion-prone hill- country covered by an active ⁽⁵⁾ farm plan	60%	61%	62%	63%	64%
Deliver planting programme on identified erosion-prone land	Erosion-prone hill country planted	446.1 hectares	500 hectares	550 hectares	550 hectares	550 hectares
Deliver farm environment plans to reduce nutrient and sediment loss	Over 50% of all contestable funding is allocated to priority catchments identified in the proposed Natural Resources Plan	New measure	Achieved	Achieved	Achieved	Achieved
Provide high quality goods and services to landowners from the Akura nursery	Survival of poles planted under the Wellington Regional Erosion Control initiative (WRECI)	New measure	85%	85%	85%	85%

Biodiversity management (6) (7)

		Performance targets				
Levels of service Performance measures	Baseline (2017)	Year 2018/19	Year 2019/21	Year 2021/22	Year 2022- 28	
Plan and deliver a programme to maintain or improve the ecological condition of identified high biodiversity value sites ⁽⁸⁾	Percentage of management actions ⁽⁹⁾ achieved to improve the habitat for native plants and animals	97.5%	95%	95%	95%	95%

(5) "active" is assessed by whether a farm plan has led to some delivery of erosion mitigation work in the past three years.

(6) Refer plans: <u>http://www.gw.govt.nz/KNE/</u>

(7) Refer operational plan: <u>http://www.gw.govt.nz/assets/Biosecurity/RPMSPLAN-2016-17.pdf</u>

(8) High biodiversity value sites are those managed under the Key Native Ecosystem programme and within collaborative biodiversity projects carried out within Porirua Harbour and Wairarapa Moana catchments.

(9) Management actions can include improving legal protection, fencing and undertaking the control of pest plants and animals.

Pest management

			Per	formance targets	5	
Levels of service	Performance measures	Baseline (2017)	Year 2018/19	Year 2019/20	Year 2020/21	Year 2021- 28
Provide possum control services in bovine TB free areas	Number of possums in the Regional Possum Predator Control Programme area	Low (<5% Residual Trap Catch)				
Provide pest species control services in Greater Wellington Key Native Ecosystems (KNE)	Deliver in accordance with KNE plans ⁽¹⁰⁾	New measure	Achieved	Achieved	Achieved	Achieved
Provide pest species control services across the region	Deliver in accordance with the Regional Pest Management Plan ⁽¹¹⁾	New measure	Achieved	Achieved	Achieved	Achieved

Harbour management

			Per	formance Targets		
Levels of Service	Performance Measures	Baseline (2017)	Year 2018/19	Year 2019/20	Year 2020/21	Year 2021- 28
	Beacon Hill Communications station is staffed and operational 24 hours a day, seven days a week	100%	100%	100%	100%	100%
Manage the	All navigation aids are working 24 hours a day, seven days a week	99.9%	100%	100%	100%	100%
safety of marine activities in the region's waters	Operate in accordance with the current Port and Harbour Marine Safety Code	Compliant with standard	Compliant with standard	Compliant with standard	Compliant with standard	Compliant with standard
	Warnings and infringements issued	New measure	Increase	Decrease	Decrease	Decrease
	Meet obligations to Maritime NZ for oil spill response equipment maintenance and exercises	New measure	4 equipment checks 2 exercises	4 equipment checks 2 exercises	4 equipment checks 2 exercises	4 equipment checks 2 exercises

(10) Refer plans: <u>http://www.gw.govt.nz/KNE/</u>
 (11) Refer operational plan: <u>http://www.gw.govt.nz/assets/Biosecurity/RPMSPLAN-2016-17.pdf</u>

Potential negative effects of the activity

Potential negative effects of the activity

The control of pest animals and plants requires a range of methods including pesticides.

Some people object to any form of animal control especially for game animals. There are also some objections to the use of chemicals to control pest plants and animals. The toxin 1080, in particular, is of significant concern to some sectors of the community, while others express their unease with the use of glyphosate or brodifacoum.

How we will address negative effects

Our pest control activities are led by national best practice. We follow guidelines and rules set by the Environmental Protection Authority and WorkSafe. Our staff are trained experts in pest plant or animal management and certified to use pesticides. If there are cost effective pest control methods that do not involve pesticides, we use them. Also, we use the least toxic chemical that will be effective in any given situation.

	unung n	IIPart Jr	מרבווובוור	0							
		ENVIR	ONMENT PRO FOR T	SPECTIVE FU HE YEAR ENI	NUL OE DNID	ACT STATEME E	NT				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Sources of operating funding											
General rate	27,844	29,549	30,761	32,061	33,216	33,940	34,389	35,137	35,879	36,559	37,073
Targeted rate	534	605	676	765	779	794	810	826	842	859	885
Subsidies and grants for operating purposes	297	340							ı		
Fees, charges, and targeted rates for water supply	5,250	6,368	6,634	6,770	6,941	5,861	5,966	6,071	6,186	6,301	6,427
Fines, infingement fees, and other receipts $^{\left(1 ight) }$	3,771	3,813	4,009	4,039	4,119	4,199	4,313	4,399	4,491	4,576	4,677
Total operating funding	37,696	40,675	42,080	43,635	45,055	44,794	45,478	46,433	47,398	48,295	49,062
Applications of operating funding											
Payments to staff and suppliers	34,875	33,141	33,402	34,180	34,985	34,308	34,935	35,526	36,214	36,956	37,738
Finance costs	206	281	366	437	485	496	501	498	482	460	453
Internal charges and overheads applied	3,595	7,198	7,485	7,882	8,179	8,451	8,450	8,630	8,835	8,981	9,118
Total applications of operating funding	38,676	40,620	41,253	42,499	43,649	43,255	43,886	44,654	45,531	46,397	47,309
Surplus/(deficit) of operating funding	(080)	55	827	1,136	1,406	1,539	1,592	1,779	1,867	1,898	1,753
Sources of capital funding											
Subsidies and grants for capital expenditure		ı							I		
Increase / (decrease) in debt	1,782	2,016	2,050	1,097	432	(45)	(180)	(12)	(285)	(443)	135
Gross proceeds from asset sales	119	205	117	67	131	133	103	116	130	121	141
Total sources of capital funding	1,901	2,221	2,167	1,164	563	88	(77)	104	(155)	(322)	276

Environment Prospective Funding Impact Statements

		ENVIR	ONMENT PRO FOR THE	SPECTIVE FL	JNDING IMPA G 30 JUNE (C	CT STATEME ONT.)	NT				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Applications of capital funding											
Capital expenditure											
- to meet additional demand									ı	75	ı
- to improve the level of service						,					ı
- to replace existing assets	1,721	3,056	2,922	2,168	1,829	1,485	1,363	1,726	1,548	1,334	1,881
Increase / (decrease) in investments						,		,	1		ı
Increase / (decrease) in reserves	(800)	(180)	72	132	140	142	152	157	164	167	148
Total applications of capital funding	921	2,276	2,994	2,300	1,969	1,627	1,515	1,883	1,712	1,576	2,029
Surplus/(deficit) of funding					I			ı			
Depreciation on Environment assets	781	926	1,165	1,292	1,399	1,395	1,415	1,539	1,599	1,636	1,701
(1) – This includes revenue from the TB Free New Zealand	1. sales of trees an	d rental income									

This statement is not an income statement. It excludes all non cash transactions such as depreciation and valuations.

For more information on the revenue and financing mechanisms applicable to this group of activities, please refer to GWRC's Revenue and Financing Policy. All figures on this page exclude GST

		EN	/IRONMENT F FOR 1	ROSPECTIVE	EUNDING IN DING 30 JUN	IFORMATION E	_				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Operating funding											
Resource management	19,885	21,839	22,310	23,225	24,272	23,637	23,929	24,524	24,985	25,473	25,805
Land management	5,044	5,402	5,959	6,073	6,089	6,145	6,284	6,402	6,530	6,656	6,806
Biodiversity management	4,778	4,737	4,843	4,954	5,092	5,174	5,264	5,364	5,503	5,580	5,693
Pest management	5,773	6,311	6,655	7,026	7,183	7,339	7,459	7,601	7,755	7,904	8,062
Harbour management	2,216	2,386	2,313	2,357	2,419	2,499	2,542	2,542	2,625	2,682	2,696
Total operating funding	37,696	40,675	42,080	43,635	45,055	44,794	45,478	46,433	47,398	48,295	49,062
Applications of operating funding											
Resource management	20,641	21,670	21,864	22,473	23,267	22,519	22,770	23,192	23,613	24,026	24,491
Land management	5,454	5,703	5, 790	5,947	5,958	6,029	6,166	6,235	6,349	6,531	6,666
Biodiversity management	4,767	4,685	4,790	4,901	5,037	5,117	5,205	5,303	5,440	5,516	5,627
Pest management	5,759	6,369	6, 568	6,872	7,026	7,178	7,294	7,432	7,585	7,731	7,884
Harbour management	2,055	2,193	2,241	2,306	2,361	2,412	2,451	2,492	2,544	2,593	2,641
Total applications of operating funding	38,676	40,620	41,253	42,499	43,649	43,255	43,886	44,654	45,531	46,397	47,309
Capital expenditure											
Environment projects	881	2,370	2,457	1,920	1,391	1,003	959	1,221	1,070	984	1,434
Capital project expenditure	881	2,370	2,457	1,920	1,391	1,003	959	1,221	1,070	984	1,434
Land and buildings											- 1
Plant and equipment	672	190	46	9	5	5	9	51	64	9	43
Vehicles	168	496	419	242	433	477	398	454	414	419	404
Total capital expenditure	1,721	3,056	2,922	2,168	1,829	1,485	1,363	1,726	1,548	1,409	1,881
This statement is not an income stateme.	nt. It exclud	es all non cas	sh transactio	ns such as de	epreciation a	nd valuation	S.	i -	- (

For more information on the revenue and financing mechanisms applicable to this group of activities, please refer to GWRC's Revenue and Financing Policy. All figures on this page exclude GST

Greater Wellington Regional Council Long Term Plan 2018-28



Regional parks and forests – Ngā papa whenua



TOTAL OF GREATER WELLINGTON EXPENDITURE

2 PERCENT

Fresh water quality and biodiversity

What we do

Greater Wellington manages a network of regional parks and forests for the community's use and enjoyment in accordance with the provisions of the Reserves Act 1977.

- Five regional parks (Queen Elizabeth Park, Battle Hill Farm Forest Park, Belmont Regional Park, Kaitoke Regional Park and East Harbour Regional Park)
- Whitireia Park (under the direction of the Whitireia Park Board).

In addition, we manage the Wainuiomata Recreation Area, the Akatarawa and Pakuratahi forests and the Hutt, Orongorongo and Wainuiomata water collection areas under the provisions of the Local Government Act 2002, Wellington Regional Water Board Act 1972, and Wellington City and Suburban Water Supply Act 1972. The network includes a range of unique natural areas for recreation and conservation and one of our roles is to provide visitor services to these areas, including the provision of a park ranger service to manage the day-to-day operation of each park. Park rangers help ensure security, provide public information, and educate visitors about the natural and cultural features of the parks.

We plan for the future of the network, and provide services and facilities for visitors (such as park rangers, tracks and buildings). We work with mana whenua to support their expression of kaitiakitanga and to tell their history of our parks and forests. We also work with community groups to protect the environment and enhance the recreational opportunities of regional parks.

The work programme that is within this activity group supports our priority area of **fresh water quality and biodiversity.**

Contribution to Community Outcomes

Our parks and forests activities contribute towards achieving an **engaged community** by:



- Providing a range of outdoor recreational opportunities and amenities for the community to enjoy
- Protecting part of the region's unique natural and cultural heritage
- Providing ways for our communities to engage with our parks, rivers and coastal heritage

Our parks and forests activities also contribute towards achieving a **healthy environment** by protecting and restoring waterways and the habitat of native plants and animals.

Our parks and forests activities contribute towards achieving a **strong economy** by:



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 Providing a range of outdoor recreational opportunities and amenities that contribute to quality of life of the region that attracts businesses and residents.



Challenges we face

As outlined in Section 1, Greater Wellington has made assumptions about matters that are likely to impact the region and how we plan our work. Outlined below is how those assumptions may impact this activity group.

Limate change/adverse weather events

Climate change is likely to lead to rising sea levels and more extreme weather events. These will impact on park structures, facilities, vegetation and waterways and lead to increased maintenance work and costs.

In the short term, we are strengthening our facilities to cope with more frequent and extreme weather events. With rising sea levels and the likely coastal erosion, we will need to remove or relocate structures from the coastline.

We may need to do more preventative work to keep areas in good condition. There may also be more reactive work to clean up damage from more adverse weather events. Building structures to withstand more adverse events may increase capital costs; but this initial investment should reduce repair costs in the longer term.

In the longer term (10+ years) we will need to consider moving more essential services and structures inland or away from rivers and streams. We will also need to plan for low lying coastal heritage-sites that are likely to be significantly affected by sea level rise.

Increase in population

The projected increase in population could result in higher demand for our parks and forests. There is likely to be an Increased and sustained demand for higher standard and accessible facilities in parks to cater for growth in the 65+ age bracket. The ways we use our recreational spaces could change to reflect the increased cultural diversity of our population with an increase in the numbers of large groups using picnic sites, organised events and potentially less resistance to commercial services being provided within parks. As our urban areas increase, we may see a greater reliance on open space areas as havens for recreation as housing development intensify.



Advances in technology

The use of new electronic devices and recreational equipment is already apparent and is likely to increase. The ways that people communicate will change - park users are likely to expect a greater range of information from updates on fresh water quality for swimming, timely and accurate flood warnings, and easy smart booking and permits.



Economic growth

One of the key areas of growth for our region is predicted to be tourism. An increased tourist market could affect local demands for services and could affect participation rates (i.e., usage of protected natural areas increases with socio-economic standards). This could increase costs but may also open up opportunities for partnership.

Planning for the future

In 2018 we will be reviewing our Parks Network Plan which provides the overall vision, strategy and objectives for the majority of our parks. This is a major piece of work which involves working with the community and other stakeholders to set out the management framework for the future of our parks.

An important focus over the next 10 years will be our contribution to the development of a network of world class recreational trails in the Wellington region. We want to create a trail network that will contribute to the lifestyle of those of us who live here and regional economic growth through tourism. We are working with the Department of Conservation, the eight councils of our region, our mana whenua partners and other stakeholders to create a single, connected, network of trails for the benefit of residents and visitors. In the longer term (10+ years) we will adapt the trail network as our population and tourism changes.

Strategies and plans that guide our work

The important policies and plans that relate to this activity are:

- Regional Policy Statement 2013 identifies the regionally significant issues for the management of the region's natural and physical resources. It includes objectives relating to landscape, indigenous ecosystems and historic heritage
- Regional plans (Regional Coastal Plan, Regional Fresh water Plan, Regional Soil Plan, Regional Air Quality Management Plan, Regional Plan for Discharges to Land) – these plans identify issues, objectives, policies and methods (including rules) to promote sustainable management of the regions natural resources. They will be replaced by the proposed Natural Resources Plan when it becomes operative
- Regional Parks Network Plan (currently under review) – provides policies and rules for the management of regional parks. These are supported by the Parks, Forests and Reserves Bylaws 2016 which control activities in parks to minimise negative impacts.

Our parks activity

We provide a range of services and facilities to park users and we will work to maintain, and where necessary, enhance these. We are planning for more people doing more activities in parks. We want to ensure that, while parks become more popular, visitors still have an enjoyable time and the environment is protected. The review of our Parks Network Plan will help us achieve this.

In the next five years, we have allocated funding to cater to growth in demand and address gaps in the levels of service that we provide. Initiatives aimed at addressing growth in demand and for a more in-depth visitor experience include further interpretation of heritage features at the Remutaka Rail Trail, and extending the track network at the Wainuiomata historic lower dam that will include the development of a loop track and bridges from the dam to pa harakeke and sledge track.

At Queen Elizabeth Park, we are planning a retreat of road, track and other visitor facilities from the Park shoreline between Raumati South and Paekākāriki. We will also revegetate a 25 hectare section of Queen Elizabeth Park with the support of grant money.

We are also planning to develop additional facilities to support growth in camping demand at Kaitoke Regional Park. We will build a new facility building at the Top Terrace, BBQs, bench/sinks and picnic tables. We will also upgrade the swing bridge to provide for two way pedestrian access, buggies and wheelchairs

Environmental, landscape and heritage management

Our parks contain many important natural and cultural heritage values. In the next three years we will prioritise the management of historic features that are critical for access or are affected by water – such as bridges, dams, culverts, bunkers and road or railway formations in the following areas: Battle Hill, Belmont, Queen Elizabeth Park, Western Depot, Pakuratahi, Akatarawa, Wainuiomata, Kaitoke, Eastern Harbour and Plantation Forest.

As mentioned in our Environment Activity Group, Greater Wellington runs a Key Native Ecosystem (KNE) programme. All our parks and forests have at least one KNE site. These sites are subject to ongoing monitoring and pest control, in order to preserve their significant ecosystem values. This work will continue over the next 10 years. We will continue to work with our community to revegetate or otherwise restore degraded environments to enhance habitat for native plants and animals and strengthen a sense of stewardship of our parks. Our Environmental Enhancement program will continue to provide funding to support community groups to do planting and restoration work across our parks and forests.

Community engagement

We are fortunate to have a lot of great community involvement in our parks. We want to maintain and strengthen this through community and volunteer relationships.

We work with many skilled volunteers who contribute their time to improve our parks and forests. In the short term we will focus on building the capacity of our staff to support volunteer groups and building the capacity of the groups themselves to organise and manage their own activities.

We will continue to provide events to encourage visitors to our parks, work collaboratively with our mana whenua partners in sharing their stories through heritage walks, and provide ranger services to support people's understanding of the parks, their values, and how they can be protected.

We will prioritise clear communications with the community. We have limited resources and need to prioritise what we do. We must be clear about what we are doing and why, and most importantly, we must communicate this to the public.

Changes to what we will deliver

In the next five years, we are proposing to develop additional park facilities across the network to cater for the predicted growth and changes in demand.

What we will deliver - Parks key projects and programmes

	Year 1	Year 2	Year 3	Year 4-10
Development of new facility building on Kaitoke Regional Park Top Terrace		٠		
Upgrade swing bridge over Hutt River at Pakuratahi Forks, Kaitoke Regional Park	•			
Planned retreat of road, track and other visitor facilities from the Queen Elizabeth Park shoreline between Raumati and Paekākāriki.	•		•	٠
Revegetate 25 hectare section of Queen Elizabeth Park	٠	٠	٠	٠
Develop loop track and bridges from Wainuiomata historic lower dam to pa harakeke and sledge track				٠
Conservation work on the Truss Bridge and Ladle Bend Bridge in Pakuratahi Forest	•	•	•	
Conservation Management Plan for Belmont munitions bunkers	٠	•	•	•
Parks Network Plan Review	•	•		

Key assets

We hold a range of assets in this area including park furniture, information displays, utilities such as bridges and bollards, machinery and barriers. You can find more detail about these assets in our Infrastructure Strategy. In general, the park assets that we own are in a good state.

How will we fund this activity?

Parks	10% user charges for organised events, farming and other leases, license fees, other added value services
	90% general rate

For further information see our Revenue and Financing Policy 2018.

Level of convice	Derformance measures		Perf	ormance targets	5	
Level of service	Performance measures	Baseline (2017)	2018/19	2019/20	2020/21	2021-28
	Percentage of the regional population that has visited a regional park in the last 12 months	68%	≥70%	≥70%	≥70%	≥70%
Provide facilities and services that support	Number of visits to a regional park in the last 12 months	New baseline – 1.7 million	Increase on baseline	Increase on baseline	Increase on baseline	Increase on baseline
the community enjoying, valuing and participating in regional parks	Percentage of regional park visitors that are satisfied with their experience	95%	95%	95%	95%	95%
	On-park volunteer hours	15,503 hours pa	15,000	15,000	15,000	15,000
	Average asset condition (1=excellent; 5 = very poor)	2.33 (structures) 2.25 (tracks)	≤3	≤3	≤3	≤3
Protect and care for the environment, landscape and heritage	Restore significant degraded environments	22,000 native trees planted pa	35,000	35,000	35,000	30,000

Measuring Performance

Potential negative effects

Potential negative effects of the activity	How we will address negative effects
 Park development and land management activities, such as construction of assets, farming and pest control could have a negative effect on environmental wellbeing. The control of pest animals and plant in parks and forests uses a range of methods including pesticides. Some people object to any form of pest animal control especially of game animals. Also some object to use of any chemicals to control pest plants and animals. The 1080, in particular, is of significant concern to some sectors of the community while others express unease with the use of glyphosate or brodifacoum among the others. 	 All activities will comply with and demonstrate accepted industry best practice and requirements of the proposed Natural Resources Plan and other relevant rules and legislation. Our pest control activities are led by national best practice. We follow guidelines and rules set by the Environmental Protection Authority and WorkSafe. Our staff are trained experts in pest plant or animal management and certified to use pesticides. If there are cost effective pest control methods that do not involve pesticides, we use them. Also, we use the least toxic chemical that will be effective any given situation.

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	R	Egional Par	KS AND FORI FOR 1	ESTS PROSPE THE YEAR EN	CTIVE FUND DING 30 JUN	ING IMPACT (Je	STATEMENT				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Sources of operating funding											
General rate	6,582	6,069	6,515	6,544	6,758	7,080	7,627	7,457	7,867	8,211	8,675
Targeted rates											
Subsidies and grants for operating purposes			ı	ı	,	ı		ı			ı
Fees, charges, and targeted rates for water supply	137	238	254	272	293	315	321	326	333	339	346
Fines, infringement fees, and other receipts (1)	675	707	708	717	729	742	755	770	805	821	837
Total operating funding	7,394	7,014	7,477	7,533	7,780	8,137	8,703	8,553	9,005	9,371	9,858
Applications of operating funding											
Payments to staff and suppliers	4,722	3,822	3,824	3,836	3,781	3,994	4,146	4,039	4,123	4,204	4,660
Finance costs	430	499	580	638	730	821	910	968	666	1,031	1,079
Internal charges and overheads applied	1,506	1,957	2,035	2,143	2,224	2,298	2,297	2,346	2,402	2,442	2,479
Total applications of operating funding	6,658	6,278	6,439	6,617	6,735	7,113	7,353	7,353	7,524	7,677	8,218
Surplus/(deficit) of operating funding	736	736	1.038	916	1.045	1.024	1.350	1.200	1.481	1.694	1.640

Parks Prospective Funding Impact Statements

	RE	GIONAL PARI	KS AND FORE FOR THE \	ESTS PROSPE	CTIVE FUNDI 3 30 JUNE (C	NG IMPACT (ONT.)	STATEMENT				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Sources of capital funding											
Subsidies and grants for capital expenditure	•										
Increase / (decrease) in debt	2,391	2,804	1,572	1,346	1,781	1,858	962	1,294	672	696	958
Gross proceeds from asset sales	118	832	92	74	104	42	146	41	95	136	77
Total sources of capital funding	2,509	3,636	1,664	1,420	1,885	1,900	1,108	1,335	767	1,105	1,035
Applications of capital funding											
Capital expenditure											
- to meet additional demand						,					ı
- to improve the level of service											ı
- to replace existing assets	3,609	3,980	2,691	2,325	2,919	2,912	2,446	2,522	2,213	2,764	2,639
Increase / (decrease) in investments						,		,			ı
Increase / (decrease) in reserves	(364)	392	11	11	11	12	12	13	35	35	36
Total applications of capital funding	3,245	4,372	2,702	2,336	2,930	2,924	2,458	2,535	2,248	2,799	2,675
Surplus/(deficit) of funding	1	I	ı	I	I	ı	I	I			
Depreciation on Parks assets	2,271	2,298	2,251	2,293	2,278	2,295	2,003	2,090	2, 035	2,082	2,017
(1) – This includes rental income and park activity fees											

For more information on the revenue and financing mechanisms applicable to this group of activities, please refer to GWRC's Revenue and Financing Policy. This statement is not an income statement. It excludes all non cash transactions such as depreciation and valuations.

All figures on this page exclude GST

Greater Wellington Regional Council Long Term Plan 2018-28

		REGIONAL P	arks and F ⁱ For	DRESTS PROS THE YEAR EN	SPECTIVE FUI IDING 30 JUN	VDING INFOR IE	MATION				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Operating funding											
Regional Parks	7,394	7,014	7,477	7,533	7,780	8,137	8,703	8,553	9,005	9,371	9,858
Total operating funding	7,394	7,014	7,477	7,533	7,780	8,137	8,703	8,553	9,005	9,371	9,858
Applications of operating funding											
Regional Parks	6,658	6,278	6,439	6,617	6,735	7,113	7,353	7,353	7,524	7,677	8,218
Total Applications of Operating Funding	6,658	6,278	6,439	6,617	6,735	7,113	7,353	7,353	7,524	7,677	8,218

		REGIONAL P	ARKS AND FO	DRESTS PROS YEAR ENDING	PECTIVE FUN G 30 JUNE (C	JDING INFOR ONT.)	IMATION				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Capital expenditure											
Battle Hill Farm Forest Park	227	260	110	22	224	651		51	86	812	50
Belmont Regional Park	442	613	1,023	1,277	539	865	1,618	625	423	ı	1,013
Queen Elizabeth Park	1,237	006	346	402	633	237	49	371	134		29
Whitireia Park	139	107			36	84	67	84			
Pakuratahi Forest	120	237	164	,	477	176		66	220	1,379	336
Akatarawa Forest	144	200	284		4	89	13	239	283	ı	16
Wainuiomata Recreation Area	39	4	33	ı		173	92	79	50	I	6
Kaitoke Regional Park	32	436	358	85	596	c	34	279		47	380
East Harbour Regional Park	862	780	13	215	10	438	ı	525	644	I	467
Parks Other		130	54	76	56	56	56	65	58	73	81
Capital project expenditure	3,242	3,667	2,385	2,077	2,575	2,772	1,959	2,384	1,898	2,311	2,381
Land and buildings		ı	,			ı		·		ı	
Plant and equipment	50	1	ı	,		ı				ı	
Vehicles	317	313	306	248	344	140	487	138	315	453	258
Total capital expenditure	3,609	3,980	2,691	2,325	2,919	2,912	2,446	2,522	2,213	2,764	2,639

For more information on the revenue and financing mechanisms applicable to this group of activities, please refer to GWRC's Revenue and Financing Policy. This statement is not an income statement. It excludes all non cash transactions such as depreciation and valuations. All figures on this page exclude GST



Water supply – Ngā puna wai



TOTAL OF GREATER WELLINGTON EXPENDITURE **11 PERCENT**

Priority Area

Water supply Regional resilience

What we do

Greater Wellington is responsible for collecting, treating and distributing safe and healthy drinking water to Wellington, Hutt, Upper Hutt and Porirua cities. This work is carried out for Greater Wellington by Wellington Water, a joint council-owned water management company. City and district councils are responsible for the distribution of water to households and businesses through their own networks.

The water supply to the four cities in the Wellington regional metropolitan area comes from three sources:

- The headwaters of the Hutt River (abstracted from an intake at Kaitoke weir, treated at Te Marua Water Treatment Plant and stored in the Mackaskill Lakes)
- The Wainuiomata and Orongorongo catchments (abstracted from river intakes and treated at the Wainuiomata Water Treatment Plant)
- The Hutt Valley artesian system (primarily extracted and treated at the Waterloo Water Treatment Plant at the Waterloo Water Treatment Plant – there is a standby treatment plant at Gear Island, Petone).

Providing the bulk water supply to the cities involves managing an extensive network of infrastructure: large diameter pipelines, pump stations, reservoirs, treatment plants and other assets. It involves maintaining a continuous supply of safe and high quality drinking water, secure and reliable water sources and that our fresh water is sustainable – that we are planning for future demand while meeting our environmental and health and safety standards.

The public water supply protects the community from water borne illnesses, provides fire-fighting capability, and supports industrial and residential development and the local economy. Having a secure water supply is also a basic requirement for a town or city.

An important part of our work is promoting water conservation and sustainability. We're also working with local councils and communities to help make sure people have access to emergency water in the event of a major earthquake.

The water supply group of activities contributes to the **water supply** and **regional resilience** priority areas.

Contribution to our Community Outcomes

Water supply activities contribute towards a RC resilient community by preparing the system to cope with emergencies such as earthquakes and the long-term impacts of climate change.

They contribute towards achieving a strong **economy** by providing high-quality bulkwate SE infrastructure that ensures there is sufficient drinking-water available to sustain and grow our population and support our economy.

They contribute towards achieving a **healthy** HE **environment** by protecting our communities gainst water borne diseases, by encouraging people to use water wisely to reduce the environmental

impacts of water supply and protecting current and future water catchments.

Challenges we face

As outlined in Section 1, Greater Wellington has made assumptions about matters that are likely to impact the region and how we plan our work. Outlined below is how those assumptions may impact this activity group.



Climate Change

Climate change and sea level rise are expected to have long term adverse effects on the water supply network. Mitigation of the long term effects of climate change will be provided by reviewing the science information as it becomes available and adjusting the timing and investment in future source upgrades and demand management as required.

Population growth

The projected population increases for our region will also put demand on our water network. Capital works are not the only way of managing the demand for waters. Non asset solutions (such as water metering) may provide more practical and cost effective ways of addressing these needs. Wellington Water considers both on the same basis of cost and effectiveness over time when making investment decisions.



Technology

New technologies and use of digital information will influence the way councils, businesses and individuals operate in the future, and have implications for assets and services. There is a clear shift in water supply industry to alternative, new and more efficient technologies and system components like sensor technology, automation and control devices and data analytics software.

Planning for the future

Future proofing the region's water supply in the immediate term and for future generations is one of our key challenges and priorities. A resilient water supply system must be robust and ensure sufficient, safe drinking-water is available to meet current and future demand, and increasing drought and rainfall patterns.

Some of our infrastructure networks are old and less able to withstand shocks. The bulk water network has limited redundancy built into it and as a result a major break in one part of the network is likely to affect other parts of the network. Also, the network crosses numerous seismic faults from catchments to tap and should a significant event occur, it could take up to 100 days to repair. We have limited local water storage to provide access to drinking water in the immediate aftermath of a major event.

Wellington Water has developed a five council approach to water supply resilience. The long-term goal is to provide 80 percent of our customers, within 30 days of a reasonable seismic event, at least 80 percent of their water needs. The strategy for achieving this goal is called 'Towards 80-30-80'. A Community Infrastructure Resilience (CIR) initiative has also been developed that will provide a limited water supply to meet the humanitarian needs of people from day eight after a major earthquake through to reinstatement of the water supply network.

To help us reach our long term goals, the priorities for water management include:

- Water supply resilience agreeing levels of service for water supply following a major natural event and developing investment plans for councils. This includes developing an alternative water supply to Wellington's eastern, central and southern suburbs
- Developing a regional asset management plan for water infrastructure
- A coordinated and consistent approach to community education programmes about the three waters (waste water, drinking water and stormwater).

Strategies and plans that guide our work

The important policies and plans that relate to this group of activities are:

- Regional Fresh water Plan 1999 identifies issues, objectives, policies and methods for the sustainable management of fresh water resources in the region including rivers, lakes, streams, ponds, aquifers and artificial water courses (until the proposed Natural Resources Plan is adopted)
- Proposed Natural Resources Plan is a combined regional air, land, water and coastal plan. It is the primary document through which Greater Wellington will meet its obligations under the Resource Management Act (1991)
- Regional Policy Statement 2013 identifies regionally significant issues around the management of the region's natural and physical resources, including fresh water
- Regional Service Plan developed by Wellington Water to ensure that the necessary water supply assets are in place and maintained to provide stated levels of service at a reasonable cost, and in a sustainable and environmentally responsible way
- National Policy Statement for Freshwater Management 2014
- Drinking-water Standards for New Zealand
- Infrastructure Strategy.

Our water supply activity

Water safety

Our key activities for the next 10 years are maintaining/renewing water supply assets at our Waterloo, Te Marua, Gear Island and Wainuiomata water treatment plants.

We aim to complete our Water Safety Plan in 2018/19 and this may indicate the need for further improvements in our infrastructure.

We have already addressed some water safety concerns within the system and will build on this during the life of this plan. In the aftermath of the inquiry in Havelock North, we reviewed our treatment processes and enhancements to rectify any issues that could have the potential to cause harm. We have also identifyied potential water quality issues with our treatment plants and have invested in new treatment solutions in our Te Marua plant after identifying potentially toxic algae growing in the Macaskill lakes. We also completed a major upgrade of the Waterloo treatment plant after bacteria were detected in the aquifer beneath Lower Hutt. The Waterloo upgrade included installation of ultraviolet light disinfection and establishment of permanent chlorination of the Lower Hutt supply. .

Since bacteria were detected in the Lower Hutt aquifer in December 2016, new information has become available that has challenged our previous assumptions about the security of the artesian supply. New thinking will be needed to ensure an appropriate regulatory framework is in place to protect the resource into the future.

Network performance

We aim to maintain current levels of service by continuing our maintenance and renewal programme. However, the ageing of our infrastructure is a significant issue. Eleven aquifer wells at Waterloo and Gear Island are reaching the end of their economic lives. Investigations are in progress to ensure replacement occurs at the right time to maximise the economic life while maintaining the risk of failure within acceptable levels- see the Infrastructure Strategy for more details.

We are also experiencing a capacity limitation at the Te Marua Water Treatment Plant. A preliminary assessment has indicated that the plant capacity may be less than previously thought. An investigation has been initiated which will help determine if this can be resolved operationally, or if capital improvements will need to be considered in future years.

Regional resilience

An alternative water source for Wellington city is a key part of our resilience strategy. In the previous Long Term Plan 2015-2025, we anticipated commencing construction of the cross harbour pipeline in 2027/28 as an option for providing a more secure water source for Wellington city. This approach was reviewed based on advice that harbour bores may offer an alternative solution.

Exploratory harbour bores in Wellington Harbour are now helping us understand the geology of the Waiwhetu Aquifer. This information will determine whether it is viable to extract water to supply Wellington city with an alternative water supply for daily water needs as well as post major shocks to the network. A decision is expected in 2018/19 on whether the best option is to build a cross harbour pipeline or to build harbour bores.

Our budget currently provides for the cross harbour pipeline at an estimated cost of \$116 million rather than the harbour bores (cost estimate of \$60- \$70 million).

We plan to improve the seismic performance of the Ngauranga and Wainuiomata water reservoirs over the next two years. This is a critical piece of work which will make the reservoirs more resilient in the event of further major earthquakes.

Improving resilience by providing capacity to cope with future population growth and business growth is the aim of the Prince of Wales/Omāroro Reservoir project. The project aims to provide drinking water to approximately 70,000 residents, commercial businesses, and the Wellington Regional Hospital. This project is primarily funded by Wellington City Council but Greater Wellington will also make a contribution via construction of the inlet pipeline and through rationalisation of assets owned by the two councils. Further information can be found in our Infrastructure Strategy in Section 4.

Changes to what we will deliver

We are planning a major renewal over the next one to three years for the Kaitoke main at Silversteam Bridge. The purpose of this is to replace pipe that is in poor condition and provide for a strengthened main from Te Marua that will reduce the number of days Porirua could be out of water after an earthquake.

What we will deliver - Water supply key projects and programmes

	Year 1	Year 2	Year 3	Year 4-10
Securing Wellington's water source – cross harbour pipeline or harbour bores	٠	٠	٠	•
Renewal of water treatment assets (Waterloo, Te Marua, Gear Island, Wainuiomata,)	٠	٠	٠	٠
Replace Kaitoke main on Silverstream bridge	٠	•	•	
Porirua Branch extend to Conclusion Street	٠	•		
Strategic stores – provide alternative locations for key equipment that can help restore water service after a seismic event	٠	٠		
Ngauranga and Wainuiomata reservoir seismic strengthening	٠	•		

Key assets

We hold a range of assets in the Water supply activity area that enable us to deliver our priority outcomes and our projects. Most of our assets in this area are water treatment plants, storage lakes, pipelines,, tunnels and pump stations. You can find more detail about these assets in our Infrastructure Strategy in Section 4.

How will we fund this activity?

The costs of operating the water supply network are apportioned to the city's served through a water levy, based on the individual cities portion of the total water delivered (as set out in the Wellington Regional Water Board Act 1972). The water levy is on-charged through local council rates to ratepayers in each of the four cities.

More information can be found in our Revenue and Financing Policy 2018.

Measuring performance

	Deuferman		Perfo	ormance targe	ts	
Level of service	measures	Baseline (2017)	2018/19	2019/20	2020/21	2021-28
	Number of waterborne disease outbreaks ⁽¹²⁾	0	0	0	0	0
	Customer satisfaction: Number of taste complaints related to bulk water supply	5	<5	<5	<5	<5
	Number of complaints from Territorial Authorities (TAs) on drinking water clarity	0	<5	<5	<5	<5
	Number of complaints from TAs on drinking water odour	0	<5	<5	<5	<5
Provide water that is safe and pleasant	Number of complaints from TAs on drinking water pressure or flow	1	<5	<5	<5	<5
	Number of complaints per 1000 connections (end consumers) to the bulk water supply system ^{(13) (14)}	0.04	<0.2	<0.2	<0.2	<0.2
	Safety of drinking water: ⁽¹⁵⁾ Compliance with part 4 of the drinking-water standards (bacteria compliance criteria)	Yes	Yes	Yes	Yes	Yes
	Compliance with part 5 of the drinking-water standards (protozoal compliance criteria)	Yes	Yes	Yes	Yes	Yes

(12) The outcome of the Havelock North Inquiry into water supply and safety is likely to result in changes to reporting requirements
(13) Non-Financial Performance Measures Rules 2013, Water supply measure [4(a-e)]
(14) Using the Water NZ survey data for the number of end consumers provided with drinking water (145,224).

(15) Non-financial Performance Measures Rules 2013, Water supply measure [1(a)-(b)]

	Deuteumanaa		Perfo	rmance targe	ts	
Level of service	measures	Baseline (2017)	2018/19	2019/20	2020/21	2021-28
	Number of events in the bulk water supply preventing the continuous supply of drinking water to consumers	0	0	0	0	0
	Sufficient water is available to meet normal demand except in a drought with a severity of greater than or equal to 1 in 50 years ⁽¹⁶⁾ ⁽¹⁷⁾	0.4%	<2%	<2%	<2%	<2%
	Attendance for urgent call-outs: ⁽¹⁸⁾ Time from local authority receiving notification to service personnel reaching site	No events occurred	<60 minutes	<60 minutes	<60 minutes	<60 minutes
Provide a continuous and	Time from local authority receiving notification to service personnel confirming resolution	No events occurred	<4 hours	<4 hours	<4 hours	<4 hours
supply	Attendance for non- urgent call-outs: ⁽¹⁹⁾ Time from local authority receiving notification to service personnel reaching site	35 minutes	<36 hours	<36 hours	<36 hours	<36 hours
	Time from local authority receiving notification to service personnel confirming resolution	30 minutes	<15days	<15days	<15days	<15days
	Average drinking water consumption per resident per day within the TA districts supplied by the bulk water system ⁽²⁰⁾	351 L/p/d	<374 L/p/d	<374 L/p/d	<374 L/p/d	<374 L/p/d
	Maintenance of the reticulation network Percentage of real water loss from the networked reticulation system ^{(21) (22)}	0.7%	+/- 2%	+/- 2%	+/- 2%	+/- 2%

(16) Normal demand includes routine hosing restrictions

(17) Assessed using a probability model of annual water supply shortfall

 $\textbf{(18)} \ \ \text{Non-Financial Performance Measures Rules 2013, Water supply measure } [3(a)-(b)]$

(19) Non-Financial Performance Measures Rules 2013, Water supply measure [3(c)-(d)]

(20) Non-Financial Performance Measures Rules 2013, [5] Greater Wellington cannot technically report due to the wording of the measure, but will report the average of all residents' consumption for the district it supplies with bulk water.

(21) Non-Financial Performance Measures Rules 2013, Water supply measure [2]

(22) All connections are metered, production flows are subtracted from supply flows and weekly mass balance checks carried out to identify losses. Differences in metering accuracy account for the loss or gain of water supplied rather than leakage or unauthorised use

	Daufaumanaa		Perfo	ormance Targe	ts	
Level of Service	Measures	Baseline (2017)	2018/19	2019/20	2020/21	2021-28
Provide hulk water	Full compliance with resource consents (23)	New measure	Yes	Yes	Yes	Yes
in compliance with all resource consents and	Annual review of relevant environmental legislation	New measure	Yes	Yes	Yes	Yes
environmental regulations	HSNO location and stationary container test certificates are current	New measure	Yes	Yes	Yes	Yes

(23) Full compliance means no notices/convictions (abatement notices, infringement notices, enforcement orders, or convictions).

Potential negative effects

Potential negative effects of the activity	How we will address negative effects
Water supply infrastructure for the collection, storage, treatment and distribution of water can have a negative effect on environmental wellbeing through water abstraction and the use of electricity for treating and pump water. A new supply could also result in an increase in these effects.	The environmental impacts of existing water supply activities are identified and very closely monitored through resource consents and an ISO 14001 accredited environmental management system. We are reducing our impacts by continuing to use electricity and chemicals more efficiently and by encouraging people to use water wisely.

Marel Supply Flosperlive Fl	unung II	IIPact Ju	מרבווובוור	0							
		WATER	R SUPPLY PRO FOR T	SPECTIVE FU	INDING IMPA DING 30 JUN	.ct stateme e	ИТ				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Sources of operating funding											
General rate	1	I	ı	ı	ı	ı	ı	ı	ı	ı	I
Targeted rate			ı			ı	ı	ı	ı	ı	I
Subsidies and grants for operating purposes											
Fees, charges, and targeted rates for water supply											
Fines, infringement fees, and other receipts ⁽¹⁾	32,170	34,308	35,572	37,451	40,223	43,447	46,642	50,020	50,907	51,567	52,092
Total operating funding	32,170	34,308	35,572	37,451	40,223	43,447	46,642	50,020	50,907	51,567	52,092
Applications of operating funding											
Payments to staff and suppliers	19,820	19,985	20,293	20,467	20,824	21,349	21,580	23,148	23,768	24,139	23,969
Finance costs	4,417	4,957	5,194	5,782	7,423	9,372	11,374	12,256	11,904	11,648	11,609
Internal charges and overheads applied	1,333	2,008	2,088	2,198	2,281	2,357	2,357	2,407	2,464	2,505	2,543
Total applications of operating funding	25,570	26,950	27,575	28,447	30,528	33,078	35,311	37,811	38,136	38,292	38,121
Surplus/(deficit) of operating funding	6,600	7,358	7,997	9,004	9,695	10,369	11,331	12,209	12,771	13,275	13,971
Sources of capital funding											
Subsidies and grants for capital expenditure									ı		,
Increase / (decrease) in debt	9,421	10,535	10,294	17,994	43,245	35,382	36,082	(1, 285)	(3,270)	(2,353)	643
Gross proceeds from asset sales		ı	ı	ı		ı	ı	ı	·	·	I
Total sources of capital funding	9,421	10,535	10,294	17,994	43,245	35,382	36,082	(1,285)	(3,270)	(2,353)	643

Water supply Prospective Funding Impact Statements
		WATER	SUPPLY PRC FOR THE	SPECTIVE FU YEAR ENDING	1 NDING IMP	(CT STATEME ONT.)	INT				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Applications of capital funding											
Capital expenditure											
- to meet additional demand		150	1,533				ı		ı		
- to improve the level of service	8,892	11,183	7,900	3,666	44,054	36,441	37,335	744	1,141	2,310	2,891
- to replace existing assets	4,026	3,312	5,299	19,349	4,489	4,548	4,965	4,739	2,630	2,578	5,187
Increase / (decrease) in investments	3,180	3,257	3,559	3,983	4,397	4,762	5,113	5,441	5,730	6,034	6,536
Increase / (decrease) in reserves	(27)	(6)	I	I	1	ı	ı	1	ı	ı	
Total applications of capital funding	16,021	17,893	18,291	26,998	52,940	45,751	47,413	10,924	9,501	10,922	14,614
Surplus/(deficit) of funding	ı			ı	ı			ı			
Water supply levy	30,863	33,069	34,230	35,892	38,305	41,214	44,126	47,240	47,906	48,336	48,427
Depreciation on Water Supply assets	10,514	15,675	15,951	16,200	16,670	17,638	16,722	17,434	17,405	17,277	17,170
(1) – This includes the Water supply levy charged to Well	lington, Upper Hutt	, Hutt and Porirua	city councils								

This statement is not an income statement. It excludes all non cash transactions such as depreciation and valuations.

For more information on the revenue and financing mechanisms applicable to this group of activities, please refer to GWRC's Revenue and Financing Policy. All figures on this page exclude GST

		.WM	TER SUPPLY F	PROSPECTIVE	EUNDING IN DING 30 JUN	UFORMATION IE					
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Operating funding											
Water Supply	32,170	34,308	35,572	37,451	40,223	43,447	46,642	50,020	50,907	51,567	52,092
Total operating funding	32,170	34,308	35,572	37,451	40,223	43,447	46,642	50,020	50,907	51,567	52,092
Applications of operating funding											
Water Supply	25,570	26,950	27,575	28,447	30,528	33,078	35,311	37,811	38, 136	38,292	38,121
Total applications of operating funding	25,570	26,950	27,575	28,447	30,528	33,078	35,311	37,811	38,136	38,292	38,121
Capital expenditure											
Water sources		130	20	21	5,935		335	I			1
Water treatment plants	2,839	3,475	1,492	1,650	1,035	1,059	1,084	1,384	1,375	1,167	1,198
Pipelines	995	1,365	4,865	17,088	502	317	357	355	434	265	358
Pump stations	40	40	245	251	2,178	2,228	2,279	2,334	399	1,973	2,459
Reservoirs	ı	ı	ı	I	ı	ı	I	I		ı	I
Monitoring and control	350	137	184	188	192	197	201	206	211	217	222
Seismic protection	ı	I	I	I	ı	ı	I	I	ı	ı	ı
Other	8,639	9,443	7,869	3,760	38,642	37,128	37,982	1,144	1, 290	1,203	3,775
Capital project expenditure	12,863	14,590	14,675	22,958	48,484	40,929	42,238	5,423	3,709	4,825	8,012
Land and buildings	1	ı	ı	I		ı	ı	I			I
Plant and equipment	55	55	57	57	59	60	62	60	62	63	66
Vehicles		ı	ı	ı	ı	ı	ı	ı	ı	·	I
Total capital expenditure	12,918	14,645	14,732	23,015	48,543	40,989	42,300	5,483	3,771	4,888	8,078

For more information on the revenue and financing mechanisms applicable to this group of activities, please refer to GWRC's Revenue and Financing Policy. This statement is not an income statement. It excludes all non cash transactions such as depreciation and valuations. All figures on this page exclude GST

Greater Wellington Regional Council Long Term Plan 2018-28

INVESTING IN RESILIENT COMMUNITIES

NO REAL

RESENT STOP BANK CREST

1858 1898 FLOODS

1939 FL00D

JANUARY 2005 FLOOD

27-28 OC TOBER 1998 FLOOD

20-21 OCTOBER 1998 FL00D

Flood protection and control works – Te tiaki me te arahi waipuke



TOTAL OF GREATER WELLINGTON EXPENDITURE

6 PERCENT

Priority Area

Regional resilience Fresh water quality and biodiversity

The flood protection and control work activity includes three activities:

- Understanding flood risk
- Maintaining flood protection and control works
- Improving flood security

What we do

Greater Wellington is responsible for managing flood risk from the region's rivers and streams. We identify the likelihood of a river flooding our houses, businesses and farms, develop floodplain management plans, provide a free advice and consultation service, maintain and build flood protection infrastructure, work with the community to improve the environment and recreational opportunities and provide flood warnings. We do this by talking with communities about how best to reduce the risk from flood and erosion while ensuring that the health and wellbeing of our rivers is maintained.

We build, manage and maintain flood protection assets along 800km of the major rivers across the region.

Managing the risk of flooding in communities across the region is a key element in being a resilient region. Making sure our communities, visitors and families avoid flood risks and are safe when flooding occurs is a key concern for us all.

Our region has a large number of rivers and streams. They are places of cultural importance to mana whenua and are the places where we swim, walk, fish and play. Our waterways are a key part of the natural environment and add to our sense of wellbeing. In times of flood, however, our rivers can be hazardous for the communities on the floodplains of these rivers. Floods are one of Wellington's most significant hazards and have the potential to cause both economic and social hardship. There have been many recent examples of flooding affecting our communities – they can have a significant impact on our communities and our families and impact on the local, regional and national economy. As global weather patterns change and become more unpredictable, it is likely that flood events will increase in frequency and scale.

The flood protection and control work group of activities contributes to the **fresh water quality and biodiversity and regional resilience** priority area.

Contribution to our Community Outcomes

Greater Wellington is responsible for ensuring that our infrastructure will be resilient in a significant flood event and our communities are prepared.

Flood protection and control works activities primarily contribute towards achieving **a resilient community** by:



- Reducing the risk of flooding in the region now and in the future by promoting the avoidance of inappropriate development in our most flood prone areas
- Informing communities about the risk and consequences of flood events in their area, including floods which exceed the capacity of agreed levels of flood protection
- Maintaining existing flood protection works and replacing, upgrading and building new flood protection works

Our flood protection and control works also contribute towards achieving:

A **strong economy** by minimising the impact of flooding on activities that contribute to the regional economy



A **healthy environment** by enhancing the environment in our rivers and along our river corridors



An **engaged community** by enabling people to enjoy recreational use of river corridors and to participate in community activities that make use of the river space

Challenges we face

As outlined in Section 1, Greater Wellington has made assumptions about matters that are likely to impact the region and how we plan our work. Outlined below is how those assumptions may impact this activity group.

Population growth/changes in land use

Population growth and our region's changing demographic profile will have significant implications for how we manage flood events in our region. Increases in urban growth and Intensification could lead to increased demands for infill and brownfield development resulting in increased pressure for flood protection in flood prone areas to offset the increased consequence when floods occur.

Alternatively, more people could seek a more rural lifestyle which could increase pressure on our flood management systems.

There are approximately 25,000 km of rivers and streams in the Wellington region of which only 800km have schemes managed by Greater Wellington. Population growth, development and the region's demographic profile will put pressure on Greater Wellington to manage greater extents of the region's rivers and streams.



Our region is predicted to experience more frequent and intense rainfall events and higher river flows as a result of climate change. Major flooding events have the potential to cause millions of dollars of damage to rural and urban communities.

We plan for climate change by:

- Assessing the degree of flood hazard risk
- Determining the appropriate responses.

We identify and consider the potential for climate change in the determination of all new flood protection services as part of our Floodplain Management Plans.

Whenever we review a Floodplain Management Plan we will identify any changes in knowledge of climate change effects and re-assess the capacity of services to meet defined service levels. We will work with territorial authorities on planning controls (e.g. setbacks, minimum floor levels etc.) and target investments to risk. In some circumstances managed retreat or other planned non-structural measures may be the most appropriate response.



Strengthening partnerships with iwi and hapū

Greater Wellington recognises mana whenua are kaitiaki of the waterways in their rohe. We will continue to work with Iwi and hapū through our flood protection programmes including:

- Ngāti Kahungunu ki Wairarapa and Rangitāne o Wairarapa in the Ruamahanga catchment
- Ngā Hapū ō Ōtaki implementing the Integrated Catchment Management Plan for the Ōtaki river
- Te Ātiawa ki Whakarongotai a Cultural Health Monitoring Framework pilot and the monitoring work associated with Jim Cook Park stopbank construction
- Te Rūnanga o Toa Rangatira Inc and the Port Nicholson Block Settlement Trust - the RiverLink project (Te Awa Kairangi/Hutt River).

We are also developing relationship arrangements with the Wairarapa post settlement governance entities: Ngāti Kahungunu ki Wairarapa Tāmaki Nui-ā-Rua and the Rangitāne Tū Mai Rā Trust.

Planning for the future

Historically we have taken a strong engineering focus to flood management – diverting rivers, and draining and building on floodplains. Over recent decades our thinking has shifted and we now take a wider view to assessing and responding to flood risks: natural solutions are considered, affected communities are closely involved and we manage the environmental effects of flood protection works to deliver holistic protection for communities.

Looking forward, we want to take this approach even further by working with iwi, communities and other councils to achieve greater social, economic and environmental outcomes from flood protection work. We will continue to look for innovative approaches to flood hazard management. As noted above, in addition to the more standard flood protection methods, such as building stopbanks and protecting against erosion, we continue to develop more sustainable flood protection methods. Four core principles form the basis of Greater Wellington's approach to floodplain management planning:

- Avoid building in high flood hazard areas: we accept that many of our communities are built on flood plains for historical reasons, but now we know that it is safer and more sustainable to build new homes and form communities away from flood hazards. In some circumstances managed retreat or other planned non-structural measures may be the most appropriate response to relocate vulnerable homes, businesses or communities away from the flooding hazards.
- Only considering new flood protection infrastructure where existing development is at risk: this connects with our first principle. We will focus on protecting our existing communities and will develop new flood protection infrastructure when required, as we are required to do by statute. However, we consider that new developments should be built in low hazard areas, so that we do not have to commit future generations to maintaining expensive infrastructure.
- Establishing standards of flood protection relative to the degree of risk: we need to ensure that the level of flood protection we provide is commensurate with the degree of risk. RiverLink, for example, meets this criterion because of the scale of the flood risk in the Hutt Valley, the potential level of damage that could be caused and the implications this would have for the region. Building stop banks for a smaller, localised stream would not be in line with the level of risk.
- Plan for climate change in assessing the degree of flood risk and in determining an appropriate response: we plan for climate change in all our flood protection planning so that landowners can have greater awareness as to potential implications of climate change on their property.

Strategies and plans that guide our work

The important policies and plans that relate to the flood protection group of activities are:

- Floodplain Management Plans (FMPs) these set • out how we will manage flood risk on individual rivers and floodplains. Greater Wellington currently has six Floodplain Management Plans (these include the Hutt, Ōtaki and Waikanae River FMPs, the Pinehaven Stream FMP, the Porirua Stream Management Plan and the Waitohu Stream Study) and a further two in development. Our river and stream management schemes established by catchment boards prior to the formation of Greater Wellington fulfil some of the functions of floodplain management plans and address flooding and erosion issues for those rivers where a floodplain management plan has yet to be developed
- Regional Policy Statement 2013 includes objectives and policies relating to flood hazards
- Council policies and principles including appropriate allowances for climate change, guidelines on the preparation of FMP's, avoiding development in areas at high risk of flooding and standards for flood protection.

Understanding flood risk

It is important that our communities understand the risk and consequences of flood events in their area. This helps inform debate about how best to manage flood risk, the appropriate level of protection from flooding and erosion hazards, and how we can maintain the health and integrity of the region's rivers.

We prepare flood hazard assessments and flood hazard maps. These identify the likelihood of flooding or erosion from a river affecting houses, businesses and farms in the affected community. This is a twoway process involving consultation with, as well as the ongoing provision of information and advice to, the affected community.

In areas of greatest risk, we work with communities to develop floodplain management plans. Floodplain management plans set out how the community will manage flood risk on individual rivers and flood plains. The floodplain management planning process involves:

- Preparing flood hazard assessments
- Consulting with affected communities on ways to manage risk
- Agreeing appropriate levels of flood protection from avoidance to mitigation of the hazards.

We also work with territorial authorities to promote the avoidance of development in our most floodprone areas.

Changes to what we will deliver

There are no significant changes to levels of service.

Maintaining flood protection and control works

We manage and maintain flood protection assets along 800km of rivers across the region. Our communities rely on the flood infrastructure on their waterways, whether they are stop banks or barrage gates. We continue to maintain our infrastructure, make repairs and minor upgrades when required, repair flood damage, safeguard our systems, ensure we comply with our legal requirements, and manage the effects of our flood protection infrastructure on our environment. Specific projects within the 10 years of this Plan include:

- Pinehaven and Porirua Stream enhancements
- Trentham to Whakaitiki improvements
- Improvements/monitoring of 15 River Management Schemes across the region.

In the next three years we will be applying for resource consents to undertake routine maintenance activities in the region. As part of this we will be implementing our Code of Practice to improve sustainable river management. The Code will guide all river management activities undertaken by Greater Wellington for the purposes of flood and erosion protection across our region, irrespective of funding, location or whether an activity requires resource consent. The Code applies to permitted activities as well as those activities which need resource consent.

The Code aims to achieve:

- Greater awareness of the effect of river management decisions and activities on a river's natural character and other significant river values, at both broad (whole of river) scale and detailed (reach or specific site) scale
- Greater consistency of river management practice across the rivers that Greater Wellington administers and manages.

Changes to what we will deliver

There are no significant changes to the levels of service.

Improving flood security

We reduce the risk of flooding through the implementation of floodplain management plans. We are currently implementing plans for the Otaki, Waikanae and Hutt rivers, Pinehaven Stream and the Lower Wairarapa Development Scheme. Over the course of this Plan, we will also begin implementation of floodplain management plans currently being developed for Te Kauru (Upper Wairarapa Valley) and the Waiohine River (Greytown area).

RiverLink

RiverLink is a transformational project for Hutt City. It combines outcomes delivered by three organisations – Greater Wellington, Hutt City Council and the New Zealand Transport Agency – to reimagine Hutt City as a vibrant, connected and resilient city. Greater Wellington is contributing to the project by improving the flood protection and flood resilience of Hutt City. RiverLink demonstrates what can be achieved through multi-agency collaboration by pooling expertise and resources to deliver a project greater than the sum of its parts, to address flood risk, climate change, housing, access, safety and urban decline.

The flood protection component of the RiverLink project funded by Greater Wellington will involve retreating and upgrading stop banks to improve the level of protection and strengthen the flood protection infrastructure. This additional space will allow for safer passage of flood flows during storm events, create more space for environment and recreation outcomes and improve the resilience of Hutt City.

While there are no significant changes to this project, the overall costs have changed. This reflects the increased cost of property due to changes within the property market. The total cost of RiverLink to Greater Wellington is now \$125 million (up from \$94 million in the 2017/18 budgets). This will be funded through a loan and repaid through rates and collected rental revenue from property acquired for the project up until the point buildings are removed to enable construction. Opportunities for the beneficial use of surplus land are being considered including options for sale at the conclusion of construction. This will include consideration of offsetting project costs or returning additional value to ratepayers.

The timing and overall affordability of this project will be further considered through the Hutt Valley Flood Management Subcommittee and changes may be the subject of further consultation.

Partnering with our communities

We work with our communities to ensure our flood protection infrastructure enhances the recreational and amenity use of our rivers. This includes:

- Working with local community groups to plant river berms with native trees
- Committing up to five percent of our capital expenditure to environmental enhancement projects
- Funding science monitoring and improved knowledge of river systems
- Maintaining and improving tracks and trails associated with flood protection systems to provide for recreational activities.

Projects we will be delivering in the next three years include:

- Te Awa Kairangi/Hutt River Environmental Strategy implementation
- Waikanae River Environmental Strategy implementation
- Otaki River Environmental Strategy Implementation
- Barrage Gates fish movement survey
- Waiwhetu Stream Environmental Enhancement
- Environmental enhancements across the managed areas of rivers and streams in Wairarapa.

Changes to what we will deliver

The RiverLink project provides a significant shift in levels of services from a 1-in-65 year return period flood event to a 1-in-440 year return period flood event including effects of climate change.

What we will deliver - Flood protection key projects and programmes

	Year 1	Year 2	Year 3	Year 4-10
RiverLink – Hutt river flood protection	•	•	•	•
Hazard investigations and development of Floodplain Management Plans for Waiohine and Te Kāuru	٠	•	٠	
Mangataere Flood Hazard Assessment		•	•	•
Otaki Floodplain Management Plan review	•	•		
Implementing the outcomes of the Flood Management Plans for the Ōtaki, Waikanae, Hutt Rivers, the Pinehaven Stream and the Lower Wairarapa Development Scheme Improvements	•	•	•	•
Implement outcomes of the Hutt, Waikanae, Ōtaki and Pinehaven Environmental Strategies and supporting community groups to enhance the river environments	٠	•	٠	•

Key assets

We hold assets in the Flood Protection and Control group that enable us to deliver our priority outcomes and our projects. Most of our assets in this area are stopbanks and other flood protection structures. You can find more detail about these assets in our Infrastructure Strategy in Section 4.

We hold assets worth \$340 million.

How will we fund this activity?

Understanding flood risk	100% general rate User charges applied to territorial authorities and others wherever practicable
Maintaining flood protection and control works	Up to 50% general rate
Improving flood security	The balance of costs (i.e. to 100%) met via targeted rates on the local authority area or via scheme rates or direct contributions from both the direct beneficiaries on the floodplain and the beneficiaries in the economic catchment area

For further information see our Revenue and Financing Policy 2018.

Upgrading infrastructure may require the purchase of property ahead of the start of physical works. Where this occurs the value is maximised where possible via rental income until such time as the property is required. For RiverLink this reduces the rating impact of the property purchase until approximately 2025.

Measuring Performance

Flood protection and control works

	Deuteuro es Messures		Perf	ormance Targets		
Level of Service	Performance Measures	Baseline (2017)	2018/19	2019/20	2020/21	2021-28
Provide the	Major flood protection and control works are maintained, repaired and renewed to the key standards defined in relevant planning documents ^{(26) (27)}	Yes	Yes	Yes	Yes	Yes
flood protection agreed with communities	Percentage of Floodplain Management Plans (FMP) recommended	Hutt 33% Ōtaki 47% Waikanae	Hutt 33% Ōtaki 47% Waikanae	Hutt 33% Ōtaki 47% Waikanae	Hutt 33% Ōtaki 50% Waikanae	Hutt 61% Ōtaki 70% Waikanae
	improvements implemented	45% Pinehaven 0%	56% Pinehaven 0%	56% Pinehaven 33%	56% Pinehaven 66%	56% Pinehaven 100%
	Percentage completion of Lower Wairarapa Valley Development Scheme work programme (2007/2021)	88%	94%	99%	100%	New work programme development
Provide	Percentage of identified vulnerable floodplains with a FMP in place	24%	29%	35%	41%	47%
information and understanding of flood risk in the community ⁽²⁸⁾	Percentage of identified vulnerable floodplains with flood hazard mapping available via online portal	72%	78%	83%	83%	83%

(26) Non-Financial Performance Measures Rules 2013, Flood protection and control works measure [1]

(27) Detailed reporting of maintenance, repair and renewal or upgrade works is included in annual asset management and implementation reports to Greater Wellington Environment Committee

(28) These measures are based on a list of vulnerable floodplains, and targets for FMPs/mapping.

Potential negative effects

Potential negative effects of the activity	How we will address negative effects
There is the potential for flood protection projects and ongoing operations and maintenance activities to have a negative effect on the river ecology and natural character of the river and therefore our natural environment.	Greater Wellington seeks to minimise the impact of flood protection projects, maintenance and operations on the environment by using a range of methods such as undertaking riparian planting and integrated land use and water management planning, and working within our Code of Practice.

Greater Wellington Regional Council Long Term Plan 2018-28

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Flood protection and conti	rol works	Prospec	tive Fund	ding Imp	act State	ements					
		FLOOD P	ROTECTION F	PROSPECTIVE	EUNDING IN EING 30 JUN	APACT STATE	MENT				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
General rate	10,679	11,512	12,031	12,851	13,898	14,724	15,588	16,667	17,251	18,349	18,977
Targeted rate	7,310	7,969	8,476	9,143	9,700	11,145	12,080	12,718	13,467	14,253	15,082
Subsidies and grants for operating purposes		ı			ı	I	ı	ı	ı	ı	
Fees, charges, and targeted rates for water supply						1	·				
Fines, infringement fees, and other receipts $^{(1)}$	3,163	4,564	4,954	5,254	5,531	5,308	5,472	5,620	3,725	2,440	2,533
Total operating funding	21,152	24,045	25,461	27,248	29,129	31,177	33,140	35,005	34,443	35,042	36,592
Applications of operating funding											
Payments to staff and suppliers	9,505	9,974	10,249	10,511	10,956	10,939	11,118	11,556	10,948	10,809	10,838
Finance costs	4,385	5,342	5,760	6,353	7,105	7,743	8,597	9,282	9,739	10,224	10,571
Internal charges and overheads applied	1,939	3,301	3,432	3,615	3,751	3,875	3,875	3,957	4,051	4,118	4,181
Total applications of operating funding	15,829	18,617	19,441	20,479	21,812	22,557	23,590	24,795	24,738	25,151	25,590
Surplus/(deficit) of operating funding	5,323	5,428	6,020	6,769	7,317	8,620	9,550	10,210	9,705	9,891	11,002
Sources of capital funding											
Subsidies and grants for capital expenditure	ı	ı		ı	ı	I	ı	ı	·	ı	
Increase / (decrease) in debt	16,643	13,163	15,690	13,224	11,600	13,782	13,534	13,248	12,262	11,088	2,862
Gross proceeds from asset sales	78	117	76	105	68	25	142	83	1,240	2,303	1,570
Total sources of capital funding	16,721	13,280	15,766	13,329	11,668	13,807	13,676	13,331	13,502	13,391	4,432

		FLOOD P	ROTECTION P FOR THE Y	ROSPECTIVE	FUNDING IN 3 30 JUNE (C	IPACT STATEI ONT.)	MENT				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Applications of capital funding											
Capital expenditure											
- to meet additional demand		ı				,		ı			ı
- to improve the level of service	21,079	17,570	20,740	18,945	18,016	20,802	21,182	21,604	20,145	18,967	11,922
- to replace existing assets	302	393	266	308	82	130	468	297	1,391	2,594	1,749
Increase / (decrease) in investments	346	359	386	423	479	521	560	593	620	647	698
Increase / (decrease) in reserves	317	386	394	422	408	974	1,016	1,047	1,051	1,074	1,065
Total applications of capital funding	22,044	18,708	21,786	20,098	18,985	22,427	23,226	23,541	23,207	23,282	15,434
Surplus/(deficit) of funding	ı	·	I	I	I	ı	ı	ı	I	1	
Depreciation on assets		1,328	1,526	1,785	2,004	2,221	2,411	2,572	2,807	3,025	3,179
(1) – This includes revenue from the sales of shingle, rent	al income and dire	ct contributions fr	om territorial auth	orities for flood pr	otection work						

For more information on the revenue and financing mechanisms applicable to this group of activities, please refer to GWRC's Revenue and Financing Policy. All figures on this page exclude GST This statement is not an income statement. It excludes all non cash transactions such as depreciation and valuations.

Greater Wellington Regional Council Long Term Plan 2018-28

		FLOOD	PROTECTION FOR 1	V PROSPECTI THE YEAR ENI	ve funding Ding 30 Jun	i INFORMATI IE	NC				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Operating funding											
Understanding flood risk	2,815	2,846	2,746	2,862	3,290	3,338	3,255	3,474	3,405	3,667	3,597
Maintaining flood protection and control works	9,639	9,267	9,402	9,623	9,943	10,021	10,330	10,756	10,753	11,013	11,255
Improving flood security	8,698	11,932	13,313	14,763	15,896	17,818	19,555	20,775	20, 285	20,362	21,740
Total operating funding	21,152	24,045	25,461	27,248	29,129	31,177	33,140	35,005	34,443	35,042	36,592
Applications of operating funding											
Understanding flood risk	2,473	2,438	2,226	2,264	2,638	2,605	2,466	2,630	2,531	2,740	2,659
Maintaining flood protection and control works	8,060	7,683	7,845	8,028	8,323	8,323	8,324	8,794	8,825	8,895	9,203
Improving flood security	5,296	8,496	9,370	10,187	10,851	11,629	12,800	13,371	13,382	13,516	13,728
Total applications of operating funding	15,829	18,617	19,441	20,479	21,812	22,557	23,590	24,795	24,738	25,151	25,590
Capital expenditure											
Hutt river improvements	16,595	12,566	14,662	13,934	13,160	9,432	9,982	11,774	11,956	12,015	9,050
Otaki and Waikanae river improvements	964	1,687	2, 195	1,931	1,537	1,767	1,537	2,370	1,769	2,004	2,128
Wairarapa rivers improvements	2,308	1,483	2,507	1,682	1,633	8,282	8,531	6,317	6,475	6,203	840
Other flood protection	1,212	1,834	1,376	1,398	1,577	1,321	1,132	1,143	1,118	911	1,387
Capital project expenditure	21,079	17,570	20,740	18,945	17,907	20,802	21,182	21,604	21,318	21,133	13,405
Land and buildings		ı		1	ı	ı	1	1			ı
Plant and equipment	123	133	12	19	13	96	142	21	21	14	15
Vehicles	179	260	254	289	178	34	326	276	197	414	251
Total capital expenditure	21,381	17,963	21,006	19,253	18,098	20,932	21,650	21,901	21,536	21,561	13,671
This statement is not an income stateme	ent. It exclude	es all non cas	h transaction	ns such as de	preciation a	nd valuation	S.				

For more information on the revenue and financing mechanisms applicable to this group of activities, please refer to GWRC's Revenue and Financing Policy. All figures on this page exclude GST

Greater Wellington Regional Council Long Term Plan 2018-28

INVESTING IN OUR CONNECTED REGION

Greater WELLINGTON REGIONAL COUNCIL TE Pane Matua Taiao

Metlink public transport – Ngā Waka Tūmatanui



TOTAL OF GREATER WELLINGTON EXPENDITURE

65 PERCENT

Priority Area

Public transport

The Metlink Public Transport group includes three activities:

- Metlink network planning and operations – an integrated and accessible network
- Rail operations and asset management

 a high capacity rail system
- Bus and ferry operations and asset management – frequent, reliable bus and ferry services

What we do

Greater Wellington manages the Metlink public transport network and delivers public transport services to the regional population. Passengers, ratepayers and road users all help fund it via fares, rates and a subsidy from the NZ Transport Agency.

We deliver services across an integrated network of bus routes, five passenger rail lines and the harbour ferry service. We are also responsible for developing and maintaining public transport infrastructure including railway stations, train maintenance depot, bus and ferry shelters, signs, and Park & Ride facilities.

Our Metlink public transport network is fundamental to keeping people and goods moving in our region.

Our Metlink public transport group of activities contributes to the **Public transport** priority area.

Contribution to our Community Outcomes

Our Metlink Public Transport group of activities contributes towards the following Community Outcomes:

A **connected community** by providing a mass transit system that moves people efficiently and relieves congestion from our roads at peak times and by providing an essential service for people for whom, whether by choice or circumstance, private vehicle travel is not an option

A **strong economy** by enhancing the efficient movement of people within the region

SE

A **healthy environment** by supporting the reduction of vehicle emissions from private vehicles.



Challenges we face

There are both opportunities and challenges for the Metlink Public Transport Group over the next 10 years.

Greater focus on the customer experience in all aspects of public transport

To maintain and improve already high-levels of customer satisfaction means continual improvement of services, based on the dynamic needs of communities and our customers. Digital technology is increasing expectations of customer service in terms of responsiveness and ease. A specific focus on customer experience is now required to anticipate these needs and maintain high-levels of service that ensure accessibility for all members of the community and encourage adoption of public transport.

Attracting more people on to public transport, particularly along key transport corridors

Everyone benefits from good public transport, including car drivers and businesses. Within the life of this plan we will see some major roading projects coming on-line providing improved options for carbased travel. Increasing congestion will be an ongoing risk to the region if too many people choose to travel by car. Our challenge is to ensure the quality, capacity, reliability and frequency of public transport is such that it becomes the preferred choice for commuters, particularly along our key transport corridors.

Providing accessible and affordable public transport for future populations

Not everyone who uses public transport has a choice. Within our region there are many people who cannot drive or do not own a car, or find it difficult to pay for travel due to life factors and affordability issues such as costs of living. For wider social and economic benefits to be realised, public transport needs to work for all aspects of society, including young, elderly, students, people with disabilities and those with low incomes. It also needs to take account of the changing travel patterns – for example we are now seeing more students commuting into Wellington city rather than living near the university as accommodation becomes less affordable. Understanding the changing needs of customers is of critical importance for the region into the future.



Emerging technologies and future mobility

The emergence of new technologies presents both challenges and opportunities for public transport. New payment systems and digital 'mobility as a service' apps are changing customers' expectations for public transport. Connected and autonomous vehicles and car sharing schemes could result in significant changes to the role of public transport and demand for car parking spaces in cities and urban areas.



Improving resilience and responding to climate change

The region's geography and susceptibility to the effects of climate change provides some unique challenges for the Metlink public transport network. Many of our core public transport routes are in areas of seismic risk and with climate change we expect to see more frequent and severe weather events affecting coastal and low lying rail and road links. Our asset plan for rail has a huge focus on improving resilience in response to this issue. For bus, our move to a new contracting environment paves the way for a modern low emission fleet, including with new electric buses to significantly reduce greenhouse gas emissions and air pollution.

Resilience and performance of rail services is also affected in some parts of our network by the age and condition of the underlying rail network. This is a particular issue for the Wairarapa line, which affects the punctuality and reliability of services. We have worked with KiwiRail to develop a business case to upgrade ageing rail network infrastructure, with a primary focus on the Wairarapa line.

Making it affordable

An ongoing challenge in managing our public transport network is balancing the demands for increased levels of service with affordability for users and ratepayers. We do this by constantly monitoring the cost of our operations and programme of improvements with patronage and fare revenue.

Planning for the future

We want to become a smarter, cleaner region by encouraging more people to travel by bus, train and ferry, especially at peak times. So we're making extensive improvements to the Metlink public transport network to deliver faster, affordable, more frequent and reliable services. It's all about providing a better public transport experience to make greater Wellington even greater.

The Wellington region has a strong culture of public transport use. Nearly 38 million passenger trips were taken on the Metlink public transport network during 2016/17 – the highest per capita public transport use in the country.

Our high use of public transport hasn't happened by chance – but has been a result of planning and investment over a long period. For the last decade our focus for investment has been on rail, which required huge catch-up investment in rolling stock and infrastructure. Our current programme is focused on the consolidation of rail services, transformation of bus services (including a new network for Wellington city, a modern sustainable bus fleet and new double decker electric buses) and improving the information and services available for customers.

Our plan for the future is to continue to invest in, and transform, all aspects of the Metlink public transport network. We want to make Metlink even better so it remains the preferred choice of travel for people, particularly in peak travel times where the benefits to the wider network and economy are more pronounced.

We want to do this by:

- Growing public transport patronage by continually improving the Metlink public transport network so that public transport services:
 - Go where people want to go, at the times they want to travel
 - Provide competitive journey times
 - Provide value for money
 - Are easy to understand and use
 - Are safe, comfortable, and reliable
 - Provide flexibility, allowing people to change their plans
- Maintaining a public transport network that includes core, local, and targeted services
- Increasing the accessibility of public transport by providing information, facilities, and services that are increasing available to all members of the public.

Strategies and plans that guide our work

The important policies and plans that relate to this group of activities are:

- Regional Land Transport Plan the strategic document that guides the development of the region's transport system, including public transport
- Regional Public Transport Plan sets the direction for public transport in the region, including funding and delivery.

Metlink network planning and operations – an integrated and accessible network

The Metlink public transport network in the Wellington region is a network of bus, train and harbour ferry services. The network is organised around a layered hierarchy of services – core routes, local routes and targeted services. Core routes form the network's backbone, linking high demand with high capacity, direct services. Local routes include all-day medium to low frequency services connecting centres within suburban areas – they complement the core network by collecting and distributing passengers from and to it. Targeted services provide services to areas where there is not enough demand to justify core or local routes, or where normal services cannot meet peak demand.

To ensure that the network operates efficiently and effectively it must be planned in an integrated way. Services also need to be reviewed from time to time to ensure they continue to meet the needs of the community and provide value for money for users, ratepayers and taxpayers.

The Regional Public Transport Plan (Public Transport Plan) is our key planning document – it describes the network and sets out policies and actions to ensure Wellington's public transport network remains the best in New Zealand. The current Public Transport Plan was adopted in 2014 and has been varied three times to ensure it remains relevant. New thinking is emerging in some areas (e.g. mass transit as part of Let's Get Wellington Moving) which may require more fundamental changes. A comprehensive review is planned in the first year of this Long Term Planfollowing the endorsement of the new Regional Land Transport Plan 2018 and roll-out of the new bus operating environment.

The primary touch-point for most customers on the Metlink public transport network is via fares and ticketing. The extension of Snapper in July 2018 across the entire bus fleet will mark a significant improvement for ticketing on bus services. To prepare the way, a new Metlink fare schedule will come into effect in July 2018, following a major review over the last year. The new fares have been simplified and applied consistently across the network. This includes cheaper travel for school children, a new 25 percent off-peak discount for all adults, and a new concessions policy providing cheaper fares for full-time students, and people with disabilities who use a Total Mobility card. The extension of Snapper is an interim solution and is a prelude to another significant change in the next few years – a single ticketing system for travel on all public transport in the region, whether by bus, train or ferry. Greater Wellington is working closely with the NZ Transport Agency and other regions as part of a national approach to integrated ticketing. Full implementation into the Metlink public transport network is expected within the life of this Long Term Plan.

Greater Wellington operates a Total Mobility scheme to assist eligible people with a permanent disability or impairment to access appropriate transport to enhance their community participation. This assistance is provided in the form of subsidised door to door transport services wherever scheme transport providers operate. There are 9,917 registered users in the Wellington region and 282,083 trips were made using the scheme in 2016/17.

Keeping the customer connected – improving the customer experience

The provision of information about public transport services forms an important part of our work. We provide information through a variety of channels, including printed timetables, signage, real time information signs, maps, guides, leaflets, social media, the Metlink service centre and a comprehensive Metlink website and App with timetable and fare information and a journey planner. Our digital information is also provided through third-party passenger information providers such as Google Maps and Embark.

Creating connected and consistent customer experience across modes, and building a direct relationship with customers, is a key focus area for the life of this plan. With new technologies driving change, customers are becoming increasingly interested in making informed choices about the best way to travel, delivered through digital platforms combining travel choice and consolidating this with other transit related transactions such as payment. Being an active participant in this area will help to ensure the relevance of public transport is maintained and enhanced into the future.

Consolidating and growing the Metlink brand is a key focus over the next few years. The move to the new public transport operating model opens up significant new opportunities to use the Metlink brand to improve customer experience and build a direct relationship with customers that grows patronage. Our aim is for Metlink to become a recognised and supported brand.

Changes to what we deliver

There are no significant changes to current levels of service. We anticipate that the Let's Get Wellington Moving programme, jointly run with Wellington City Council and the NZ Transport Agency looking at the longer-term future transport needs of Wellington City, will propose some significant changes. These changes will be addressed when known and we will consult at that time. In this plan we have made allowance for some funding to provide the parts for which Greater Wellington has responsibility (responsibility for local roads sits with Wellington City Council and state highways sits with the NZ Transport Agency) – depending on the final preferred option this may need to change.

Rail operations – a high capacity rail system

Rail services provide core routes forming much of the network's backbone. They link areas of high demand with high capacity and offer direct services with extensive operating hours.

Metlink's role in the provision of rail services can be divided into two parts – operations and assets. We determine the timetable and procure and fund a rail operator (Transdev Wellington Ltd) to provide services. We own the fleet of electric Matangi trains that service the metropolitan area and also the carriages that service Wairarapa. We also own all railway stations (except Wellington Railway Station), the train maintenance depot and all over bridges and underpasses. In addition, we manage all of the Park & Ride carparks. Metlink manages these assets in accordance with its Asset Management Plan, to ensure that they are maintained, upgraded and replaced in a timely manner that ensures that the agreed level of service can be maintained.

Our focus for rail over the life of this plan is threefold: firstly, to continually improve levels of service for customers; secondly, to unlock capacity to cater for ongoing and expected high levels of growth; and thirdly, to improve resilience of the underlying network.

We will do this by building on existing investment and consolidating the state of assets which we have control of. This includes an on-going programme of improvements to stations and platforms to improve levels of service for customers and to improve resilience of our network. Combined with a new integrated ticketing system, we anticipate these changes will help to ensure Metlink's metro rail services offer a reliable, customer friendly and safe service for years to come.

Unlocking capacity and improving resilience is also about capitalising on the success of previous rail investments and upgrading the network to provide sufficient capacity to manage existing and future growth. A big focus over the early period of this plan is to work with KiwiRail and the Crown to secure much needed funding on the underlying track asset so we have a fit for purpose rail network. We are also looking to secure funding to improve peak service frequency and capacity, cater for forecasted peak passenger demand through to 2030, and ensure an ongoing balanced mode share between road and rail during peak periods.

Changes to what we deliver

We are changing the level of service provided by the Wairarapa and Capital Connection rolling stock.

Initial funding has been included for trains to replace Greater Wellington's ageing Wairarapa fleet and KiwiRail's Capital Connection fleets with modern long distance commuter trains. These units will have the ability to run on electricity in the metro area and switch to diesel propulsion outside of the electrified network.

A new fleet of modern, lower emission, dual powered (electro-diesel) trains (15 four-car units) that can serve both lines will mean increased flexibility and capacity across the network and allow for extra train services from both Masterton and Palmerston North. This new fleet would enable four morning and four afternoon services between Masterton and Wellington and two morning and two afternoon services on the Capital Connection line.

We are progressing with a business case to evaluate this option and other potential options and as part of this process will need to confirm the level and timing of government funding available.

We have assumed that central government will fund 90 percent of the new trains. This is the same proportion as the funding that was allocated for the first fleet of Matangi train units introduced in 2011. However, the funding provided for the purchase of additional Matangi train units was closer to 50 percent. The new Government has announced a review of the Government Policy Statement on Land Transport, which sets out its approach to transport policy and funding, and intends to review rail funding. While there is still uncertainty about this assumption, it is clear the Government intends to give greater priority to public transport, rail in particular.

While more regional funding may increase certainty, the overall affordability for ratepayers and investment in other priority areas must be balanced. We also have to consider that the Capital Connection train is currently owned and run by KiwiRail.

We have allowed for \$33 million in capital expenditure over two years starting in 2022/23. This equates to 10 percent of the estimated total cost of \$330 million (subject to further refinement as we progress the plan). This will be a loan, paid back over 30 years with an annual rates cost of \$2.16 million. This is equivalent to an average of \$6.40 (incl. GST) per ratepayer per year.

Bus and ferry operations – frequent, reliable bus and ferry services

Bus and ferry services are key elements of the Metlink public transport system – covering core routes, local routes and targeted services to areas or link destinations where there is low demand.

Metlink's role in the provision of bus and ferry services can be divided into two parts – operations and assets. We own and/or fund bus infrastructure such as bus stop signs, bus shelters and the Lambton Bus Interchange. We also procure and fund bus and ferry operations in accordance with the timetable and service levels set out in the Public Transport Plan.

The Public Transport Plan sets the context for a major programme of transformation to the way we operate and manage the bus network – with some big changes coming into effect during the life of this Plan. Our focus for the next few years will be on putting in place the new Wellington City bus network (in mid-July 2018), bedding in the new bus operating model and improving levels of service across the network, with a focus on further enhancements to the Wellington city network.

Changes to what we deliver

Our long term projects present a transformation of all aspects of the network.

What we will deliver – Metlink public transport key projects and programmes

	Year 1	Year 2	Year 3	Year 4-10
An integrated and accessible network				
Establish and promote Metlink as the brand for an integrated public transport service	٠	٠	٠	٠
Provide digital information that keeps pace with customers' expectations of ease and responsiveness	٠	٠	٠	•
A single national integrated fares and ticketing system – agree, procure, develop and implement with national and regional stakeholders	•	•	•	•
Let's Get Wellington Moving – Implement results of agreed recommendations				•
A high capacity rail system				
Catch up renewals to achieve a fit for purpose and more resilient Wellington metro rail track	•	•	•	•
Unlocking capacity – rail network infrastructure improvements to remove constraints on increasing capacity at peak times	٠	٠	٠	٠
Unlocking capacity – provide additional peak period capacity to meet ongoing passenger growth	•	•	٠	•
New rolling stock to service the Wairarapa Line and Capital connection				
Develop and agree approach including funding	•	•		
Undertake procurement process		٠	٠	•
Roll-out of new stock				•
Install new, maintain and upgrade Metlink's station and network assets to meet service demands	•	•	•	•
Frequent, reliable bus and ferry services				
Put in place the new Wellington city bus network and bed in the new bus operating model	٠			
Review and improve levels of service across the bus network, with a focus on further enhancements to the Wellington city network	٠	٠	٠	•
Install new, maintain and upgrade Metlink's assets to meet service demands	•	•	•	•

Key assets

Metlink public transport assets make up a good proportion of our assets with a replacement value of \$636.9 million. You can find more detail about these assets in our Infrastructure Strategy in Section 4.

How will we fund this activity?

	35-50% fares and other user charges
Public transport	25-35% targeted rates
	25-35% subsidies

For further information see our Revenue and Financing Policy 2018.

Measuring performance

Metlink public transport

Lovel of convice	Derformance measures		Per	formance targets	5	
Level of service	renomiance measures	Baseline (2017)	2018/19	2019/20	2020/21	2021-28
Transform and	Percentage of rail users who are satisfied with their trip overall ⁽²⁹⁾	93.0%	>92.0%	>92.0%	>92.0%	>92.0%
elevate customer experience and use of Metlink passenger services	Percentage of bus users who are satisfied with their trip overall ⁽³⁰⁾	92.0%	>92.0%	>92.0%	>92.0%	>92.0%
	Annual public transport boardings per capita	74.5	75.6	75.7	76.9	80.5
	Percentage of	Bus 99.1%	99.5%	99.5%	99.5%	99.5%
Deliver services in accordance	delivered (reliability)	Rail 97.2 %	99.5%	99.5%	99.5%	99.5%
with the published	Percentage of	Bus N/A ⁽³¹⁾	90%	95%	95%	95%
timetable	scheduled services on- time (punctuality - to five minutes)	Rail 88%	90%	91%	92%	95%
Provide accessible and accurate information on Metlink services to the public	Percentage of users who are satisfied with the provision of Metlink information	67%	≥70%	≥71%	≥72%	≥75%
Maintain and	Percentage of passengers who are satisfied with overall station/stop/wharf	91%	≥91%	≥92%	≥92%	≥94%
and condition of Metlink assets	Average condition rating of all bus shelters maintained by Metlink (1 = very good and 5 = very poor)	1.8	Improvement on previous year	Improvement on previous year	Improvement on previous year	lmprovement on previous year
Provide a subsidised taxi service to customers unable to use buses or trains	Percentage of users who are satisfied with the overall service of the scheme ⁽³²⁾	99%	≥99%	≥99%	≥99%	≥99%

(29) Satisfied = score of 6-10 on a scale of 0-10

(30) Satisfied = score of 6-10 on a scale of 0-10

(31) The punctuality measure has changed from the previous Long Term Plan, moving from 10 to 5 minutes punctuality with the new bus contracting environment.
 (32) Satisfied = score of 3-5 on a scale of 1-5 – In 2017/18 the satisfaction scale changed from 1-10 points to 1-5 points

Potential negative effects

Potential negative effects of the activity

There is the potential for public transport projects and ongoing operations to have negative effects on environmental wellbeing, although public transport has an overall positive effect on CO2 emissions in the region.

How we will address negative effects

We will seek to minimise the impact of public transport projects and operations, for example, by requiring bus services to be provided by modern fuel-efficient vehicles, and appropriately managing the storm water run-off from sealed car-parks.

	spective	: runaing	Impact	statemer	SIL						
		Metlink pue	3LIC TRANSPO FOR 1)RT PROSPEC THE YEAR EN	TIVE FUNDIN DING 30 JUN	ig impact st E	ATEMENT				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Sources of operating funding											
General rate											
Targeted rate	64,656	68,110	70,193	78,511	85,537	92,653	96,393	99,885	101,389	106,534	106,534
Subsidies and grants for operating purposes	87,685	79,575	75,095	76,830	86,143	86,997	89,726	93,009	95,004	93, 195	103,915
Fees, charges, and targeted rates for water supply ⁽¹⁾	48,063	94,120	97,447	99,738	100,050	103,029	106,200	109,470	112,951	124,391	120,368
Fines, infringement fees, and other receipts ⁽²⁾	2,273	7,613	6,194	2,759	2,785	2,856	2,908	2,969	3,012	3,068	3,151
Total operating funding	202,677	249,418	248,929	257,838	274,515	285,535	295,227	305,333	312,356	327,188	333,968
Applications of operating funding											
Payments to staff and suppliers	172,792	221,826	214,601	215,856	232,400	235,392	242,230	249,914	255,289	268,619	275,702
Finance costs	13,562	14,265	14,323	14,731	15,486	16,098	17,190	17,442	16,952	16,398	15,687
Internal charges and overheads applied	5,853	9,567	9,949	10,477	10,871	11,233	11,231	11,470	11,743	11,937	12,119
Total applications of operating funding	192,207	245,658	238,873	241,064	258,757	262,723	270,651	278,826	283,984	296,954	303,508
Net surplus/(deficit) of operating funding	10,470	3,760	10,056	16,774	15,758	22,812	24,576	26,507	28,372	30,234	30,460
Sources of capital funding											
Subsidies and grants for capital expenditure	6,921	23,980	29,782	30,947	15,065	12, 186	10,130	10,507	13,849	19,445	18,258
Increase / (decrease) in debt ³⁾	15,777	46,650	14,587	11,443	6,558	16,671	13,453	(4,696)	(3, 132)	(13,863)	(15,450)
Gross proceeds from asset sales	10	10		ı	10	11	·	ı	11	11	·
Total sources of capital funding	22,708	70,640	44,369	42,390	21,633	28,868	23,583	5,811	10,728	5,593	2,808

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		METLINK PUB	LIC TRANSPC FOR THE	IRT PROSPEC	TIVE FUNDIN 3 30 JUNE (C	g impact si ont.)	IATEMENT				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Applications of Capital Funding											
Capital expenditure											
- to meet additional demand	5,976	4,117			12,810	13, 104	13,629	13,956	14,305	241	247
- to improve the level of service	11,664	7,398	32,885	28,708	3,832	2, 151	2,312	3,249	2,310	1,287	2,026
- to replace existing assets ⁽⁴⁾	1,720	34,522	3,100	3,648	4,890	2,710	2,291	2,059	8,018	11,233	12,726
Increase / (decrease) in investments ⁽³⁾	17,990	30,748	20,660	26,651	19,068	33,541	29,742	12,864	14,277	22,874	18,071
Increase / (decrease) in reserves	(4,172)	(2,385)	(2, 220)	157	(3,209)	174	185	190	190	192	198
Total applications of capital funding	33,178	74,400	54,425	59,164	37,391	51,680	48,159	32,318	39,100	35,827	33,268
Surplus/(deficit) of funding			ı	I	1			ı		ı	
Depreciation on Public Transport assets	1,662	4,615	6,064	9,389	12,572	14,020	14,576	15,420	16,500	18,211	19,430
 Variance mainly due to LTP assumption of gross bus This includes revenue from Greater Wellington Rail L - UNRC fully funds some public transport improveme that will be owned by the 100% council subsidiary G - CWRC (as graphot) has enhered into an arrangement 	s contracts startin Limited for service ent expenditure at 5reater Wellington	g 2017 which will no s:s provided to mana the time the exper Rail Limited it is tre Sus, and Mana to pr	w start in 2018 age the rail assets ise is incurred, and eated as an investr	recovers a share c nent in this subsidi vith double decker	of the debt servicin iary." * huses. This has fo	g costs from the N rms a service con	√Z Transport Agenc cession arrangeme	.y. Where this expe	enditure is for rail r AS 32 In 2018/19 1	olling stock and inf	rastructure on asset-
double decker buses are initially recognised at fairving recognised which is accounted for using the amortis	/alue of \$31 million sed cost model le	n and subsequently ading to finance exi	/ measured in acco	ordance with PBE IF Irs.	SAS 32. They are o	depreciated on a s	straight-line basis c	wer an useful life o	of 20 years. \$31 mil	lion of financial lial	oility is also

This statement is not an income statement. It excludes all non cash transactions such as depreciation and valuations

For more information on the revenue and financing mechanisms applicable to this group of activities, please refer to GWRC's Revenue and Financing Policy. All figures on this page exclude GST

		METLINK P	UBLIC TRANS FOR 1	PORT PROSP	ECTIVE FUNI DING 30 JUN	DING INFORM E	1 ATION				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Operating funding											
Metlink network planning and operations	17,638	25,542	24,940	24,019	28,971	30,802	32,529	35,199	36,982	38,892	40,837
Rail operations and asset management	123,761	127,275	128,635	132,399	141,158	143,260	146,394	149,926	150,382	153,733	159,522
Bus and ferry operations and asset management	61,278	96,601	95,354	101,420	104,386	111,473	116,304	120,208	124,992	134,563	133,609
Total operating funding	202,677	249,418	248,929	257,838	274,515	285,535	295,227	305,333	312,356	327,188	333,968
Applications of operating funding											
Metlink network planning and operations	13,412	26,591	24,525	21,710	25,675	26,784	27,874	29,794	30,573	31,522	32,728
Rail operations and asset management	109,466	120,479	119,703	121,251	128,636	128,024	130,225	132,810	132,687	135,380	140,712
Bus and ferry operations and asset management	69,329	98,588	94,645	98,103	104,446	107,915	112,552	116,222	120,724	130,052	130,068
Total applications of operating funding (excluding improvements)	192,207	245,658	238,873	241,064	258,757	262,723	270,651	278,826	283,984	296,954	303,508
Investments in Greater Wellington Rail Limited $^{(\mathrm{)}}$											
Rail operations and asset management	17,990	30,748	20,660	26,651	19,068	33, 541	29,742	12,864	14,277	22,874	18,071
Total investment expenditure	17,990	30,748	20,660	26,651	19,068	33,541	29,742	12,864	14,277	22,874	18,071

		METLINK P	UBLIC TRANS FOR THE	SPORT PROSP	ECTIVE FUNE 3 30 JUNE (C	DING INFORN ONT.)	AATION				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Capital expenditure											
New public transport shelters, signage, pedestrian facilities, land and systems	19,320	45,997	35,985	32,356	21,491	17,923	18,232	19,264	24,588	12,716	14,999
Total capital project expenditure	19,320	45,997	35,985	32,356	21,491	17,923	18,232	19,264	24,588	12,716	14,999
Land and buildings	•										
Plant and equipment									1	8	,
Vehicles	40	40	ı	1	41	42			45	45	I
Total capital expenditure	19,360	46,037	35,985	32,356	21,532	17,965	18,232	19,264	24,633	12,761	14,999
Total Investment in Public Transport Infrastructure	37,350	76,825	56,645	59,007	40,600	51,506	47,974	32,128	38,910	35,635	33,070
(1) – GWRC fully funds some public transport improveme	nt expenditure at t	che time the expens	se is incurred, and	recovers a share o	f the debt servicin	g costs from the N	Z Transport Agenc	*			

Where this expenditure is for rail rolling stock and infrastructure that will be owned by the 100% council subsidiary Greater Wellington Rail Limited it is treated as an investment in this subsidiary.

For more information on the revenue and financing mechanisms applicable to this group of activities, please refer to GWRC's Revenue and Financing Policy. All figures on this page exclude GST This statement is not an income statement. It excludes all non cash transactions such as depreciation and valuations.

INVESTING IN THE FUTURE OF OUR REGION

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Regional leadership – Ngā kaihautū o te rohe



TOTAL OF GREATER WELLINGTON EXPENDITURE

6 PERCENT

Priority Area

Water supply Public transport Resilient region Fresh water quality and biodiversity

The Regional Leadership Group includes the following activities:

- Wellington regional strategy
- Emergency management
- Democratic services
- Relationships with Māori and mana whenua
- Regional transport planning and programmes
- Regional initiatives

What we do

Greater Wellington coordinates regional leadership activities in partnership with other local authorities on a range of issues and priorities across the region. Our long term approach is to develop and maintain strong relationships and collaborative programmes at a regional level to assist with achieving integrated decision making across the region. We involve mana whenua, key stakeholders, central government and the community in these processes and in our decision making. We also lead or are involved in a number of regional initiatives that provide significant benefits to the regional community in a number of areas including economic development, emergency management, regional resilience, transport planning and healthy homes.

Many of the issues facing our communities are complex and require regional whole of system approaches if we are to find meaningful solutions. Leadership is essential for our region if we are to build on our existing strengths and develop new initiatives that will enable us to continue to deliver on our key outcomes. Connectedness is also key – building partnerships and relationships with a wide array of organisations to ensure that a regional perspective is considered alongside local and nationwide considerations.

The Regional leadership group of activities contributes to the **water supply, public transport, resilient region and fresh water quality and biodiversity** priority areas.

Contribution to our Community Outcomes

Our regional leadership activities contribute towards achieving:

A **strong economy** by developing region- wide strategies and funding programmes to help the region realise its economic potential

A **resilient community** by enabling the region to be ready to respond to and recover from major emergency events, such as earthquakes or flood events

A **connected community** by developing plans to meet the region's transport needs, informing the community about the range of transport options available, and supporting the availability of ultra-fast broadband

A **healthy environment** by taking a

leadership role in other regionally significant issues such as the climate change strategy and reducing carbon emissions HE

EC

An **engaged community** by providing

opportunities for mana whenua and residents to engage in our activities and participate in decision making.

Challenges we face

There are a number of opportunities and challenges in the Regional Leadership group of activities.

Many of the issues and opportunities have a regional context and require a coordinated approach across the region, building partnerships with a wide range of organisations.

Demographic change

Our population is expected to increase and become more culturally diverse. This growth will be characterised by an increase in people aged over 65 as well as a corresponding increase in life expectancy. This is likely to result in greater pressure on our transport planning, on the uptake of active transport and the associated infrastructure such as cycle lanes and the movement of people around the region.

1 Adverse events/climate change

We have experienced some shocks in the last few years (e.g. earthquakes and flooding within our region) which have highlighted the need to address the robustness of our infrastructure and its ability to recover quickly from emergency situations. We are meeting these challenges by working with the territorial authorities as well as utility companies in our region to better understand the interdependencies of our key networks and identify the key regional priorities for investment.

Economic growth

The combined impact of tourism and employment growth in our regional economy is likely to put increased pressure on our infrastructure, regional transport and planning services as well as emergency management services. Building world class infrastructure, including improving our connections within the region, to the rest of the country and internationally, are a vital component of improving our competitiveness. Planning and delivering the region's major transport projects requires a coordinated and integrated approach across a number of different organisations as well as navigation of complex consenting processes. We also need to diversify our economy to ensure it is more resilient, including growing businesses in emerging new sectors. Maintaining and improving our quality of life is also an important component of attracting businesses and talented people to our region.



Governance/Partnering

Partnerships with mana whenua will be increasingly significant for Greater Wellington as Te Tiriti o Waitangi/Treaty of Waitangi settlements are finalised in the region. New statutory requirements may also raise issues that need to be considered such as Mana Whakahono-ā-rohe (Resource Legislative Amendment Act 2016). The Ara Tahi/Council relationship will continue to develop during this 10 year period so that mana whenua have the opportunity to be involved in the policy and operational areas of concern to them.

Greater Wellington seeks to build its own capability and capacity to work more effectively with Māori through a staff and elected member training programme, Te Ara Matua.

Planning for the future

Our objective is to develop and maintain strong relationships and collaborative programmes at both a local, regional and national level. Greater Wellington is well placed to do this because:

- We have a broad mandate to respond to community needs and consider social, economic, cultural and environmental wellbeing across the region.
- We connect the national to the local: we connect the central government picture with community concerns
- We coordinate with others in the region to reduce duplication and improve results for our communities
- We partner with the six mana whenua groups across the region
- We incorporate the views of mātāwaka (Māori who reside in Wellington and come from tribes outside of the Wellington region)
- We co-operate with other local authorities on a range of issues, including economic development, transport, and civil defence and emergency management
- We connect with business and community groups across the region
- We lead regional initiatives that provide significant benefits to the regional community.
- We take a leadership role on significant issues such as climate change.

Strategies and plans that guide our work

The important policies and plans that relate to this group of activities are:

- The Wellington Regional Strategy an economic growth strategy which contains a range of initiatives to realise our economic potential
- Wellington Region Civil Defence Emergency Management Group Plan 2013-2018 (CDEM Group Plan) – provides the strategic direction for civil defence and emergency management in the Wellington region
- Regional Land Transport Plan the strategic document that guide the development of the region's transport system, including public transport
- Wellington Region Triennial Agreement 2016-2019 – sets out the commitment by Greater Wellington and the region's territorial authorities to good governance by acting cooperatively and collaboratively
- Memorandum of Partnership.

Wellington Regional Strategy

The Wellington Regional Strategy (WRS) was developed by the region's nine local authorities, in conjunction with central government and the region's business, education, research and voluntary sector interests and adopted in 2007 (reviewed in 2012). The WRS reflects a commitment by all the councils to support, promote and facilitate sustainable economic growth for the region and is focused on regional interventions or actions that can realistically make a difference.

In 2014, the region's councils agreed to combine the tourism, venues and major events functions of Wellington City Council and the economic development functions of Greater Wellington together, in a single Council Controlled Organisation, the Wellington Regional Economic Development Agency (WREDA). Greater Wellington has a 20 percent shareholding in WREDA with the other 80 percent being held by Wellington City Council.

Greater Wellington's WRS Committee oversees decision making and governance of the WRS. The Committee membership includes one regional councillor, four members nominated by Wellington City Council, one member nominated by each of Kāpiti Coast District Council, Hutt City Council, Porirua City Council and Upper Hutt City Council, and one member nominated by the three Wairarapa district councils.

The WRS has the following focus areas:

- Commercialisation of innovation: with a focus on science and technology-driven innovation, this focus area involves supporting existing successful businesses and exploiting the region's attractiveness as a vibrant and supportive environment for entrepreneurs to set up firms, access capital and to innovate
- Investment mechanisms for sustainable growth: this is about attracting international investment, making more of existing investment networks (such as angel investment networks) and ensuring these are connected internationally and through local business opportunities
- Building world class economic infrastructure: regional economic prosperity is heavily dependent on the region's level of connectedness at local, national and international levels. This is, in turn, dependent on the quality of our foundation infrastructure and transport systems
- Attracting business, investment and talent to the region: this is about having a targeted approach to attracting businesses, potential investors and skilled migrants to the region

- Education and workforce development to service economic needs: this focus area is about building on existing connections and initiatives to grow the region's skills and education base and ensure the region's specific skills needs are met
- Open for business: being open for business is about councils delivering business services with a "can do" attitude and facilitating a business environment where smart, innovative firms can flourish.

Changes to what we deliver

We will develop a Regional Investment Plan with the region's territorial authorities and input from WREDA and central government agencies. This will outline the region's top priorities for investment over the short, medium and long term. We are also working with mana whenua in the region and investigating the development of a Māori economic development strategy.

Emergency Management

The Wellington Region Emergency Management Office (WREMO) leads and co-ordinates the effective delivery of Civil Defence and Emergency Management (CDEM) services for the nine councils in the Wellington region. WREMO is responsible for providing a comprehensive and integrated approach to CDEM across the 4R's of emergency management: reduction, readiness, response and recovery.

Within this context, WREMO's focus is on developing a resilient regional community that is:

- Ready able to respond quickly and effectively to change and adversity by being well-informed and able to make good decisions
- Connected in touch with others and able to support each other in times of need
- Capable takes practical steps to reduce their level of risk, is ready for and able to respond effectively to change and adversity and recovers quickly after a disruptive event.

WREMO is responsible for the following functions:

- Resilience building increasing community resilience through education, connectedness and cooperation
- Improving operational resilience increasing capability and capacity to provide a timely and effective response during an emergency
- Improving business systems and capability developing and maintaining the systems, policies and procedures for WREMO to operate effectively.

Changes to what we deliver

All nine councils, including Greater Wellington, have increased their funding contribution to improve WREMO's ability to help the region achieve greater levels of resilience, including the ability to recover quickly after a major event. This increased funding results from a review of the CDEM function in the Wellington region following the Kaikoura earthquake in late 2016.

Democratic services

Greater Wellington has 13 Councillors who represent six constituencies. Greater Wellington enables democratic local decision-making and action on behalf of regional communities. Our democratic services activity involves Council and committee meetings held on a regular (approximately six-weekly) basis. These meetings provide opportunities for the public to provide input to Greater Wellington's decision-making through public participation or through making submissions or providing feedback on specific proposals. We also review Greater Wellington's representation arrangements, three yearly Council elections and any other elections and polls required to be conducted. Greater Wellington has also established advisory groups to provide it with advice on a wide range of matters.

Changes to what we deliver

There are no changes to our levels of service.

Working with mana whenua and Māori

Greater Wellington works individually and collectively with our mana whenua partners to achieve prosperous Māori communities connected to a healthy environment and natural world.

During the period of this Long Term Plan and guided by the 2013 Memorandum of Partnership, our focus is on strengthening the partnerships with mana whenua as we work together on improving social, economic, cultural and environmental outcomes for the region. Ara Tahi sets the collective mana whenua strategic direction for working on these priority outcome areas with Greater Wellington.

Our work will build on and enhance the positive and enduring one-to-one direct relationships we have with each iwi. As partners, we will review the partnership to strengthen our relationship for the next 25 years.

As our mana whenua partners move through the Treaty of Waitangi settlement process, there will be changes to the way we work together. We will continue to support them in achieving their Treaty aspirations in the post-settlement environment. We will meet our responsibilities associated with settlement redress.

We welcome new and emerging mechanisms to enhance mana whenua participation in resource management, including Mana Whakahono-ā-Rohe (iwi participation arrangements).We look forward to the new relationship opportunities that emerge once the applications under the Marine and Coastal Area Act 2011 with interests in our region are resolved. We will continue to monitor and provide advice on new legislative and regional policy changes that impact on Māori.

While our partnership with mana whenua is the major focus for Greater Wellington, we continue to look at opportunities to include mātāwaka (Māori who reside in Wellington and come from tribes outside of the Wellington region) of the region in relevant programmes. This acknowledges the contribution of mātāwaka to our region over many decades and our obligations under the Local Government Act 2002. Over the next 10 years we will focus on:

- Protecting the environment and Māori values through representation on the various committees and working groups across Greater Wellington
- Growing our workforce capability to engage effectively with mana whenua through cultural and language education
- Positioning Ara Tahi for the future and ensuring the regional priorities they identify are included in Greater Wellington's work programme
- Understanding and progressing aspirations for growing the Māori economy in the region
- Working with Māori and marae of the region in establishing effective systems to respond to natural disasters and other emergencies.

Changes to what we deliver

Post settlement environment

We will continue to work with other councils and central government agencies to help prepare and position any structures and new systems needed for consideration as settlement redress by our mana whenua partners and in advancing their aspirations in the post settlement environment.

Mātāwaka

We are reorienting how we work with Māori to enable us to deliver excellent services that are informed by mana whenua and mātāwaka of the region. Our work with mana whenua has been described above and will continue to be a major focus for Greater Wellington. However, our work with mātāwaka must become part of Greater Wellington's programmes of work. This shift acknowledges the vital contribution of mātāwaka and their current and future contributions to the building the region.

Regional transport planning and programmes

Greater Wellington plans for the development of the region's land transport network. We do this through the development of a Regional Land Transport Plan (RLTP), which also outlines the projects that the region supports for central government co- funding through the National Transport Fund. We also encourage the use of public transport through targeted promotions and behaviour change initiatives, and promote active transport: walking, cycling and scootering.

Greater Wellington is also responsible for monitoring the implementation of the RLTP and prepares a full monitoring report every three years and a summary monitoring report on an annual basis. We maintain, update and administer regional transport models which are used by a number of agencies to plan for transport improvements. We support Greater Wellington's Regional Transport Committee, made up of all the region's mayors, the Chair of Greater Wellington and NZTA.

We are a partner in key regional transport programmes and projects, including Let's Get Wellington Moving.

Our cycle safety programme includes cycle skills training, induction training for new bus drivers on safely sharing the road with cyclists, a visibility at night campaign for pedestrians and cyclists and design competitions. We want more people to feel safe using active transport modes so that congestion is reduced around schools and on the transport network.

With declining numbers of children being active on the way to school, provision of cycle skills training will provide parents with the confidence that their children know how to ride safely on the road. We need to be ahead of these changes particularly in regards to encouraging use of active modes, and promotions about how to improve cyclists' visibility.

Changes to what we deliver

We are working as one of three partner agencies in developing a Recommended Investment Programme as part of Let's Get Wellington Moving. Once this has been agreed we will continue to work collaboratively to further investigate the programme, develop business cases and implement early improvements. We will also establish a suitable delivery mechanism to deliver the programme.

We are developing a business case to investigate the options to integrate regional transport modelling and analytics the region across the region. This is being developed collaboratively with the regions territorial authorities and NZTA.

We plan to run a series of promotions, focussed at workplaces and businesses, to increase public transport patronage. We will also encourage people to integrate sustainable modes with public transport, for example, bike racks on buses, bike share scheme, carpooling to Park & Rides, bike storage at stations.

Regional initiatives

Greater Wellington leads and partners with others on a number of key initiatives aimed at promoting significant economic, social and environmental benefits to the regional community.

Greater Wellington also works on other strategic projects that are required in response to regionally significant issues, usually in collaboration with other agencies and organisations- the Ministry of the Environment, the Department of Conservation, NIWA, the Institute of Geological and Nuclear Sciences, tertiary institutions and volunteer organisations.

Lifelines Resilience Project

Greater Wellington coordinates the Lifelines Resilience project - an initiative of the Wellington Lifelines Group. This is a collaborative project that includes Greater Wellington, representatives from Wellington City Council, Porirua City Council, Hutt City Council, Upper Hutt District Council and Kāpiti Coast District Council and the utility companies. By working together this ensures any investment is focussed on best results for the region to build resilience, not just for each individual utility.

The project is designed to identify where our regional infrastructure is vulnerable in the event of a 7.5 magnitude earthquake, what the interdependencies are between the different lifeline services and what steps we could take to enable our region to recover from such an event. While the project is primarily concerned with seismic disruption, it has a wider application, for example, during other events such as a flood or fire.

The first phase of the project, a programme business case, is nearing completion. The second phase of the project will be to better understand the financial case, including timing and funding of the recommended programme.

Water Wairarapa

Increasingly severe water shortages are predicted in the Wairarapa due to future climate change effects. This will impact water quality and availability in the area.

Greater Wellington and our partners are exploring ways of ensuring greater certainty of water supply for Wairarapa. Greater Wellington currently leads and funds this initiative. The project commenced in 2010. The completed scheme would comprise multiple water storage locations and a distribution network via rivers and piping. It would service each of the towns' future drinking water needs, provide irrigation support to around 30,000 hectares of productive agricultural land and be used to bolster minimum flows, thus protecting water quality where it is most threatened. Discussions with local mana whenua, businesses and other interested groups have been undertaken. Upon completion of the viability study, a commercial entity would be formed to raise the capital to develop and construct the scheme.

Greater Wellington is partnering with Wairarapa councils to look at how water storage can be integrated with municipal water supply, wastewater, stock water races and provider wider environmental and amenity opportunities, such as increasing flows in rivers and lakes.

Warm Greater Wellington

Greater Wellington provides financial assistance to purchase insulation that is paid back through homeowners' property rates. The scheme began in April 2010 and thousands of houses have been insulated under this scheme. This will continue to be provided.

Northern Gateway Futures

Greater Wellington is working with CentrePort and other partners on future plans and opportunities for port land. This includes investigating options for a new integrated ferry terminal and long-term plans for the future of the port land, including any opportunities to re-use non-operational land for other purposes.

Changes to what we deliver

It is anticipated that the Lifelines Resilience Project will require on-going support which will provide for an increased level of resilience in the region.

Greater Wellington will be considering extension of the clean heating programme to other areas of the region as part of Warmer Wellington. Currently only Wainuiomata and Masterton properties are eligible for the clean heat component of the scheme.

What we will deliver – Regional leadership key projects and programmes

	Year 1	Year 2	Year 3	Year 4-10
Wellington Regional Strategy				
Labour Market Strategy	٠			
Plan for Māori economic development with Ara Tahi	٠			
Review of the GPI	٠			
Development and coordination of the Wellington Regional Investment Plan	•	٠	٠	•
Review how we invest in regional economic development to achieve the best outcomes for the region	٠			

Emergency Management				
Community Preparedness	•	•	•	•
Emergency Response Model	•	•	•	•
Lifelines Coordination	•	•	•	•

Relationships with mana whenua and Mäori				
Lead legislation and policy advice on areas of implication for Māori	•	٠	•	•
Training to support organisational cultural understanding	•	٠	•	•
Position Ara Tahi for the future	٠	•		

Regional Transport Planning and programmes				
Transport modelling, data collection and analysis for regional planning	٠	٠	٠	٠
Regional Land Transport Plan	٠	٠	٠	•
Let's Get Wellington Moving – prepare and develop approach to recommendations	•	•	٠	
Behaviour change programmes to facilitate use of public transport, walking and cycling and reduce vehicle use	•	•	٠	•
Training and campaigns to improve road safety	•	•	٠	•

Regional Initiatives				
Water Wairarapa	٠			
Northern Gateway Futures	•	•	•	•
Lifelines Resilience project	•	•		

How will we fund this activity?

Relationships with mana whenua	100% general rate
Regional transport planning and programmes	About 52% funding from NZTA Balance from general rate
Wellington regional strategy	100% targeted rate charged on differential by land use, being: – A uniform charge on residential and rural ratepayers – A capital value basis for businesses
Emergency management	100% general rate
Democratic services	100% general rate
Regional Initiative - Warm Greater Wellington	100% targeted rate
Regional Initiative - Water Wairarapa	100% general rate

For further information see our Revenue and Financing Policy 2018.

Measuring Success

Loud of Convice	Performance		Per	formance Targets	>	
Level of Service	Measures	Baseline (2017)	2018/19	2019/20	2020/21	2021-28
Coordinate and deliver programmes which promote and encourage sustainable and safe transport choices	Number of adults participating in Sustainable Transport initiatives and promotions ⁽³³⁾	Establish baseline	Increase	Increase	Increase	Increase

Regional transport planning and programmes

(33) – Aotearoa Bike Challenge - Wellington, national cycle skills training courses, Smart Travel Challenge, Smart Travel registrations, and bus/bike workshops

Emergency management

Lougl of Convice	Performance		Per	formance Targets		
Level of Service	Measures	Baseline (2017)	2018/19	2019/20	2020/21	2021-28
Work with	Percentage of households with sufficient emergency food and water to last at least seven days	10%	11%	12%	13%	20%
community to improve resilience to, and preparedness for, major emergency events	Annual activation test for each Emergency Operations Centre (EOC) and Emergency Coordination Centre (ECC)	100%	100%	100%	100%	100%
	Number of published Community Response Plans	75%	85%	95%	100%	100%

Potential negative effects

There are no significant negative effects from regional leadership activities.

Regional leadership Prospe	ective Fur	Inding Im	pact Stat	ements							
		REGIONAL	LEADERSHIP FOR 1	PROSPECTIV	'e funding Ding 30 Jun	IMPACT STAT IE	EMENT				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Sources of operating funding											
General rate	7,272	9,293	10,235	10,002	10,701	10,628	10,338	10,443	10,657	10,749	10,821
Targeted rate	8,004	8,145	8,577	9,034	9,122	9,227	9,578	666'6	10,285	10,643	10,923
Subsidies and grants for operating purposes	1,369	1,359	1,369	1,402	1,441	1,485	1,510	1,547	1,587	1,624	1,665
Fees, charges, and targeted rates for water supply	18	18	18	19	19	19	20	20	20	21	21
Fines, infringement fees, and other receipts $^{\left(1 ight) }$	2,203	2,790	2,817	2,864	2,832	2,879	2,922	2,990	3,072	3,132	3,193
Total operating funding	18,866	21,605	23,016	23,321	24,115	24,238	24,368	24,999	25,621	26,169	26,623
Applications of operating funding											
Payments to staff and suppliers	18,134	21,517	22,587	21,425	21,293	21,978	22,017	22,672	23,755	23,811	24,429
Finance costs	1,076	1,047	1,040	1,028	1,039	1,033	1,060	1,077	1,082	1,109	1,140
Internal charges and overheads applied	571	574	655	649	625	641	633	641	649	653	655
Total applications of operating funding	19,781	23,138	24,282	23,102	22,957	23,652	23,710	24,390	25,486	25,573	26,224
Surplus/(deficit) of operating funding	(915)	(1,533)	(1,266)	219	1,158	586	658	609	135	596	399
Sources of capital funding											
Subsidies and grants for capital expenditure	281	459	266	1	I	61	142	1	36	61	1
Increase / (decrease) in debt	1,820	1,273	717	(191)	(129)	(133)	312	406	616	938	251
Gross proceeds from asset sales	45	ı	77	31	31	33	ı	50	18	69	35
Total sources of capital funding	2,146	1,732	1,060	(160)	(86)	(33)	454	456	670	1,068	286

		REGIONAL	LEADERSHIP FOR THE	PROSPECTIV	ve funding G 30 June (C	IMPACT STAT ONT.)	EMENT				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Applications of capital funding											
- to meet additional demand											
- to improve the level of service	1		ı			ı					ı
- to replace existing assets	745	995	787	108	527	243	296	172	141	404	135
Increase / (decrease) in investments	1,211	(609)	(553)	(2)	504	533	706	779	848	1, 126	412
Increase / (decrease) in reserves	(725)	(187)	(440)	(47)	29	(229)	110	114	(184)	134	138
Total applications of capital funding	1,231	199	(206)	59	1,060	547	1,112	1,065	805	1,664	685
Surplus/(deficit) of funding	ı							ı		I	
Depreciation on Regional Leadership assets	255	184	410	504	420	512	480	372	261	333	229
(1) – This includes revenue from the territorial authoritie	sto fund the amal؛	gamated regional ∈	:mergency manag	ement group.							

For more information on the revenue and financing mechanisms applicable to this group of activities, please refer to GWRC's Revenue and Financing Policy. This statement is not an income statement. It excludes all non cash transactions such as depreciation and valuations.

All figures on this page exclude GST

		REGION	al leadersi For '	HIP PROSPEC THE YEAR EN	TIVE FUNDIN DING 30 JUN	ug informa [.] Je	IION				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Operating funding											
Wellington Regional Strategy	4,939	4,905	5,012	5,219	5,426	5,538	5,643	5,759	5,900	6,017	6,141
Emergency Management	3,452	3,999	4,123	4,135	4,214	4,256	4,287	4,481	4,446	4,686	4,689
Democratic Services	1,954	2,247	2,484	2,387	2,487	2,698	2,559	2,602	2,883	2,752	2,772
Relationships with Maori	1,034	1,330	1,469	1,312	1,572	1,489	1,516	1,545	1,577	1,610	1,642
Regional transport planning and programmes	3,021	4,092	4,576	4,908	5,109	4,951	4,789	4,700	4,670	4,724	4,809
Regional initiatives ⁽¹⁾	4,466	5,032	5,352	5,360	5,307	5,306	5,574	5,912	6, 145	6,380	6,570
Total operating funding	18,866	21,605	23,016	23,321	24,115	24,238	24,368	24,999	25,621	26,169	26,623
Applications of operating funding											
Wellington Regional Strategy	5,105	5,108	5,222	5,332	5,442	5,555	5,661	5,775	5,893	6,011	6,133
Emergency Management	3,395	3,954	3,981	4,062	4,141	4,219	4,287	4,365	4,446	4,525	4,607
Democratic Services	1,806	2,170	2,698	2,308	2,360	2,888	2,449	2,502	3,059	2,605	2,659
Relationships with Maori	1,033	1,322	1,462	1,305	1,565	1,481	1,507	1,537	1,568	1,601	1,633
Regional transport planning and programmes	3,442	5,352	5,576	4,711	4,164	4,230	4,264	4,335	4,413	4,491	4,574
Regional initiatives ⁽¹⁾	5,000	5,232	5,343	5,384	5,285	5,279	5,542	5,876	6,107	6,340	6,618
Total applications of operating funding	19,781	23,138	24,282	23,102	22,957	23,652	23,710	24,390	25,486	25,573	26,224
Capital expenditure											
Capital project expenditure	550	006	521	ı	374	120	279	1	70	120	
Land and buildings	1	ı	I	1		ı	1	I		1	
Plant and equipment	45	15	14	5	48	18	16	9	16	54	18
Vehicles	150	80	252	103	105	105	-	166	55	230	117
Total capital expenditure	745	9 95	787	108	527	243	296	172	141	404	135
 (1) - Regional initives includes the rates and expendit This statement is not an income statem For more information on the revenue ar 	ure associated with nent. It exclud nd financing r	the Warm Greater ¹ es all non cas nechanisms a	Vellington Progra h transactio pplicable to	m. Only ratepayers ns such as de this group of	s participating in the participation and participation and factivities, p	he scheme are cha Ind valuation Mease refer to	rge a rate to recove s. b GWRC's Rev	er the costs of the set of the se	scheme. nancing Polic	ý	

All figures on this page exclude GST

Introduction to our Financial Strategy

We begin this Long Term Plan in a strong financial position. Our AA financial rating was recently confirmed, we have a robust balance sheet, and our business has these significant features:

We have diverse revenue sources – our total income from rates and water levies is less than 50 percent of our total revenue.

- Our net debt is less than 100 percent of annual revenues.
- Our finance costs are around 5 percent of our total revenue we only pay 5 percent of our annual income as interest on our borrowings.

The Long Term Plan is dependent on Greater Wellington being able to fund big pieces of work. This Financial Strategy reflects our focus to maintain Greater Wellington's good financial position while also providing the things that matter to our communities. We plan to deliver a significant programme of investment in the region, while managing the competing tensions among resilience, affordability, and rising customer and community expectations.

Section three

Financial Strategy Te rautaki ahumoni

Purpose and approach

The purpose of our strategy is to provide a sound financial platform from which Greater Wellington can deliver the things it says it will deliver - the things that benefit our region and community. We intend doing this by:

- Providing an overall direction and desired end point for Greater Wellington's financial status
- Presenting the financial consequences of the Long Term Plan
- Balancing the provision of existing services, growth, and growing demands with sound financial management
- Together with the Infrastructure Strategy, provide an outline of costs, risks, and trade-offs.

We have taken a principle-based approach in developing our Financial Strategy and have centred it on four major principles outlined below.

Transparent

We are providing clear information to the community and wider group of stakeholders on the processes and choices undertaken in developing our financial framework and decisions

Prudent

We are not taking any undue risks, using considered, careful and sensible decision making

Fair

We are providing for intergenerational and community equity

Value for money

We are ensuring expenditure on any item provides maximum impact and effectiveness.

Key Factors impacting our Financial Strategy

The work of Greater Wellington covers a wide range of activities with many factors and risks impacting its financial operations. We have made a number of financial and non-financial assumptions upon which the financial planning for the next ten years is based. These are outlined in Section 5.

Core to our Financial Strategy has been balancing the community expectations on levels of service while limiting the rate increases. We recognise that we have a diverse community and are mindful of the impact of rate increases on those in our community with low and/or fixed incomes. In order to keep rate increases as low as possible, we have prioritised and scheduled our activities carefully and made some decisions on how to optimally fund certain types of expenditure. This has meant funding some costs that, although not an asset, provide future benefits to our communities and spreading the costs to match the benefit to reduce rates. We have also extended the repayment on our loans which fund our flood protection asset from 20 to 25 years to both limit the rates impact and more fairly spread the cost of these assets across generations.

The other major issues that have had a large influence on the overall shape of our Financial Strategy are identified below.

Earthquake response, consequences and preparedness

In November 2016 the Kaikōura earthquake highlighted the resilience challenges our region faces. Greater Wellington has absorbed and planned for a number of financial impacts resulting from the earthquake. These have included: increased market rental costs; the loss of Centreport dividend income; increasing resilience of our core infrastructure to better withstand shocks; and investment in regional resilience planning.

Implications of the delivery of major works programmes

Greater Wellington is committed to a number of major programmes of work to effectively deliver outcomes to our vision: an extraordinary region – thriving, connected and resilient. The timing and scope of these projects have been optimised to balance cost pressures, limit the rates increase, and maintain a healthy balance sheet. Outlined below are our major programmes of work and the implications for the Financial Strategy.

Public transport transformation programme

The new Public Transport Operating Model (PTOM) requires Greater Wellington to build long-term commercial partnerships with public transport operators, in order to improve services and grow patronage. More information on PTOM and the transformation programme are detailed Section 2, Metlink Public Transport.

A major financial consequence of this change is that public transport fare revenue and associated costs are being managed directly by Greater Wellington as opposed to being collected by a third party which was the case previously. In 2017, we received \$48 million in rail transport fare revenue. In 2018/19 we expect our fare revenue to double to \$100 million (including revenue from the government funded supergold discount and concession card). We will therefore have greater revenue risks and opportunities to manage.

The new operating model is part of a wider public transport transformation investment programme including:

- Developing integrated ticketing solutions across the network
- Introducing network fare pricing and incentives
- Rebranding the network to the Metlink brand and driving the marketing and customer facing services of the brand
- Developing our commercial and financial capability and modernising our business systems.

This means that we have a much bigger business to operate and we have developed a number of assumptions to our expenses and revenues that will be tested early in the planning period.

Greater Wellington plans to manage these revenue risks by:

- Aligning the incentives and risks faced by Greater Wellington and service providers
- Increasing patronage
- Maintaining suitable levels of public transport reserves.

Flood protection programme

Our flood protection programme over the next ten years is focused primarily on RiverLink, a joint initiative with Hutt City Council and NZTA to deliver better flood protection, better lifestyle and improved transport links for the people of central Lower Hutt, detailed Section 2, Flood protection and control works. We plan to spend a total of \$94 million capital expenditure on this project over the next ten years and \$83 million on other floodplain management plans.

We have optimised the timing of delivery of the overall flood protection programme, and extended the loan repayment terms on our flood assets, balancing affordability with key areas of required service level improvements and spreading the cost more fairly in line with the benefits.

Bulk water resilience

An alternative water source for Wellington city is planned to be constructed to improve the ability for the bulk water network to withstand a major earthquake. Greater Wellington has already done considerable work investigating possible options for new water sources. The two most likely options, outlined in Section 2, Water supply, are for a cross harbour pipeline or harbour bores. Investigation continues to determine the best option with the outcome likely to be known by August 2018, with significant implications to our balance sheet. Until the feasibility of the harbour bores is proven, we are currently planning for the more costly option, being the cross harbour pipeline, with an estimated cost of \$116 million (up from \$85 million as per the 2015-2025 Long Term Plan), as opposed to \$60 million to \$70 million for the harbour bores.

Rail infrastructure and rolling stock funding

Greater Wellington's plan to increase its level of service across the Metlink public transport network requires some significant investments in rail infrastructure. We don't own all the infrastructure – KiwiRail own the track on behalf of the Crown. We are developing business cases for the Government to fund key initiatives; our Long Term Plan has been developed on the assumption that these business cases are successful. There is a level of uncertainty with this assumption and should the assumed level of funding is not provided from central government, Greater Wellington will need to consider alternative options and consult further with the community at that time.

Rail network maintenance and capacity enhancements

Greater Wellington contributes to the annual maintenance, renewals and insurance costs of the rail network, which gives Greater Wellington an interest in the quality of the network performance and the cost of the service. KiwiRail has a backlog of deferred maintenance, particularly on the Wairarapa line, resulting in our operational costs being high, and services are often delayed.

Business cases have been developed for for:

- Network track infrastructure catch-up renewals on the Wairarapa line, and
- Unlocking network capacity to cater for ongoing and expected service demands.

Under the draft Government Policy Statement on land transport 2018 these business cases are now able to be funded from the National Land Transport Fund (NLTF) under the Transitional Rail activity class. These have been included in our bid for NLTF funding through the Regional Land Transport Plan as priority one band for funding.

Rail rolling stock

The trains which operate on the Wairarapa line are proposed to be replaced with a new fleet of long distance commuter trains which would provide enhanced levels of service and capacity on Wairarapa and other existing routes. Early costs are estimated at \$330 million. Given the early stages of option development, cost estimates, and uncertainty on the requisite Crown business cases above, as well as funding allocations to be agreed with our partners, we have provisioned for 10 percent of this cost in years 2022-24. We have also maintained a provision for refurbishment of the Wairarapa carriages, the extent and timing of which will be reviewed together with the development of the business case.

Other factors influencing our Financial Strategy

Population and changes in land use

Greater Wellington's assumptions (Section 5) outline expected changes in land use and population growth. These changes will impact demand for Greater Wellington activities and we have provided increased operating expenditure accordingly. We plan to spend \$70 million over the next ten years on capital projects to meet the additional demands that growth creates. Almost all of this will be on Public Transport. Longer term, we plan to spend almost \$395 million to meet growth needs. More than 80 percent of that expenditure will be for developing alternative water sources in the mid-2030s.

Revenue (including rates and changes to our rating policy)

Historically the main sources of revenue for Greater Wellington are rates (general and targeted), levies (for water supply) and government grants (mainly the New Zealand Transport Agency funding for transport activities).

The implementation of the Public Transport Operating Model (PTOM) will result in Greater Wellington receiving all public transport fare revenue (and associated costs). In 2017/18 fare revenue was \$50 million including supergold and this is projected to double to \$100 million from 2018/19 with the new bus contracts commencing. This is expected to grow to \$128 million over the period of the Long Term Plan based on fare increase and patronage growth assumption in Section 5. Public transport fare revenue will represent approximately 25 percent of total revenue over the period of the Long Term Plan.

Dividends, investment income and external revenue have been relatively small but important contributions to total income. The temporary suspension of the CentrePort dividend is scheduled to resume at a lower level in 2018/19. The difference is planned to be funded by debt in 2018/19 and higher than planned subvention payments. It is expected to fully resume after 2021/22.

The main source of government subsidies received is from the New Zealand Transport Agency for the funding of transport activities.

Other revenue sources include consenting processing, monitoring fees, residential rentals, soil conservation and grazing rentals and investment income.

The graph below shows where our revenue comes from. In 2017/18 we expected our total revenue to be \$343 million; by 2028 we expect it to exceed \$500 million.



Figure 1: Where our funds come from

Rates

Figure 2: Rates and Levies



Rates increases and quantified limits on rates increases

Greater Wellington will collect \$165 million in rates and levies revenue in 2017/18 and this is expected to increase to \$250 million over 10 years. About 33 percent of that increase is due to price pressures that Greater Wellington expects to face, and the rest is due to funding requirements to meet the planned levels of service.

Greater Wellington has set a limit on the total rates it will collect at 45 percent of total operating expenditure in each year.



Figure 3: Rates and limits on rates

Greater Wellington forecasts an average increase in rates of 4.98 percent each year for the next ten years. Over the next three years, rates are planned to increase by:



We are mindful of the impact that these increases have for ratepayers. In the planning process, Greater Wellington has considered the funding requirements of various project proposals. Some projects have been pruned and the timing for others has been adjusted to achieve the rates impact at these levels.

Greater Wellington's limit on rates increases is the change in total rates revenue from one year to the next. Our planned limit on rate increases is 8 percent for years 2018-2023 and then 5 percent for the later years. This is an average compound annual rate of 5.01 percent.



Figure 4: Rate increases and limits on rate increases

Water supply levy

Greater Wellington, via the joint council controlled organisation Wellington Water, delivers bulk water to the metropolitan cities of Wellington, Hutt City, Upper Hutt and Porirua. This service is funded via a water levy charged directly to the local councils. This in turn is on charged to their respective rate payers.

The levy increase in 2018/19 is 7.1 percent. We are planning to increase the levy by an average 4.6 percent per year over the 10 year period. The levy increases are mostly driven by the major capital projects including the alternate water supply option.

Operating expenditure

Over the life of the Long Term Plan our operating expenditure is forecast to increase by 28 percent from \$386 million in 2018 to \$492 million in 2028.

The below graph provides a 10 year view of operating expenditure for each of Greater Wellington's activity groups. The large increases align to our key issues outlined in our Infrastructure Strategy, which include:

- **Public transport network:** Our activity plans will require operating expenditure to increase by \$72 million (29 percent) over the next ten years to improve patronage, levels of services and to fund borrowing for the capital programme.
- **Water supply:** Our activity plans will require operating expenditure to increase by \$12 million (30 percent) to maintain our existing infrastructure and to fund borrowing for the capital programme that includes sourcing an alternate water supply.
- **Flood protection:** Our activity plans will require operating expenditure to increase by \$9 million (43 percent) to maintain our existing infrastructure and to fund borrowing for the capital programme that includes investing in the RiverLink project.



Figure 5: Expenditure

Greater Wellington's strategy is to fund its operating expenditure out of operating revenue. Rates, levies and fare revenue are set at a level to ensure this objective.

There are circumstances where we propose to use loan funding for operating expenditure where there are obvious longer term benefits to the community, or where certain expenditure is one off in nature. These loans are repaid over the life of the benefit to ensure fairness across generations. In the Long Term Plan we propose to loan or reserve fund:

- Our contribution to the development of a Petone to Wellington cycleway, which has the additional benefit of enhancing flood protection to the rail and road network
- The planning stages of "Let's Get Wellington Moving" and other small planning initiatives for Centreport and Water Wairarapa that will provide ongoing benefits to the region
- Asset renewal peaks for KiwiRail rail network access. Greater Wellington funds a share of rail network
 assets renewals which are owned by KiwiRail. Network asset renewals based on KiwiRail's strategic asset
 management plans will increase over the next few years, before resuming close to today's levels. The 'peak' is
 planned to be funded by debt and repaid over the life of the assets
- The public transport transformation programme will bring substantial benefit to public transport users and the wider community and continues to be reserve or loan funded.

Operating surplus

The following graph shows the planned total revenue as a percentage of operating expenses over the Long Term Plan. Total revenue is projected to exceed operating expenditure for every year of the plan.



Figure 6: Balanced Budget Benchmark

Included in our revenue is capital grants the Crown's contribution for new public transport assets. These grants, which are typically around half of the asset value, are received and recognised when the asset is purchased. The remaining is rates or levy funded over the life of the asset.

We have also provided the following more conservative alternative view that excludes these capital grants. This shows there are several years where operating expenditure exceed operating income.



Figure 7: Balanced Budget Benchmark (alternative view)

This view shows planned operating revenue for the 2018/19 financial year will be 96.1 percent of the operating expenditure. This is driven by a number of factors including funding operating expenditure with loans and reserves where there is future benefit as outlined above. Also impacting the operating surplus in 2018/19 is the partial loss of the CentrePort dividend and subvention payments which are expected to resume closer to previous levels in 2019/20.

Additionally, in 2017/18, Greater Wellington undertook its five year Bulk Water asset revaluation cycle exercise which resulted in a \$179 million increase in the asset values and an annual depreciation expense increase of \$5 million, increasing operating expenditure. As Greater Wellington does not fund depreciation (assets are debt funded, with ongoing rates or levy based on loan repayments and interest) there is no corresponding rating or levy income to offset the increased cost.

Greater Wellington is comfortable with this outcome based on the solid funding rationale for our revenue and expenditure and that our overall revenue exceeds expenditure for each year of the Long Term Plan.

Capital expenditure and transport improvements

This Long Term Plan includes capital expenditure of \$932 million over the next ten years. The capital expenditure (capex) programme is driven mainly by the step change we are making to Public Transport and the future mass transit options of Let's Get Wellington Moving, the need to improve the security of our bulk water supply, and the development of the RiverLink project.

The majority of our capital expenditure is infrastructure related and is explained in detail in our Infrastructure Strategy.



The below graph provides a 10 year view of capital expenditure for each of Greater Wellington's activity groups. The first half of the Long Term Plan has significant capital expenditure driven by the public transport network transformation initiatives and the establishment of an alternate water supply from 2020 to 2024. After these investments are completed the programme reduces to reflect our ongoing programme of maintenance and renewals.



Figure 8: Capital expenditure & transport improvements and debt

Maintaining levels of service

To maintain the current levels of service requires capital expenditure of \$156 million over the next 10 years as outlined below.

- Water supply \$57 million the major cost comes from relocating the Kaitoke main in 2020 (see Figure 3).
- **Public transport** \$54 million, excluding any rail investments capex rises from 2025 onwards due to the replacement of back end real time information systems (see Figure 9).



Figure 9: Capital expenditure to maintain the current levels of service, water supply and public transport 2018-28

To maintain current levels of service, Greater Wellington will also spend:

- Flood Protection \$2 million.
- **Parks** \$25 million: All of the parks capex is for maintaining the current levels of service. It will mostly be spent in our larger parks, Queen Elizabeth, Belmont and Kaitoke / Pakuratahi
- **Environment** \$18 million: Capital expenditure is mainly for maintaining the current level of service. Capital expenditure is for science equipment and monitoring.

Greater Wellington is confident it can maintain its existing levels of service, providing there are no major external shocks - such as earthquakes, or changes in government policy that, for example, could reduce planned levels of subsidy.

However, we do not plan to simply maintain levels of service for our major activities, because of our commitment to increasing the resilience of our infrastructure, and our region. For most of our activities, an increase in resilience is an increase in the level of service. Figure 10 shows the expected capital costs of improving levels of service.



Figure 10: Capital expenditure for improving levels of service

Greater Wellington is confident that it can meet planned additional demands for services outlined in this Long Term Plan. Figure 10 above shows the planned investment of alternate water supply and implementing PTOM initiatives alongside the consistent investment in improving flood protection.

Debt

The benefits of the services we provide flow over many years, and we use debt so that future ratepayers pay for their share of the assets and expenditure. In this plan, debt funding is used for:

- **Capital expenditure** which is expenditure for items that have long lives. Most of Greater Wellington's capital is for items that will provide services to residents and ratepayers for years to come. Where we receive a Central government (or other sources) contribution or subsidiary, Greater Wellington will borrow funds for its share of capital expenditure.
- **Working capital** due to timing differences between cash inflows and outflows. Working capital funds are managed in accordance with the Treasury Management Policy.
- Other investment activity, for example, shares in the Local Government Funding Agency (LGFA).
- Some operating expenditure for one-off projects and expenditure that provides longer term benefit.
- Loss of Centreport dividend revenue: Debt has been used as a mechanism to fund the short-term revenue shortage while Centreport recovers its operations. Once the port revenues are back on track, we can use them to pay down the debt.

Greater Wellington's Treasury raises funds and lends these on to internal business groups. The business groups borrow for the life of the asset and repay the interest and principal over the asset life with funds secured from rates or external sources. For this plan, we have extended loan lives of flood protection assets by five years to 25 years to reduce annual debt servicing costs and aligning loan lives closer with the expected asset lives. This provides improved levels of inter-generational equity.

Greater Wellington holds substantial financial reserves and contingency funds, which earn interest, resulting in the net debt position being considerably lower than the total debt.

We expect debt to rise to \$768 million by 2026, as a result of our substantial investment programme in infrastructure resilience. The closer we get to these events, the more accurately we will be able to forecast the actual costs and impacts.





External debt and borrowing limits

We have set the following limits on borrowing:

- A maximum external debt level where interest costs are no more than 30 percent of rates and levy income, occurring within the 10-year period
- A maximum external debt balance of \$800 million during the 10-year period. The peak balance is currently expected to be \$768 million in 2025/26, but we have allowed a little headroom to take account of any expected cost increases.

The following graph shows that Greater Wellington's net debt to total revenue ratio is forecast to be well below the prudent limit of 250 percent.



Figure 12: Borrowing limits in the Financial Strategy

Greater Wellington intends to continue sourcing the bulk of its financing from the Local Government Funding Agency (LGFA) because it provides a lower cost of borrowing. We have the following financial covenants with the LGFA:

- Net debt/total revenue <250 percent
- Net interest/total revenue <20 percent
- Net interest/annual rates and levies <30 percent
- Liquidity 110 percent.

The following graph shows the forecast ratios compared to financial limits over the next 10 years. With the forecast level of expenditure Greater Wellington remains within its prudent financial limits, and within the financial covenants set by the LGFA.



Figure 13: Financial strategy borrowing limits

Policy on the granting of security on borrowing

Greater Wellington uses a Debenture Trust Deed to grant security to its lenders when it borrows funds. We established a Deed in 2011 that enables us to borrow funds from the LGFA.

Greater Wellington may offer security by providing a security interest in one or more of Greater Wellington's assets other than its rates and rates revenue.

Greater Wellington may only grant a security interest in physical assets by resolution of Greater Wellington, when either-t

- There is a direct relationship between a debt and the purchase or construction of the secured assets which it funds (e.g. through a finance lease, or some form of project finance), or
- Where those security interests are leases or retention of the arrangements which arise under the terms of any lease or sale and purchase agreement.

Reserves

Greater Wellington expects to start this Long Term Plan with \$32.9 million financial reserves, and we will progressively draw down our reserves to \$24.4 million in 2021/22, in order to reduce the rates impact of our planned expenditure, mostly funding the public transport transformation programme. After that we will build up our financial reserves to reach \$32.9 million by 2027/28.

Here are the major strategic decisions we have made in relation to reserves.

Public transport reserve: For ratepayers, we want to mitigate the impact of our substantial public transport investments, so we will draw down the Public Transport reserve from \$12.5 million, reducing to \$5.8 million in 2021/22 as a buffer for public transport revenue risks.

Flood protection: Catchment scheme reserves are built up by contributions from properties within defined catchments and/or schemes. We will progressively increase the reserves for catchment schemes from \$5 million to \$9.3 million, so that we can invest more intensively in the future, to manage increased flood risks within specific catchments.

The flood contingency reserve is used to repair flood damage, and is funded from flood protection rates. We will progressively increase our flood contingency reserve from \$5.5 million to \$11.5 million.

Rural fire reserve: We plan to allocate new funding to the rural fire reserve each year. In the Long Term Plan, that reserve grows from \$74,000 to \$100,000, but we expect that some of these funds will be used to fund firefighting at some stage.

Election reserve: Greater Wellington uses a reserve fund for elections, funding a share of the costs every year, while spending them once every three years.

This graph shows how Greater Wellington's total reserve funds will appear after 10 years if we only draw down the amounts that are planned. It is more likely that we will draw down contingency reserves for flood and fire however we cannot predict the timing or quantum.



Figure 14: Reserve funds, 2018-28

Financial investments

Greater Wellington's policy objective for its financial investments is to achieve an average annual real rate of return that is consistent with market norms for the risk levels involved.

We invest in Council Controlled Organisations (CCO's) and Council Controlled Trading Organisations (CCTO's) for strategic purposes, including earning revenue. Greater Wellington's primary objective is to ensure that any capital investment in a CCO or CCTO is protected. We have strategic investments in:

- Wellington Regional Economic Development Agency Limited
- Wellington Water Limited
- Wellington Rail
- CentrePort
- Local Government Funding Agency (LGFA).

CentrePort

Greater Wellington is the major shareholder in CentrePort, with the following long term objectives for holding this security:

- receive an acceptable level of cash return
- receive an on-going increase in the value of the investment.

The Kaikōura earthquake has interrupted the flow of cash returns, with the dividend expected to resume in 2018/19. However, our long term objectives for holding port securities are unchanged. We consider the port to be a strategic asset for the region, and intend to work with CentrePort on its long term recovery. We forecast a return to strong dividend performance over the life of this plan.

Local Government Funding Agency (LGFA)

Greater Wellington is a founding shareholder of in the LGFA which provides Greater Wellington with:

- lower cost of borrowing, due to LGFA's economies of scale
- a dividend as return on the investment in LGFA.
Insurance

Our approach to insurance is to focus on the effects of low probability, high impact events. We do not insure 100 percent of our assets, because it is unlikely that all assets would simultaneously be affected by a hazard event. Our annual budgets provide funding for repairs as a result of smaller, more frequent events.

Flood protection assets

Greater Wellington insures its two largest flood protection assets - the barrage gates on the Ruamāhanga River at Lake Wairarapa (value \$30 million) and the flood walls on the Hutt River at Waiwhetu.

Larger floods (25 to 40 year return period) may cause considerable damage to assets, and Greater Wellington maintains a major flood protection recovery fund. Where damage exceeds the balance of either or both funds, borrowing may be necessary to carry out the repairs. For smaller floods with a five to 25 year return period, we have the contingency reserve for flood protection.

Above-ground assets

We maintain a material damage business interruption insurance policy for all Greater Wellington above-ground assets (excluding motor vehicles and rail rolling stock which are separately insured). These assets are insured on a maximum probable loss basis.

We are in an insurance collective with the Hutt City, Upper Hutt City, Kāpiti Coast District and Porirua City councils. We share a large excess (5 percent of site sum insured to a maximum of \$20 million for earthquake events) in order to reduce our premium costs. The excess is substantially less for other hazards such as fire. To ensure we can afford this excess, Greater Wellington has a material damage fund, which is at \$8.6 million at 30 June 2018, and is planned to rise to \$16.6 million over the next 10 years.

Greater Wellington is liable for a shared insurance excess with KiwiRail, which insures the bulk of the Wellington metropolitan rail assets under a maximum probable loss scenario.

Underground assets - water supply

Our underground water assets are generally not insured but we have funds for hazard events, as cash deposits or reserves. The hazard event fund is forecasted to have a balance of \$31 million at 30 June 2018 and moving out to \$76 million over the next 10 years. The gap between this and the maximum probable loss may be covered by a mix of insurance, borrowing and government assistance.



Infrastructure Strategy Te rautaki hanganga

Introduction to our Infrastructure Strategy

Greater Wellington's Infrastructure Strategy tells you how we plan to manage our infrastructure over the next 30 years, to support the vision we have for the region in response to our changing environment. The provision of prudently managed infrastructure is key to delivering on the Council's vision and priorities.

Introduction and approach

Scope of Strategy

The strategy outlines how we plan to manage the following asset groups:

- Water supply
- Public transport
- Flood protection
- Parks
- Environmental science
- Harbours

For each asset group identified above, this strategy will outline the key issues and considerations and our management approach. While the Infrastructure Strategy provides details of the level and timing of investment needed to operate, replace, renew and upgrade existing facilities, the Financial Strategy outlines the required rating and debt levels to fund these investments. Together the two strategies outline how Greater Wellington intends to balance investment in assets and services with affordability.

The Council uses its asset management plans as a basis for its Long Term Plan, including this Infrastructure Strategy. This Strategy does not contain that level of detail of asset management and operational planning. It draws on them to provide a high-level summary of the assets owned and managed by Greater Wellington in terms of type, quantity, confidence and value to help frame the Infrastructure Strategy discussion.

Strategic assets

Assets and groups of assets that Greater Wellington holds and considers to be strategic assets, and pertinent to this Infrastructure Strategy are:

- The bulk water supply network
- Rail rolling stock and other rail infrastructure required for the operation of the passenger rail system in the region (taken as a whole)
- Flood protection assets
- Regional parks and forests network (including water supply catchments)
- Harbour navigation aids and communications systems (taken as a whole).



It should be noted each of the significant infrastructure issues does not affect each asset group equally. In addition, the significant infrastructure issues are not mutually exclusive, and that a change in one affects the other two.

What has changed since 2015?

Our role has not changed; the type of work Greater Wellington needs to do and provide has not changed. However we continue to review and adjust how we operate and how we deliver our services.

Long term planning for infrastructure is not new to us; we prepared our first Infrastructure Strategy as part of the 2015-25 Long Term Plan. Much of the information and assumptions in that strategy is still valid today. We have reviewed our 2015 strategy, and rather than starting from scratch, have used that as a base – we understand that we need to take an enduring approach to making decisions about infrastructure.

The assets we own for bulk water supply, flood protection, and public transport constitute the majority of Greater Wellington's asset value, and require our largest annual operating expenditure commitments. They were covered in our 2015 Infrastructure Strategy. As part of this update, we have chosen to expand the scope of the strategy, to include three additional asset groups: parks; environmental science; and harbours.

There have also been some events that have had an impact on what and how we deliver services and when, including:

- Greater Wellington has a new vision and new strategic priorities which set a framework for our work
- Our knowledge of our assets and forecasting capability has continued to grow
- The impact of the Kaikōura earthquake in November 2016 and the floods of 2016/17 have brought a sharper focus on how resilient we need to be as a region to survive and thrive with adverse shocks and stresses including population change, earthquakes, adverse events and climate change.

Direction for infrastructure

Greater Wellington's infrastructure underpins our ability to deliver to our vision and priorities.

An extraordinary region - thriving, connected and resilient

- Fresh water quality and biodiversity
- Water supply
- Regional resilience
- Public transport

Principles

While Greater Wellington's vision, priorities and the assumptions provide an over-arching framework to ensure we are working on the things that matter, the following principles shape how we manage our assets. The application of these principles ensures we manage our assets in a consistent and considered way.

Forward looking – intergenerational equity. Infrastructure is future oriented – developed and managed with consideration for long-term use including future technology and population changes.

Optimal – Greater Wellington will optimise its infrastructure planning to take account of lifetime cost and demand factors

Adaptable – we will build and develop assets that are resilient to social and environmental changes, including adverse events

Coordinated – we develop our infrastructure in consultation with our major partners reflecting our part in the national system (central government, Territorial Authorities, Council controlled organisations). We will develop our infrastructure with other partners too, wherever that would be practical and cost-effective

Navigating a changing environment

In developing our Long Term Plan, Greater Wellington formed a view on the type of things that will, and do, impact on how and when we plan our investment now and in the future. These assumptions are listed below (and detailed in Section 5).



Changes in our population



Increased adverse events and impacts from climate change



The fast-pace of changes in technology



Economic growth



Pressures on land use and the environment



Governance



Social change.

In the detail of each asset group in this strategy, we outline specific considerations and impacts of these assumptions and the options we have to address them, and any impact this will have on our levels of service.

Additional asset management assumptions have been made in preparing this Infrastructure Strategy. These are listed in the Appendix 1 (page 198) and the detail given in the relevant section of the document.

Public and environmental health

Providing, operating, managing and regulating infrastructure can have adverse effects on public health and safety and the environment. An overriding assumption is that all Greater Wellington work aims to improve environmental outcomes, or at least mitigate any adverse effects, as well as protecting and improving public health and safety.

Asset approach

Asset management approach

We have committed to best practice asset management across the organisation. This means using practices to manage assets and long term works programmes to deliver agreed levels of service, in the most cost effective manner, throughout their lifecycle. Asset management is core business and integrated with all other business processes.

Asset management at Greater Wellington is guided by the International Infrastructure Management Manual (IIMM). Asset management is used to forecast the prudent expenditure needed to operate, maintain and renew or upgrade our assets. Asset management is a continuous exercise- Asset Management plans are refreshed annually, and reviewed three yearly, to deliver activities and contribute strongly to Council's priorities.

Asset knowledge

Good quality asset management relies on good quality asset knowledge. It is important that asset managers can analyse how particular assets perform, understand the lifecycle costs and the risks associated with failure. Uncertainty about data for an asset can impact on financial sustainability.

Asset knowledge covers a description of the assets, their age, condition, performance, and value. This information, whether it is detailed or based on judgement, is essential to the broader lifecycle discussion. Data confidence gives us the ability to quantify the relationship between any given level of service, its associated funding requirements, and the increasing or decreasing of any consequential 'risks' associated with changing a level of service.

We have a good understanding of assets. Greater Wellington undertakes regular condition and performance monitoring which, along with demand and risk data and relevant asset life expectancy rates, informs maintenance, renewal and replacement of assets.

This condition and performance data is reassessed at different intervals and frequency depending on the asset type and its criticality. Generally we have a good degree of confidence in our asset data, and are working to close maturity gaps where they exist.

We are confident that this strategy is based on a strong foundation of reliable asset information, though it is acknowledged there is a risk of this asset information not being accurate or up to date. These risks are minimal and are part of an asset management plans improvement plan.

Critical assets

Central to managing risks, hazards and resilience is the criticality of assets. Critical assets are those that are likely to result in a more significant financial, environment and social cost in terms of impact on organisational objectives and agreed level of service, but not necessarily a high probability of failure. The more critical - or significant - an asset, the better management it requires. The criticality of all Greater Wellington's assets (1 (Extreme) to 5 (Insignificant)) has been established and used to inform their lifecycle management.

Lifecycle management

Greater Wellington uses a lifecycle management approach in its management of assets. As such, we consider lowest long term/whole of life cost (rather than short term savings) when making decisions. There is more detail on Lifecycle management in Appendix 1 (page 198).

The majority of our capital investment will be funded through debt, which will be paid back over an appropriate time period for the underlying asset. Operating expenditure is funded out of operating revenue. Rates and levies are set at a level to ensure that Greater Wellington achieves this objective.

Greater Wellington maintains its assets until they reach the end of their useful lives, when they are renewed, or upgraded. An asset's useful life is updated periodically based on:

- Age and condition profile
- Performance and customer service issues
- Growth and changing demands
- Criticality and risk
- Ongoing maintenance requirements
- The differing economic lives of individual assets.

The following table summarises value, condition, reliability of asset data and criticality of the assets covered by the Strategy.

Asset Group	Replacement value	Overall condition	Data confidence	Criticality
Water supply	\$403.6 million	2 - Minor defects only	2 - Reliable	1 - Extreme – for the entire network
Flood protection	\$340.6 million	2 - Minor defects only	2 - Reliable	1 - Extreme – stop banks, flood gates, barrage gates, detention dams
Public transport	\$637 million	3 - Maintenance required	2 - Reliable	3 - Moderate
Parks	\$77 million	2 - Minor defects only	2 - Reliable	3 -Moderate
Environmental science	\$5.7 million	1 - Very Good	2 - Reliable	2 - High – River and rainfall monitoring equipment
Harbours	\$1.6 million	2 - Minor defects only	2 - Reliable	3 - Moderate – Signal Station at Beacon Hill

Condition, data confidence and criticality are all based on 1–5 rating scales.

Rating	Condition	Data confidence	Criticality
1	Excellent	Systematic and fully optimised data programme	Major, region wide, long term disruption and significant cost to restore service
2	Some minor maintenance work is required	Reliable data in information system with analysis and reporting	Significant disruption over an extended period
3	Maintenance is required to return to the expected level of service	Sufficient information to support basic analysis	Serious localised impacts and cost
4	Requires a significant upgrade	Basic /incomplete information based on assumptions	Minor service disruption.
5	The asset is unserviceable.	No asset register	Negligible social or economic impact

Levels of service and financial considerations

Levels of service, performance measures and targets all have financial implications. Greater Wellington's priority areas drive levels of service, which influence timing and quality of maintenance renewals and upgrade works. Some projects are renewals-based however these indirectly contribute to service level provision.

Levels of service are therefore the vital link between Greater Wellington's priority areas and expenditure requirement, and account for expenditure differences between:

- Asset types (such as water supply and parks assets)
- Asset components (such as bus stops and railway carriages)
- Asset sub-components (such as asset types differences between catchments (refer to Floodplain Management Plans)
- Expenditure categories (such as maintenance and renewals).

Capital development funding is categorised according to whether it predominantly meets levels of service, growth or renewals needs.

Local Government Act S17A reviews

We have recently undertaken a high-level review of the funding, governance and service delivery arrangements relating to the provision of infrastructure, as required by section 17A of the Local Government Act. The review did not result in any recommended changes to the overall nature of the arrangements in place at this time. Reviews, which include alternative delivery scenarios, are programmed to occur on a rolling six year basis, and ahead of major contracts coming to an end.

For the purpose of this Infrastructure Strategy, we have assumed our existing structure and models of delivery will remain in place over the 30 year period.

Insurance for strategic assets

As part of our financial provision for the impact of natural hazard-related events on infrastructure, we maintain a material damage business interruption insurance policy for all Greater Wellington aboveground assets (excluding motor vehicles which are separately insured). Our above ground assets are insured on a maximum probable loss basis. This common approach to insurance means that we do not insure 100 percent of our assets. As there is a low level of risk that all assets would simultaneously be affected by a hazard event. This approach to insurance focuses on the effects of a low probability, high impact event. We provide adequate funding in our annual maintenance budgets to accommodate repairs as a result of smaller, more frequent events. We have a large excess (\$20 million for earthquake events) in order to reduce our premium costs. The excess is substantially less for other hazards such as fire.

To meet this excess, Greater Wellington has set up a material damage fund. This fund is currently approximately \$8.6 million, and earns interest which is added to the fund.

Our trains are insured separately, also on a maximum probable loss basis. Any shortfall would be met by borrowing.

Our underground assets are generally not insured but we have funds set aside for hazard events – either as cash deposits or reserves. The specific funds for our different asset groups are discussed in more detail in our Financial Strategy.

Significant infrastructure challenges and issues

In considering Greater Wellington's assets against our priorities and vision, we believe the significant infrastructure issues for the region are:

- ageing infrastructure
- resiliency
- affordability

It should be noted each of the significant infrastructure issues does not affect each asset group equally. In addition, the significant infrastructure issues are not mutually exclusive, and that a change in one affects the other two.

Below each of the issues is described and expanded on. The asset sections describe the impact of the key infrastructure issues on the assets. It also describes the options for dealing with the issues, and the implications of those options.



Ageing Infrastructure

Our infrastructure is ageing and we need to plan to ensure it is fit for purpose and will meet the ongoing needs and challenges of the region.

Some of the region's assets will reach the end of their economic life during the term of this strategy. As an asset nears the end of its life, there is an increased chance of asset failure resulting in reduced levels of service. Costs tend to escalate towards the end of an asset's life, as repairs and maintenance activity increases to keep the asset in service.

Older assets may also no longer be fit for purpose - they may no longer meet the needs of users, be legislatively compliant or they may contain technology that is no longer supported. These older assets may not be easy to adapt to the changing future needs of the community – additional capacity and increased resilience cannot be simply added to most assets.

Each asset group has a programme in place for renewing or replacing existing assets when they reach the end of their economic life, that is, when they no longer function or the cost of operating and maintaining the asset each year, outweighs the benefit it is providing.

Ageing assets is an issue for most asset groups, however the issues with the biggest financial impact during the term of this strategy are in water supply (aquifer wells and the Kaitoke trunk main) and public transport (Wairarapa trains; rail network).

Some assets have long lives and may be managed in perpetuity. Examples include the Stuart Macaskill lakes (water storage), parks heritage assets and flood protection schemes. The asset management plans contain the strategies for managing these assets.

Resilience

Being resilient is having the ability to withstand, adapt and work through the shocks and stresses that will undoubtedly hit the region. These shocks and stresses, outlined in our assumptions, may be short and sharp or gradual, any of which could have a dramatic impact on our community and business, and impact on the economy of the whole region. Resilience in the Infrastructure Strategy means being able to reasonably predict, survive and continue to provide essential services to the community with minimal interruption after an adverse event. Our approach in the 2015 Infrastructure Strategy was to look at resilience through the natural hazards lens. We now recognise that we need to consider other resilience factors as well.

The world is rapidly changing; technological advances, demographics and societal changes, our climate and natural environment, business and funding practices, legislative requirements, workforces skills and capability. How we provide, manage and think about assets and infrastructure will have to change to ensure ongoing resilience.

Our options for managing infrastructure resilience revolve around the level of risk that the community is willing to accept. High risk options, such as doing nothing, do not represent good asset management practice. Although 'doing nothing' would not increase our costs in the short term it will result in a decline in the condition of our assets and the level of service provided, and would increase the risk of failure of, or damage to, our assets. Doing nothing will almost certainly result in increasing costs, possibly significantly, in the longer term.

Improving the resilience of all our assets is a lower risk approach –moving from a post disaster recovery costs position, to investment in mitigation that would limit the impact of shock and stresses when adverse events do hit.

Improving resilience may include physical improvements to the infrastructure itself; backup plans in the event of failure or compromise; building redundancy into the networks, flexibility to meet changes in supply or demand; and/or funds for repairing significant damage. Mitigation and adaptation of the long term effects of climate change will be provided by reviewing the science information as it becomes available and adapting the timing and scope of programmes as required.

Redesigning how we work, the jobs and workplaces, and combining people, teams and stakeholders to work together collaboratively to develop the best solutions and smarter ways of delivering for our communities is also important to our resilience and can bring about multiple, long term benefits.

Affordability

The large infrastructure we own represents significant historic investment and significant investment in the future. Providing infrastructure is Greater Wellington's biggest area of activity; the majority of funding spent on planned infrastructure projects and programmes water supply, flood protection and public transport is in order to meet agreed levels of service.

The upgrade and/or addition of new assets, to improve resilience or to support growth in the region and other service levels/challenges/demands, will add further to our costs. Deferring or reducing expenditure on assets now, would only increase our cost burden in the future whilst increasing the risk of asset failure and shortening the life of the asset. We will not defer maintenance or renewals - this does not reflect our principles for managing our assets.

Greater Wellington is mindful of the impact rates increases have for ratepayers. In the planning process, Greater Wellington has considered the funding requirements of various project proposals. The timing and scope of projects have been optimised to balance cost pressures, limit the rates increase, and maintain a healthy balance sheet.

A key challenge will be developing work programmes that can accommodate a range of future states and enhance the resilience and adaptability to change, under models that are affordable to our community. The key affordability pressures we face are:

- Public Transport Transformation Programme The new Public Transport Operating Model (PTOM) requires Greater Wellington to build long-term commercial partnerships with public transport operators, in order to improve services and grow patronage
- Rising costs following the November 2016 earthquake
- Investment in the resilience of our asset groups and services, so that the region is better able to withstand and/or recover from major shocks and stresses – especially bulk water supply and flood protection.

Addressing the issues

The Wellington region needs to respond to some big challenges. As well as the challenges to the community of affordability and ensuring financial sustainability and equability, Wellington will be home to more people in the future, and there will be corresponding increases in demand on assets and services, including water swater supply. The demand for recreation facilities and activities is also likely to increase.

The region's population is projected to increase from around 504,000 in 2017 to 538,000 by 2027 and 596,000 by 2047. The ageing of the baby boom generation and increased life expectancies means those aged 65 and over will make up a larger proportion of the region's population. However boomers are starting to give way to millennials. The inter-generational differences between the millennials and baby boomers are clear; the sharpest differences in the "asset gatherers" versus "lifestyle minimalists" characteristics being location- two out of three millennials live in cities, where as about half of all baby boomers live rurally. We will need to adapt the services we deliver to respond to changing population and demographics across, and in specific parts of, the region. We need to think about when and how we deliver services to suit our changing demographics.

The status quo will not deliver the future Wellington needs in the short or long term. To succeed, we must build on our competitive advantages; our high public transport use, our physical environmental opportunities and ecological assets. Addressing the issues requires a change of paradigm from the way we have often planned and managed the region in the past, to a sequential multi-disciplinary, multi-agency approach. We need to make evidence based decisions at the macro scale, to deliver services on the back of other major investment for the wellbeing of our community.

To address the issues we have considered a range of options and scenarios. These options have been developed to holistically deliver services and long term works programmes to agreed levels of service in the most cost effective manner, throughout their lifecycle. Multi-benefit projects, such as RiverLink, delivered with other stakeholders will become replaced with single focused projects. Asset management is an essential part of effective business planning to support sustainable service delivery. It links together our priorities with the levels of service needed to deliver them, the work required on the assets to sustain those levels of service, and the finances needed to support that work. The "most likely" scenario always has alternatives. Sometimes scenarios are dependent on others or outside our control. Other factors in the environment or economy can have an unforeseen effect. More often, however, the distinction between the most likely scenario and others depends on the decisions the organisation makes and the options it decides to pursue.

Whilst also helping address infrastructure issues, the most likely scenarios also contribute toward our strategic priorities- improving the quality of our region's waterways and increasing biodiversity, increasing the regions resilience to adverse events and providing infrastructure and systems that encourage and support increased use of public transport.

Issue	Most likely scenario	Cost	Time
	Replacement of Kaitoke trunk water main	\$19 million	2018-21
	Waterloo and Gear Island aquifer wells	\$9 million &	2019-25
	replacement	\$19 million	2028-35
Ageing Infrastructure	Lower Wairarapa Valley Development including George Blundell barrage gates	\$207 million	2018-48
	Replacement with long distance trains	\$33 million	2023-24
	Rail station infrastructure renewal and upgrades	\$71 million	2019-29
	Real Time Information system replacement or renewal	\$19 million	2028-29
Issue	Most likely scenario	Cost	lime
Resilience	Ngauranga and Wainuiomata reservoir strengthening	\$6 million	2021 – 20
	Cross harbour pipeline	\$116 million	2018-23
	Riverlink, and other Floodplain Management Plans.	\$506 million	2018-48
lssue	Most likely scenario	Cost	Time
	Water supply source development	\$320 million	2032-40
	Flood protection provision of recreational and amenity facilities	\$16 million	2018-48
Affordability	Upgrade shelters and develop interchange hubs	\$8.3 million	2018-19
	Install integrated ticketing	\$48 million	2019-21
	Let's Get Wellington Moving	\$67 million	2021-26

The table below summarises the most likely scenarios and the issue they address.

How much needs to be invested

The capital investments Greater Wellington has made in the past, and will continue to make in the future, commit Greater Wellington to annual costs to maintain, operate, renew, and replace these assets.

Capital expenditure

In maintaining levels of service, meeting priorities and addressing challenges, Greater Wellington expects to spend more than \$3,740 million on renewals and new capital between 2018/19 and 2048/49.

Figure 1 below shows forecast annual capital expenditure, and debt levels, shown in 2018/19 dollars, under the most likely scenario for the whole of Council, including the six asset groups over the 30 years of this Strategy.

The peaks represent large investment that we need to manage from both an affordability perspective and with our organisational ability to manage the workload.



Figure 1: Capital expenditure and transport improvements

Figure 2 shows the same forecast annual capital expenditure and debt levels as figure 2, but dollars are inflated for comparison purposes.



Figure 2: Capital expenditure and transport improvements (comparison version with inflation)

Operating expenditure

Over the life of the Long Term Plan our operating expenditure is forecast to increase by 34 percent from \$367 million in 2018 to \$492 million in 2028. Figure 3 provides a 10 year view of operating expenditure for each of Greater Wellington activity groups.

Part of these consequential operating costs is to support new capital including asset renewals and upgrades. Though operational efficiencies are a continual area for improvement and savings are being pursued in this area. The larger increases include:

- Public transport network: our activity plans will require operating expenditure to increase by \$88 million (37 percent) over the next ten years to increase patronage, improve levels of services and to fund borrowing for the capital programme.
- Water supply: our activity plans will require operating expenditure to increase by \$14 million (38 percent) to maintain our existing infrastructure and to fund borrowing for the capital programme that includes sourcing an alternate water supply.
- Flood protection: our activity plans will require operating expenditure to increase by \$10 million (52 percent) to maintain our existing infrastructure and to fund borrowing for the capital programme that includes investing in the RiverLink project.





Greater Wellington's strategy is to fund its operating expenditure out of operating revenue. Rates, levies and fare revenue are set at a level to ensure this objective.

Assumptions and risks

Section 101B(3)(b) of the Local Government Act requires local authorities to provide for the resilience of their infrastructure by identifying and managing risks. Risk management is about assessing and managing likelihood and consequences of an event happening, that will impact on the achievement of Greater Wellington's priorities.

The individual Asset Management Plans which inform this strategy analyse the risks associated with the assets and activities and management and mitigation of that risk. The following table shows the key assumptions that under pin the Infrastructure Strategy (additional to the Long Term Plan assumptions) the associated risks and impacts.

APPROACHES AND ASUMPTIONS	RISKS	LEVEL OF UNCERTAINTY	ІМРАСТ
We will provide infrastructure that can deliver activities in a manner that meets agreed levels of service now and into the future	Community expectations of council services are continually increasing, while tolerance for cost increases, disruptions and service failure is decreasing	Low	Changes to the stated service levels may result in new operational and/or capital expenditure costs which may require an increase in rates requirement
Asset management decisions are aligned to our strategic plans	Inability for assets and activities to contribute to the priorities	Low	Lack of alignment may result in priorities and community expectations not being achieved
We will comply with all legislation and national standards that apply to assets and service provision	The statutory requirements for local government evolves at rate or scale that is unaffordable to the community	Low	Reputational risk, and potential legal action, if non-complying. Work programmes may need to be changed to fit legislation changes
We will maintain and renew assets to agreed levels of service, in accordance with asset management (IIMMs) and industry best practice	Renewals programmes are deferred and asset condition and performance deteriorates as a result	Low- medium	A long term deferral of renewals poses a risk of asset deterioration and compromise of integrity which may attract additional capital expenditure costs in the future
Wellington region's population is growing; becoming older and more diverse – in culture, ethnicity, lifestyle, interests, tastes, leisure preferences, and in many other ways	Population growth, and demand on activities, occurs at faster or slower rate than projected	Low	Slower or faster population growth may impact on service levels, infrastructure expansion renewal programmes and costs, resulting in increased or decreased rates requirements
Natural disasters, or other events, will not change the demography of the region over the planning period	Ability of the region, communities, institutions and businesses as well as central government to function in Wellington following stresses and shocks	Medium —high	Climate change adaptation and/ or mitigation works are required earlier or later than programmed and require changes to capital expenditure programmes
The resilience of assets to adverse events is prioritised	Investment and resourcing is inappropriate to improve asset and activity resilience	Medium	Moving from a post disaster reconstruction costs position to investment in mitigation that would limit the impact of a disaster in the first place
Increasing ability to develop the best solutions and smarter ways of delivering services	The robustness of the assets, the level of redundancy and management of interdependencies of assets, services and community recovery is not considered	Low	Keeping up-to-date with technology and industry changes result in additional costs and potential rate increases

APPROACHES AND ASUMPTIONS	RISKS	LEVEL OF UNCERTAINTY	ІМРАСТ
There will be no change to levels of service unless recommended otherwise. Improvements to services will generally only be made where there is a gap in our service offering and the increase in service level is agreed	Service levels may require adjustment in response to service issues identified by the community, changes to legislation or an external factor	Low	Changes to the agreed service levels may result in new operational and/or capital expenditure costs which may require an increase in rates requirement
We are implementing an ongoing programme to improve the knowledge of asset condition and performance Asset data reliability and confidence is based on best available information at the time. Acknowledging this does have ability to impact on the reliability of the plan	Asset life and condition assessments prove to be invalid and assets require replacement earlier or later in their life cycle	Low – medium	An unexpected failure of an asset would be managed by re-prioritisation of capital expenditure programmes Additional borrowing costs may be incurred if renewals programmes were not able to be re-prioritised, and could require rates funding
Agreed service levels will be funded, in some cases as shared cost with central government and/or alternative funding	Shared funding percentages with external stakeholders change	Medium	An unexpected change in funding scenario would result in re-prioritisation of expenditure programmes Additional borrowing costs may be incurred if renewals programmes were not able to be re-prioritised, and could
A focus on renewals to maintain agreed levels of service, within an agreed risk environment with a focus on increasing resilience	Deferred backlog of asset maintenance and/or renewals	Medium	A long term deferral of renewals poses a risk of asset deterioration and compromise of network integrity which may attract additional capital expenditure costs in the future

Our six asset groups

The following sections outline how Greater Wellington plans to manage each of its six key asset groups. For each asset group, the key issues, options, and our management approach are outlined.

	ASSET REPLACEMENT VALUE
Water Supply	\$403,580,000
Public Transport	\$636.9M
Flood Protection	\$340.6M
Environmental Science	\$5,737,000
Parks	\$77M
Habours	\$1,642,855

Water supply

The bulk water supply assets include a network of pipelines, pumping stations, reservoirs, treatment plants and other assets. Greater Wellington owns the bulk water supply assets.

On behalf of Greater Wellington, Wellington Water Limited provides bulk water supply to four of the region's cities. Wellington Water is a council controlled, shared service organisation, jointly owned by Greater Wellington Regional Council and Hutt, Porirua, Upper Hutt and Wellington city councils- the shareholders. Wellington Water is contracted to manage the water supply activity on the Councils' behalf, this includes strategic and asset management planning, operations and capital projects. Policies and user charges functions remain with Greater Wellington Regional Council.

Assets	Number
Distribution pipework	180,494
Treatment plants	4
Tunnels	9,404
Water storage	7
Pump stations	20
Roads and tracks	45
Raw water intakes and wells	18
Aquifer wells	11

Replacement value	Condition	Performance	Data confidence	Asset management maturity	Criticality
\$403,580,000	2. Minor defects only	2. Good, only minor shortcomings	2. Reliable	2. Intermediate	1. Extreme – for the entire network

Thirty year goal

Future proofing the region's water supply for the immediate future and for generations to come is our priority. Our water supply system must be robust and ensure sufficient drinking-water is available now and in the future. We must also be able to cope with emergencies and the long-term impacts of climate change.

Wellington Water is taking an integrated approach across the responsibilities of all five shareholding councils to water supply resilience across the Wellington region to bring about multiple, long term benefits. This approach aims to provide a limited water supply to customers close to their homes

immediately after a major earthquake.

Significant issues and challenges

Ageing Infrastructure

The 11 aquifer wells at Waterloo and Gear Island are reaching the end of their economic lives. A total of \$28 million has been allocated for replacement of the wells over the next 20 years. Investigations are in progress to ensure replacement occurs at the right time to maximise the economic life while maintaining the risk of failure within acceptable levels.

Replacement of the Kaitoke trunk main will be a significant renewal project in the medium term. The pipeline will require replacement in the mid to late 2040's. This is just outside the timeframe for this Infrastructure Strategy. However, it is appropriate to note that the potential impact on debt forecasts may be as high as \$270 million. Greater Wellington is investing in options to extend the economic life of the pipeline as much as is practicable. Operations and maintenance activities over the next 30 years will need to be adjusted to manage the end of life process. Additional details will be included in future infrastructure strategies.

Resilience

Building resilience into our water assets is vital as water supply is an essential service. Significant consideration has been given to what happens in event of failure of the asset or how the service is restored with minimum cost, time and effort. This includes investment in mitigation that would limit the impact of a disaster in the first place. The major risk to the resiliency of our water supply assets is from a significant earthquake, particularly one that involves movement of the Wellington Fault. Other hazards include major rain events, droughts, fires, and electricity failure of over two days' duration.

Impacts of climate change - regional drought and changing rainfall patterns, and sea level rise - are expected to have long term adverse supply and demand effects on the water network. However, these are not expected to be significant over the next 30 years.

Drier summers and wetter winters are anticipated and may increase the need for summer bulk water storage. Greater Wellington has also examined the impact of sea level rise (in the range of 0.8 to 1.5m) on the water take from the Waiwhetu aquifer. In order to maintain sufficient pressure in the aquifer and prevent the possibility of salt water contaminating the supply, when the weather is very dry, Council may need to reduce abstraction rates from the aquifer to a greater degree than we had previously considered. The aquifer supplies up to 70 percent of the regions water during dry summers so a reduction in yield will also increase the need for seasonal storage in the long term.

The bulk water supply pipeline from the Te Marua treatment plant to Porirua and Wellington crosses the Wellington Fault at Te Marua, Silverstream and Karori, and some sections may be subject to damage from liquefaction and land movement. Restoring the supply of water to the four cities following an earthquake involving the Wellington Fault, will be challenging and take a considerable amount of time (100 days plus for Porirua City and Wellington's northern suburbs). Our long-term goal is to provide 80 per cent of our customers within 30 days of a reasonable seismic event, with at least 80 per cent of their water needs (80-30-80).

An alternative water source for Wellington city is planned to improve the ability for the water network withstand a major earthquake. Greater Wellington has done considerable work investigating possible options for new water sources for daily water needs as well as post major shocks to the network. The two most likely options are for a cross harbour pipeline or harbour bores to the Waiwhetu aquifer. Investigations are continuing to determine the best option; the most feasible option is expected to be known by June 2018. Until the feasibility of the harbour bores are proven, we are planning for the more costly cross harbour pipeline option (\$116 million). Both options also have an annual water levy impact. Depending on the decision made on options, we may need to amend our long term plan.

Water supply resilience also involves increasing our water storage capacity through new and upgraded reservoirs. The Omāroro Reservoir project will improve the region's water supply network and increase water storage in case of a disaster, work is programmed for 2019-22. The seismic strengthening of the Ngauranga and Wainuiomata water reservoirs will be undertaken over the next couple of years. These upgrades will be complemented by a joint central/ local government initiative which aims to have 22 alternative emergency water source locations across the regions by 2018.

Affordability

Affordability has been balanced with the need for resilient infrastructure. There are no immediate affordability issues with water supply infrastructure. Water supply is funded through a levy on territorial authorities, according to consumption (as provided for the in Wellington Region Water Board Act 1972). We assume that shared water levy charged directly to the councils will continue.

Other issues

Following the 2016 Havelock North water contamination incident, routine monitoring detected E. coli and high levels of total coliforms in the untreated water extracted from the Waiwhetu aquifer. This was previously considered a secure groundwater source. As a result, we have (during the 2017/18 financial year) installed additional treatment infrastructure, and all drinking water from the Greater Wellington bulk water supply is now treated in a manner that meets the Havelock North Drinking Water Inquiry recommendations. Investment will be required over the next few years to complete UV disinfection of all ground water supply, the scope of the work and the costs involved are not yet quantified.

Emerging contaminants (EMs), such as pesticides and pharmaceuticals, and their treatment and /or removal from the bulk water supply is an issue that may require greater focus in the future. EM's have potential to cause adverse ecological and/or human health effects.

Responding to the Long Term Plan assumptions

Over the 10 years before 2015, per capita consumption of water decreased while regional population increased. This resulted in reduced overall demand for water. The reasons for this included:

- Fewer leaks in the city reticulation systems
- Improvements in consumer attitudes to water conservation
- improvements in household water efficiency.

The downward trend in per capita consumption has flattened since 2015. If demand remains the same as population increases then a new water supply source will be required by around 2040. Planning and development work for this will need to commence within the life of this Infrastructure Strategy – in approximately 2030. This is likely to include additional seasonal storage, a new water treatment plant, and a significant increase in bulk transfer capacity.

There has been considerable investment into investigating possible options for new water sources as well as upgrading existing assets. Three potential on-river storage dam sites have been identified, along with investigation into a third storage lake at Kaitoke. The new source options being considered provide different levels of benefit with respect to emergency supply following natural hazard events – particularly movement of the Wellington fault. Options for new sources are therefore being considered in combination with emergency water supplies.

A recent assessment has shown that a relatively small reduction in demand could significantly defer the timing for developing a new water source. The financial and environmental benefits of this are significant, so there is likely to be an increased focus on demand management in the coming years.

It should also be noted however, all current watertake consents, including the Waterloo and Gear Island wellfields, are from sources that are identified as over-allocated in Greater Wellington's proposed Natural Resources Plan (e.g. Hutt, Wainuiomata and Orongorongo rivers). That means it would be extremely difficult to secure new consents for additional water takes. These limits also apply to other catchments earmarked for future use. Also impacting on future supply will be the outcomes from the Wellington Harbour and Hutt Valley Whaitua, which has yet to be established but which will determine limits for future water flows. More stringent limits could impact on future water takes when consents expire from 2030-2037, further supporting a strategic case for demand management.



Technology

Many cities across the world are already transitioning towards what we call the "fourth generation" of water infrastructure. This is characterised by improved water efficiency; source control; separation of resources and pollutants at source; improved management and control of flows in the system; and resource recovery of energy, carbon and nutrients.

New technologies and use of digital information will influence the way councils, businesses and individuals operate in the future, and have implications for assets and services. There is a clear shift in water supply industry to alternative, new and more efficient technologies system components like sensor technology, automation and control devices, and data analytics software. Smart Water offers opportunities for more efficient plant operations, optimisation of pumping and power usage, asset management, detection of leaks and contaminants, and consumer access to individual usage data.

Addressing significant issues and options

Level Of Service	Issues	Options	Most likely scenario	Principle alternative option
	Ageing water	Replacement of critical infrastructure	Replacement of Kaitoke trunk main	Porirua Branch
	supply assets	Upgrade bulk supply water mains	pgrade bulk supply water Waterloo and Gear Island aquifer wells replacement	
	Water storage	Strengthening of storage	Ngauranga and	Ctratagia storeg sites
Safe and healthy	resilience	Alternative storage sites across the region	strengthening	Strategic stores sites
water	Wator supply	Desalination Plan		
Respectful of the environment	resilience	Cross Harbour Pipeline	Cross harbour pipeline	Harbour Bores
		Harbour Bores	-	
Resilient networks support our community.	UV disinfection of all ground water supplies	UV Treatment at sources	UV treatment at Gear island	No alternative is a must do to protect public health
		Upgrading and installing new assets		
	New water	Demand management	Source development for	Options will become apparent as
	supply source.	Promoting water conservation	growth -	investigation work commences
		Source development for growth		

Most likely scenarios are based on the following assumptions specific to water supply:

	 We will maintain and renew assets to agreed levels of service, in accordance with asset management (IIMMs) and industry best practice Asset data reliability and confidence is based on best available information at the time. Wellington Water are implementing an ongoing programme to improve the knowledge of asset condition and performance
Lifecycle of significant assets	 Continued approach of evidenced-based decision-making for any asset investment proposal
	 A focus on renewals to maintain agreed levels of service, within an agreed risk environment with a focus on increasing resilience
	 Integration with planning tools to ensure all growth areas have the ability to be serviced by existing, upgraded or new infrastructure
Growth or decline in the demand for the service	-Wellington's population is growing; becoming older and more diverse. We are planning for a steady increase in demand for water supply from residential, economic and tourism growth.
	 Natural disasters, or other events, will not change the demography of the region over the planning period
Level of service	-We do not propose any significant changes to our current levels of service for water supply
	 The most likely scenarios will address the impacts, and maintain the levels of service for safe to drink, and continuous and secure supply

Significant capital expenditure decisions

The following table sets out the significant decisions about capital expenditure for our water supply assets required over the next 30 years, including when we expect to make those decisions, what principal options we expect to have to consider, and the approximate scale or extent of the costs associated with the decision.

Significant decision required	Timing of project	Principal options	Costs
2018-2021 Renewal of critical assets		Replacement Kaitoke trunk main on Silverstream Bridge. Budget and timing changed significantly due to the complexity of the project.	\$19 million
	19/20 — 24/25, 28/29 — 34/35	Waterloo and Gear Island aquifer wells replacement Budget and timing changed significantly.	\$9 million \$19 million
Improving water storage resilience.	18/19 — 19/20	Ngauranga and Wainuiomata reservoir strengthening	\$5 million
Improving water supply	18/19 – 22/23	Decision to be made following investigations whether pursue harbour bores or cross harbour pipeline. Cost for harbour pipeline shown here.	\$116 million
lesmence.	18/19 — 19/20	Strategic Stores for spares and equipment. New project to improve operational resilience across the region	\$5 million
Supplying safe drinking water	TBC	UV treatment at Gear Island. New project to protect public health that has resulted from the Havelock North Inquiry.	Not yet quantified
Future investment for regional supply capacity	2032-2040	New water supply source.	\$320 million

The breakdown of capital expenditure by investment driver is given in Figure 4 below. This shows significant investment in proposed resilience improvements in the early stages of this strategy, followed by new source development in the mid-2030s and major renewals work in the late 2040s.

Figure 4: Water supply, significant captial expenditure decisions 2018-2048 Capital expenditure inflated dollars



Estimates of capital and operating expenditure

The estimates of the projected capital and operating expenditures for water supply infrastructure assets are shown in Figure 5.



Figure 5: Water supply, annual expenditure 2018 - 48

Public transport

Greater Wellington plans, funds and operates the Metlink public transport network of train, bus and harbour ferry services throughout the region. We own and maintain parts of the public transport network, including trains, railway stations, and bus shelters. We contract companies to operate the train, bus and harbour ferry services on our behalf. We provide customer information about the Metlink services, as well as providing a transport subsidy scheme (Total Mobility) for people with disabilities who cannot easily use public transport.

Trains

Greater Wellington Rail Limited is a Council-Controlled Organisation of Greater Wellington, which owns the Matangi fleet of electric multiple units, the Wairarapa passenger carriages and some other rail infrastructure as outlined below, via funding from Greater Wellington. Because electric multiple units and carriages are investments that Greater Wellington needs to fund, we include them in the Infrastructure Strategy.

Assets	Number
Bus stops & shelters	3064
Interchanges	6
Park & Ride facilities	40
Rolling stock	193
Station assets	47
Rail network infrastructure	5
Customer information assets	4

Replacement value	Condition	Performance	Data confidence	AM Maturity	Criticality
\$636.9M	3 -Maintenance Required	3 -Moderate	2 -Reliable	4- Intermediate	3 -Moderate

Thirty year goal

The Wellington region has a strong culture of public transport use. Nearly 38 million passenger trips were taken on the Metlink public transport network during 2016/17 – equating to the highest per capita public transport use in the country.

We want to become a smarter, cleaner region by encouraging more people to travel by bus, train and ferry, especially at peak times. So we're making extensive improvements to the Metlink network to deliver faster, affordable, more frequent and reliable services. It's all about providing a better public transport experience to make greater Wellington even greater.

Our high use of public transport hasn't happened by chance – but has been a result of planning and investment over a long period. For the past 10 years we have made a significant catch-up investment in rolling stock and infrastructure.

Our current programme is focused on consolidation of rail services, transformation of bus services (new network for Wellington city, modern sustainable bus fleet, including new double decker electric buses) and improving the customer facing aspects of the Metlink network.

Our plan for the future is to continue to invest in, and transform, all aspects of the Metlink public transport network. We want to make Metlink even better so it remains the preferred choice of travel for people, particularly in peak travel times where the benefits to the wider network and economy are more pronounced.

Who owns what?

While Greater Wellington provides the public transport network we only own some of the assets used for public transport services. We need to ensure that the assets are managed effectively, so that the public transport network can operate efficiently.

Greater Wellington owns some bus stop shelters and the majority of bus stop related infrastructure, as well as customer information systems (such as Real Time Information System, and the website).

Local city and district councils own some bus stop shelters and related infrastructure; Wellington City Council owns the Wellington Station bus interchange; and Hutt City and Wellington City councils own their respective ferry wharfs.

Third parties e.g. Adshel own some bus shelters.

Greater Wellington Rail Limited owns the trains for our rail services, station buildings (except Wellington Rail Station), Park & Ride carparks, and other station-related infrastructure.

Bus service contractors are responsible for their own buses, except for the new double-decker buses that are coming. Council will be obliged to buy them back from the operators at the end of the respective operating contracts.

KiwiRail owns the rail network infrastructure, including tracks, signals, telecommunications, network control, overhead traction power system, and station platforms. KiwiRail Freight also provides the locomotives used on the Wairarapa line. The Capital Connection train is currently owned and run by KiwiRail.

Ferry operators own their own ferries.

Significant issues and challenges

Ageing Infrastructure

Wairarapa Line rolling stock

The carriages operating on the Wairarapa line were manufactured from old British carriages during 2007-13. The carriages require a mid-life refurbishment in the period 2019-21, with replacement scheduled around 2032. A business case is currently being developed to assess alternative options.

The preferred option is to replace the ageing fleet with Electro/Diesel Multiple units (EDMU) on Wairarapa and the Capital Connection lines, servicing Otaki and Palmerston North (currently owned and managed by KiwRail) at the same time. One important advantage of bundling the Wairarapa and Capital Connection trains together is that we achieve significant economies of scale – it is very difficult and expensive to construct a small number of specialised train units.

Early costs are estimated at \$300 million in today's dollars. Given the early stages of option development, cost estimates, and uncertainty on the requisite Crown business cases, as well as funding allocations to be agreed with our partners, we have provisioned for 10 percent of this cost in years 2022-24. This would bring forward the spending we proposed in the last Long Term Plan for replacing the carriages during 2027 to 2030. We have also maintained a provision for refurbishment of the Wairarapa carriages, the extent and timing of which will be reviewed together with the development of the business case.

The ageing Wairarapa carriage refurbishment or replacement estimated costs and funding commitment from other stakeholders is also an affordability issue.

Rail station infrastructure

The rail station infrastructure has a range of ages, conditions and performance, which require ongoing investment to ensure that assets provide the agreed level of service. Seismic strength issues on our pedestrian bridges and subways need addressing.

Bus infrastructure

Currently bus services in the urban centres are at capacity during peak periods. Congestion means the services are often delayed. The current programme of works includes upgrades to bus shelters and developing key interchange hubs in Wellington City. The current Wellington city bus network service provision will not meet current and future patronage demands or customer expectations. Capacity and frequency of service levels could be enhanced to attract patronage and better cope with urban population and economic growth. The current package of service enhancements is focused on greater coverage, capacity, shoulder peak service and frequency. The package has a cost of \$0.6 million in the first year and increasing year on year.

In preparation for the new bus network, which has an increased reliance on transfers, we are developing new transfer hubs, which include more extensive public transport information, including Real Time Information and wayfinding. The bus network real time information system is approaching its end of life and is scheduled for replacement or renewal in 2028/2029.

Outside of Wellington city, the focus is on speeding up renewal of existing bus shelters and closing the service level gap by installation shelters and other customer facilities at bus stops – for example, the renewal of key bus interchange facilities at Porirua Station which has reached the end of its life. The renewal of the customer facilities is planned to be undertaken in 2019/2020.

New buses, owned by the operators, with lower emissions profiles, including some electric, will be in operation under the new contracts.

Resilience

Severe wind and rain events impact on, and disrupt, public transport (both our and others' assets). Sea level rise will have a significant effect on parts of our public transport system, especially those located adjacent to the coast. Although Greater Wellington does not own roads, or the rail network we rely on these assets to provide the public transport service to the region. We operate a reserve fund for any major loss or damage to public transport infrastructure as a result of natural hazards.

There is a need to shift from traditional transport modes, such as private vehicle use, to making mobility a service, for example, electric autonomous public and private shared, on-demand transport. They have a smaller environmental footprint and optimise land use. Investigation into the feasibility and development opportunities to achieve Transit Oriented Development at key interchanges (e.g. Kilbirnie, Johnsonville, Wellington Regional Hospital, Waterloo, Porirua, Paraparaumu town centre) is planned. This option will require proactive land purchase and coordination with local councils on integrated transport and land use planning.

Affordability

Rail infrastructure and rolling stock funding

Greater Wellington's plan to increase its level of service across the Metlink public transport network requires some significant investments in rail infrastructure. Some of this infrastructure is not owned by Greater Wellington; KiwiRail own the track on behalf of the Crown. We are developing business cases for the Government to fund key initiatives; our Long Term Plan has been developed on the assumption that these business cases are successful.

Rail network maintenance and capacity enhancements

Greater Wellington contributes to the annual maintenance, renewals and insurance costs of the rail network, which gives Council an interest in the quality of the network performance and the cost of the service. KiwiRail has a backlog of deferred maintenance, particularly on the Wairarapa line, resulting in our operational costs being high, and services are often delayed.

Business cases are currently submitted with the Crown to obtain funding for:

- addressing deferred maintenance and renewals on the Wairarapa line (~\$100 million), and
- unlocking network capacity to cater for ongoing and expected service demands (~\$100 million).

This plan assumes full Crown funding of both of these business cases in the 2018 central government budget round. Failure to obtain this funding support will have significant impact on meeting the agreed level of service, and/or the affordability of the Wellington passenger rail service.

Responding to the Long Term Plan assumptions

External factors that have the potential to increase public transport demand are:

- A growing population and economy (possibly also leading to increased congestion)
- Intensified development and patronage growth along transport corridors
- An ageing population
- Declining car ownership among younger generations
- Higher relative private transport costs (fuel, parking)
- Increased congestion
- Greater awareness and focus on clean, and/or renewable energy

Let's Get Wellington Moving

Let's Get Wellington Moving (LGWM) is a joint project among Greater Wellington, the Wellington City Council (WCC) and NZTA which aims to develop a transport system that supports Wellington city's growth, while making it safer and easier to get around. The project advocates for a multi-modal approach to improving the transport system including significant improvements to public transport services, as well as prioritising routes in the central city for public transport, walking and cycling, and measures to manage travel demand.

While it is too early to confirm the final scenario, and detailed business cases have not yet been completed, Greater Wellington has budgeted \$67 million in today's dollars over the next 10 years for programme improvements to provide the infrastructure to facilitate mass transit in Wellington. The final shares of costs for each party to the agreement will depend on the work done to each stakeholders' assets - NZTA has State Highways, WCC has local road investments and Greater Wellington has responsibility for planning and funding public transport services, and the means of procurement for any mass transit system.

Integrated ticketing

An integrated fares and ticketing system (IFT) is planned for the Wellington region's bus, train and harbour ferry services. Integrated ticketing will mean just one payment mechanism for all travel regardless of mode, and integrated fares will mean a simpler set of fare products with no additional costs for journeys requiring more than one service or mode. This represents a major improvement in service level.

A standard ticketing system across all bus operators as an interim measure, has been contracted and will be implemented during 2018. Current expectations are that installation of an IFT system will commence in 2020/21.

Issues and options

Levels of service	Issue	Options	Most likely scenario	Principle alternative option
	Existing rolling stock for Wairarapa and Capital Connection are ill- equipped to meet current and future patronage demands or customer expectations.	 Wairarapa line carriage refurbishment or replacement. Purchase other second hand carriages. Shuttle services between Upper Hutt and the Wairarapa. 	Replacement with a modern dual powered (Electro/ Diesel Multiple Unit) train fleet.	Refurbishment of the Wairarapa carriage fleet.
Transform and elevate customer experience and	Poor condition of rail stations requires ongoing investment.	Either reducing or increasing the level of service provided by the rail station infrastructure, and the level of risk accepted by the Council and the community (for example seismic risk).	Investment in rail station infrastructure - renewals, strengthening and upgrades - including the replacement of the Waterloo station roof.	Reduce level of service, and/ or the increase the user/rates funding of passenger rail service.
use of Metlink passenger services Maintain and improve the performance and condition of	KiwiRail network has significant amounts of deferred maintenance, which affects services and is also a resilience risk.	Complete the rail network maintenance at our cost.	Business cases submitted with the Crown to obtain funding.	Reduce level of service, and/ or the increase the user/rates funding of passenger rail service.
Metlink assets Deliver services in accordance with the published timetable	Bus services in the urban centres are at capacity and need to be enhanced to attract patronage and cope with urban population and economic growth	Bus shelter and interchange - new, upgrades and renewals	New bus network for Wellington City.	Transit oriented development.
Provide accessible and accurate information on Metlink services to the public Provide a fares	Urgent need for shift from traditional transport modes, such as private vehicle use, to electric public transport.	Transit oriented development	Let's Get Wellington Moving implementation	Transit oriented development
and ticketing system that attracts and retains customers	Changing and increasing customer expectations for cost-effective fares across a range of transport modes for a single journey.	Integrated fares and ticketing system (IFT)	Integrated fares and ticketing system (IFT)	Standard ticketing across buses and across trains.
	The real time information system is approaching its end of life	Before 2028 a decision will be required about whether to replace or renew.	Real Time Information System replacement or renewal	
	Vulnerability to disruption from natural wind and rain, sea level rise, earthquakes	Through participation in lifelines projects and working with other stakeholders our resilience to major events is increased.	Achieving outcomes with other stakeholders - i.e. Lifelines commitment	

Most likely scenarios are based on the following key assumptions specific to public transport:

Lifecycle of significant assets	 We are making asset management decisions based on our strategic plans (LTP, dNRP, RLTP etc). 		
	 We will maintain and renew assets to agreed levels of service, in accordance with asset management (IIMMs) and industry best practice. 		
	 Asset data reliability and confidence is based on best available information at the time. An ongoing programme to improve the knowledge of asset condition and performance is being implemented. 		
	 We will provide infrastructure that can deliver services in a manner that meets agreed levels of service now and into the future. 		
Growth or decline in the demand for the service	 Community expectations of council services are continually increasing, while tolerance for cost increases, disruptions and service failure is decreasing. 		
	- Varying stakeholder assets and associated risks to meeting levels of service.		
	 Wellington's population is growing; becoming older, more diverse and more urban. We are planning for continued, and future increases in, demand for a variety of modes, whilst allowing for changes in service levels for an enhanced public transport service. 		
	 We anticipate the use of public transport will increase in the future, albeit using relatively conservative population growth estimates. Key drivers considered include population growth, aging population, congestion and technology change. 		
	 Natural disasters, or other events, will not change the demography of the region over the planning period. 		
Level of service	– Changes proposed, as described below.		
	 Improvements to services are being made where there is a gap in our service offering and the increase in service level is agreed. 		
	 Customer satisfaction will increase as a result of increases in asset, operational and customer service levels. 		
	 Agreed service levels will be funded, in some cases as shared cost with central government and/or alternative funding. 		
	-Assume that shared funding percentages with external stakeholders will continue.		

Increasing levels of service

We **do** propose changes to our current levels of service.

Our short term work programme is to ensure we are meeting the existing levels of service. Longer term projects represent an increase in level of service; to transform aspects of the Metlink public transport network to deliver a world class service⁽¹⁾, which attracts and retains customers.

We have an investment programme to deliver those service improvements. These include improving the frequency of train and bus services during peak times, introducing integrated fares and ticketing, a modern sustainable bus fleet for Wellington city, new transfer hubs, additional park and ride space, improving bicycle storage at stations, renewing the real time information system, and extending CCTV coverage.

Our focus over the next 10 years is to:

- 1. continually improve levels of service for customers
- 2. unlock capacity to cater for ongoing and expected high levels of population and economic growth, and
- 3. improve the resilience of the network as a whole.

¹ which we define as a service where more than 95% of customers are satisfied with their trip.

Significant capital expenditure decisions

Public transport infrastructure is expensive, and funding it poses significant challenges for all regional communities.

Our significant decisions about capital expenditure for our public transport assets required over the next 30 years are set out in the table below. This includes when we expect to make those decisions, what principal options we expect to have to consider, and the approximate scale or extent of the costs associated with the decision.

Significant decision required	Timing of project	Principal option	Costs
The existing rolling stock for Wairarapa and Capital Connection services are ill- equipped to meet current and future patronage demands and service level expectations.	Between 2019 and 2021	Replacement of the Wairarapa, and Capital Connection, fleet with new trains -the preferred option.	Refurbish Wairarapa carriages for \$13 million and then replace within 10 years, Or Replace Wairarapa and Capital Connection fleet in the period 2019- 21 at an inflated cost of up to \$330 million (If funding support from other stakeholders) net cost to Council likely to be \$33 million
The package of rail station infrastructure renewals, strengthening and upgrades is aimed at meeting the level of service expected by customers.	On going	Reducing (or increasing) the level of service provided by the rail station infrastructure. Or Increasing (or reducing) the level of risk accepted by the Council and the community (for example seismic risk).	\$71 million over the next 10 years which includes \$10m in 2020/21 for the replacement of the Waterloo station roof
Interchange/ mobility hubs – dedicated enhancement of key interchanges would	2018/19	Enhanced programme of improvements to existing assets at key hubs in Wellington City and at key interchange stations on the rail network.	\$8.3 million – includes \$5.7 million additional cost to support the new network
improve attractiveness and access to public transport and active modes.	2019/20	Proactive land purchase programme at key interchanges (e.g. Kilbirnie, Johnsonville, Waterloo, Porirua).	\$3.4 million – includes Porirua Station bus shelter upgrade
The projected life of the integrated ticketing system, once installed, is ten years. Before this time elapses, a decision will be required about whether to replace or renew the system.	2018-21	Replace or upgrade integrated ticketing.	\$48 million
Real Time Information System replacement or renewal.	2028-29	Before 2028 a decision will be required about whether to replace or renew.	\$19 million
Lets Get Wellington Moving funding.	2021-26	At the time of this plan the final scenario has not been confirmed.	\$67 million.

The breakdown of capital expenditure by investment driver is given in Figure 6 below. The graph shows capital expenditure for buses, real time information and integrated ticketing; it doesn't include rail. Rail is considered an investment cost not a capital cost.





Estimates of capital and operating expenditure

The indicative estimates of the projected capital and operating expenditures for public transport infrastructure assets are shown in Figure 7.



Figure 7: Public transport, annual expenditure 2018-48

Flood protection

We manage flood risk from the region's rivers and streams. We investigate flood hazard, develop floodplain management plans and maintain and build flood protection works in accordance with these plans. We also provide an advice and consultation service in relation to flood and erosion risks and work with the community to maintain or improve the environment and recreational opportunities.

In providing this activity we also enable public recreational use and enjoyment of river corridors and contribute to the restoration of the natural and cultural values of rivers.

We recognise and provide for mana whenua relationships to fresh water and their stewardship in relationship to rivers.

Assets	Number
Stopbank reaches	1095
Individual structures	107
Bank edge structural	1777
Bank edge vegetative	1539
Channel assets	1074
Berms amenity	744

Replacement value	Condition	Performance	Data confidence	AM maturity	Criticality
\$340.6M	2- Minor defects only	2 -Good	2 -Good	2 -Good	1 - Stop banks, flood gates and walls, barrage gates, and detention dams
Thirty year goal

Historically in New Zealand, we have taken a strong engineering focus to flood management - diverting rivers, draining, and building on, land that were part of a river's floodplain. Over recent decades thinking has shifted and a wider view is taken to assessing and responding to flood risks. Avoiding flood risk is top of mind as are more natural solutions, affected communities are closely involved, and we think more about the environmental effects of flood protection works as well as protecting our communities.

Looking forward, we want to take this approach even further by working with iwi, communities and other councils to achieve greater social, economic and environmental outcomes from flood protection work. We will continue to look for innovative approaches for flood hazard management. In addition to the standard flood protection methods, such as building stopbanks and diverting flood water, our focus has moved to avoiding flood hazard in the first place and providing relevant and up-to-date information. A key component of this is working with territorial authorities to ensure new development in flood hazard areas is appropriate.

Significant issues and challenges

Ageing Infrastructure

Large flood protection assets such as stopbanks are maintained in perpetuity, so do not have an end of life as such and do not have a defined programme for their renewal. Annual planned maintenance keeps the assets in good condition and providing good performance overall. In some cases, capital improvements are necessary when flood damage to assets requires more than standard operational repair work.

Of the 15 percent of assets rated as being in poor or very poor condition, the majority are debris fences, groynes and willows. As such flood protection assets are fit for purpose, structurally sound and legislatively compliant, meeting the agreed levels of service.

The George Blundell Barrage Gates is a complex asset and an integral component of the Lower Wairarapa Valley Development Scheme and the gates have a useful working life until approximately 2074. Various asset parts make up the Barrage Gates, some of which are programmed for renewal in the next 30 years.

Resilience

Floodplain Management Plans describe how we manage the flood risk on individual rivers and floodplains. The risks associated with population growth, land development and natural hazards are incorporated into Floodplain Management Plans and other planning. This ensures the asset base is resilient to increasing shocks and stresses and that any new assets are created following a risk-based approach.

The major hazards relating to flood protection assets are damage from major earthquakes and from floods. Major earthquakes could result in cracking and slumping of stopbanks, foundation settlement and cracking of concrete structures, cracking of river berms, and slumping of rock edge protections. The Barrage Gates in the Lower Wairarapa Valley are a particular concern. Flood protection assets on land subject to liquefaction may also be damaged. Parts of our flood protection systems are also vulnerable to the damage and impacts of storms, rising sea levels, including the ability to discharge flood flows to the coast.

If flood protection systems are damaged, then the flood risk to communities along all major rivers in the region is heightened and will operate at reduced service levels until repairs can be completed. Water managers worldwide are looking to use natural green infrastructure as a flexible and efficient way to manage flood flows and risk (softer engineering). Industry best practice is moving away from costly, bigger stopbanks, pipes, and pumps (hard engineering) towards ways of capturing and holding water where it falls. There is an industry appreciation globally of the need to more fully integrate the planning and management of catchments land use and water management to mitigate flooding risk. Greater Wellington will need to work with local authorities and land developers in a more holistic approach to land, floodplain and water management.

Affordability

Expansion of the flood protection network generates additional maintenance costs which must be factored into budgets. Unless maintenance costs can be met with additional new funding, they must be met via reductions in strategy development or network development programmes.

Community expectations, on-going monitoring of environmental effects, together with more cognisance of the potential effects of flood protection work on the environment are changing the way that flood protection interventions in river environments are undertaken. This delivers improved outcomes for rivers, biodiversity and public amenity, but also increases the costs of the flood protection work. At the same time continuing to meet demands to protect people from flooding by building new, bigger and better flood protection especially in greenfield areas comes at a high cost.

Ensuring long term debt levels are sustainable while responding to demand for adequate and equitable flood protection across the region is an ongoing challenge. We have optimised the timing of delivery of the overall flood protection programme, and extended the loan repayment terms on our flood assets, balancing affordability with key areas of required service level improvements and spreading the cost more fairly in line with the benefits.

Climate change may impact on the ability of Greater Wellington to meet agreed levels of service for flood protection long term. In some circumstances managed retreat may be the most appropriate response.

Responding to the Long Term Plan assumptions

The conventional approach to flood hazard management- which removes water as fast as possible - relies on building structures and draining water. These engineered systems will reach capacity with a growing population and economy, as well as the effects of climate change. Reducing the risk and mitigating the future damage to our communities requires holistic integrated land use and water management and strategies, as well as traditional protection defences.

Population change, economic growth and land use changes are anticipated in particular parts of the region. New development in areas that are subject to flooding, which increases the risk, is not supported. Avoiding flood hazard by not building in high hazards areas is the most effective way of managing flood risk in the long term. Where existing approved development is subject to an unacceptable degree of flood risk then construction of new infrastructure will be considered. In all other circumstances reliance will be placed on either avoidance or alternative nonstructural measures.

More sustainable flood protection strategies will include planning and design principles to hold water in the landscape, using pump stations when necessary, rather than as a default. We will work with local authorities on planning controls (e.g. setbacks, minimum floor levels, onsite detention, water sensitive design) and target investments to risk. In some circumstances managed retreat or other planned non-structural measures may be the most appropriate response.

An example of this holistic multi agency approach is RiverLink. Greater Wellington, Hutt City Council and the NZ Transport Agency are combining their skills and working together on the project, which will bring big benefits to the Hutt Valley community.

The RiverLink project will deliver better flood protection, urban rejuvenation, better lifestyle and improved transport links for the people of central Lower Hutt.

RiverLink involves widening the river corridor – giving the river room to move, rather than constraining it. The space created between the new flood walls and stopbanks will allow for recreation and amenity; tracks, cycleways, swimming spots, picnic places, native bush restoration, kayak launching facilities. The project also allows for predicted increased rainfall frequency and magnitude and the impact on river and stormwater flooding, whilst working with urban intensification and land development.

Issues and options

Level of service	Issues	Options	Most likely scenario	Principle alternative option
	Inappropriate, new development and intensification in areas that are subject to flooding. Increased risk is not supported.	Work with local authorities on planning controls or other non- structural measures. Softer, more natural approaches. Avoidance using planning controls. Managed retreat from hazard areas. Traditional protection defences Development of new floodplain management plans.	Integrated, holistic multi agency catchment planning approaches.	Avoidance using planning controls.
Improve information and understanding of flood risk in the communityAgeing infrastructure - specifically Lower Wairarapa Development Scheme, including parts of the George Blundell Barrage Gates.Infrastructure is managed to agreed level ofAgeing infrastructure - specifically Lower Wairarapa Development Scheme, including parts of the George Blundell Barrage Gates.		Consider assets for scheme wide renewal, including the Barrage Gates, review historic information and studies. Carry out engineering investigations to determine maintenance and renewal options. Risk management renewals programming, including using a Asset Performance Tool developed to assist with identifying high risk river reaches and critical assets. Assess asset performance.	Determine maintenance and renewal options.	No alternative option.
service Minimise the environmental impact of flood protection works Improve community's resilience to flooding	Predicted increase in frequency and magnitude of storm events and the potential impacts of rising sea levels.	Target investments to risk. Work with local authorities on planning controls or other non- structural measures. Softer, more natural approaches . Managed retreat from hazard areas. Traditional protection defences Climate change allowed for in design. Adaptive management.	Combination of methods including: Implementing catchment/ floodplain management plan Upgrading infrastructure to maintain level of service.	Retreat from hazard areas.
	Meeting agreed levels of service within budgets and resources.	Opportunities to improve levels of service and improve value.	Minimal changes.	Apply additional resources and funding.
	Increased demand for improved outcomes for rivers, biodiversity and public amenity.	Work with local authorities on trail and open space provision. Softer, more natural approaches. Managed retreat from hazard areas. Traditional protection defences. Support community restoration and planting.	Amenity and recreation components as per the Environment Strategy.	Softer, more natural approaches.

Most likely scenarios are based on the following assumptions specific to flood protection:

Lifecycle of significant assets	 We are making asset management decisions based on our strategic plans. We will maintain and renew flood protection assets to agreed levels of service, in accordance with asset management (IIMMs) and industry best practice. Asset data reliability and confidence is based on best available information at the time. An ongoing programme to improve the knowledge of asset condition and performance is being implemented. We will provide infrastructure that can deliver services in a manner that meets agreed levels of service now and into the future. This may mean a move from traditional protection defences to softer, more natural engineered approaches. A focus on planned maintenance to meet agreed levels of service, within an agreed risk environment with a focus on increasing resilience. Integration with Territorial Authorities planning to ensure all growth areas present low risk and have the ability to be serviced by existing infrastructure or protection can be provided via planned, non-structural or softer, more natural measures.
Growth or decline in the demand for the service	 Wellington's population is growing; becoming older and more diverse. We are planning for intensification of population and land use changes in particular parts of the region. Natural disasters, or other events, will not change the demography of the region over the planning period. Assume the stance of no new development in areas subject to high risk of flooding and/or which increases the hazard risk is supported by TAs and councillors.
Level of service	 We do not propose any significant changes to our current levels of service in the short term of this strategy. Assume that shared funding percentages with external stakeholders will continue. Improvements to services will generally only be made where there is a gap in our service offering and the increase in service level is agreed. Increasing community expectations, on-going monitoring of environmental effects and increasing legislative requirements will drive change in the way that flood protection interventions are undertaken. Increased investment may be required to maintain levels of service in the face of climate change and sea level rise.

Significant capital expenditure decisions

Our significant decisions about capital expenditure for our flood protection assets required over the next 30 years are in the table below. This includes when we expect to make those decisions, what principal options we expect to have to consider, and the approximate scale or extent of the costs associated with the decision.

Significant decision required	Timing of project ⁽¹⁾	Principal options	Costs
Continue with traditional protection structures as well as move into the avoidance of inappropriate development and softer, more natural measures.	2018 to 2048	 Approval and implementation of the Floodplain Management Plans (FMP's). Significant decision points to deliver major projects including: Hutt River Riverlink Waiohine River FMP Te Kauru FMP 	Up to \$520 million
Asset maintenance and renewals in the Lower Wairarapa Development Scheme, including the George Blundell Barrage Gates	2018 to 2048	– Determine and carry out programme for maintenance and renewal works.	\$207 million
Greater provision of recreational and amenity facilities	2018 to 2048	 Develop new assets to deliver an agreed vision for regional rivers, as defined in the environmental strategy. 	\$16 million

The breakdown of capital expenditure by investment driver is given in Figure 8 below.



Figure 8: Flood protection, significant capex decisions 2018-48

Estimates of capital and operating expenditure

The indicative estimates of the projected capital and operating expenditures for flood protection infrastructure assets are shown in Figure 9.

Operating costs associated with large flood protection assets such as stopbanks, which are maintained in perpetuity, as such do not have an end of life or a defined capex renewal programme, mean the flood protection forecast is opex heavy. Preparing floodplain management plans and investigative works are a major contributor to opex costs.



Figure 9: Flood protection annual expenditure 2018-48. Capital expenditure inflated dollars

Parks

Greater Wellington manages a network of regional parks and forests for the community's use and enjoyment. The network includes a range of unique natural areas for recreation and conservation. We plan for the future of the network, provide services and facilities for visitors and work with mana whenua and community groups to protect the environment of regional parks.

Assets	Number
Amenity area	53
Barrier	2335
Building	164
Environmental area	7
Park furniture	280
Heritage feature	97
Information	1369
Land management area	6
Production area	34
Road	247
Structure	895
Track	229
Utility	776

Replacement value	Condition	Performance	Data confidence	AM maturity	Criticality
\$77M	2. Minor defects only	3. Moderate	2. Reliable	3. Core	3. Moderate

Thirty year goal

The vision for our parks network is "to enrich lives by connecting people with healthy natural places". We need to face the challenges and opportunities of the future if we are to achieve this vision.

A key focus will be our contribution to a network of world class recreational trails in the Wellington region. By working together with the Department of Conservation, the eight councils of our region and other stakeholders, we want to create a trail network that will contribute to the lifestyle of those of us who live here and regional economic growth through tourism. By working with our iwi partners, stakeholders and the community, we hope to create a single, connected, network of trails for the benefit of residents and visitors.

Significant issues and challenges

Ageing Infrastructure

Parks assets are characterised by a large proportion that are legacy assets that are no longer managed for their original purpose (e.g., historic water supply, rail, defence and farming infrastructure). These assets are highly reliant on preventative maintenance and inspection cycles as the means of extending remaining life expectancy.

Asset performance is a key issue, particularly with signs and information boards, where the information displayed can rapidly become out of date ahead of the actual useful life of the asset. Increasingly sophisticated use of technology offer opportunities to future-proof our information and supporting systems, such as enhanced communications, parks mapping and work tracking, facility entry, and visitor usage (big data).

Greater weight is afforded to condition data than age when assessing the useful remaining life of Parks assets. Some assets rated by condition can have performance shortfalls as well (e.g., due to inadequate capacity or shortcomings in design or construction or being legacy assets). These types of assets are subject to the normal business process – involving inspections to identify defects and remedial options (from corrective maintenance to removal and replacement). Pakuratahi Forks swingbridge is one such asset, where the change in levels of visitor use has created a longterm performance short fall. This structure has been scheduled for early replacement.

Resilience

The potential stresses and strains relating to parks service mainly relate to natural events such as flooding, earthquakes and fires. Climate change is likely to lead to rising sea levels and more extreme weather events. These stresses and strains will impact on park structures, facilities, vegetation and waterways and access, and result in increased maintenance work and costs. Sea level rise increases the risk of the failure of our coastal infrastructure. In the short term, we are strengthening our facilities to cope with more frequent and extreme weather events. With more intense rainfall and flooding likely, structures will need to withstand more frequent high water flows. Flooding in 2015 resulted in the loss of 15 structures and considerable damage to several tracks and other structures within the network. With rising sea levels and the likely coastal erosion, we will need to remove or relocate structures from the coastline such as the Queen Elizabeth Park coastal track, Paekakariki road end facilities (toilets, roads, carpark, and picnic areas) and eventually the ranger's residence.

Climate and weather changes are also likely to change the maintenance needed in parks and forests. We may need to do more preventative work to keep areas in good condition. For example, high temperatures may lead to higher vegetation growth rates near tracks, requiring more regular cutback of vegetation. There may also be more reactive work to clean up damage from more storm events.

Building structures to withstand more adverse events may increase capital costs; but this initial investment should reduce repair costs in the longer term. For example, it took a year to repair damage from floods at Belmont Regional Park in 2015, but only three weeks to recover from the 2016 event. This was because in the 2015 rebuild we gravelled and widening tracks, allowing easier machine access for repairs.

In the longer term (10+ years) we will need to consider moving more essential services and structures inland or away from rivers and streams. We will also need to plan for low lying coastal heritage-sites that are likely to be significantly affected by sea level rise.

Affordability

Increasing park usage and expectations for improved services and facilities requires additional cost to maintain and renew park infrastructure. Unplanned maintenance also impacts on resources. These factors may affect the timing of new development projects and the upgrade of lower priority assets when extra funding is not available.

Responding to the Long Term Plan assumptions

The region is currently well serviced for parks both in location and size, and the forecast population growth will not necessitate the need for additional regional parks. Increasing population size and diversity, including increased tourist numbers, is likely to increase the need for services and supporting park infrastructure, for the park customer experience to be maintained. This includes more litter removal, repairs and maintenance and demand for more carparks and public conveniences. A forecasted increase in visitor numbers to the Region is likely to increase demand at regional parks, particularly if visitors intend on camping.

Growth in sports like cycling, mountain biking and trail running has created a demand for tracks and supporting infrastructure associated with these activities. It is difficult to predict the likely effect of a transition towards electric powered vehicles or autonomous vehicles, but demands are expected to change with impact on levels of service.

Many parks assets are subject to heavy peak loading pressures due to the highly skewed seasonal and temporal use patterns have a significant effect on performance and capacity of certain assets (e.g., public toilets and septic treatment systems).

Sudden significant changes in visitation can have a profound impact on parks resources (for example, a clampdown on freedom camping in Lower Hutt in 2015 led to abruptly increased usage of the Dry Creek camping area; this had associated environmental impacts that took some 12-15 months to adequately resolve).

Level of service	Issues	Options	Most likely scenario	Principle alternative option
Maintain/enhance the Park experience Provide on-park administration,	Rising sea levels and more extreme weather events- flooding and wildfires will impact on park structures, facilities, vegetation and waterways and access, and lead to increased maintenance work and costs.	 Increase opex budgets. Adaptation - remove or relocate assets away from waterways and coast. 	Queen Elizabeth coastal erosion - facilities relocation.	Longer term adaptation of assets and services.
information, public relations and by-law enforcement Provide information, skills and support to encourage the public to contribute to park visitor services Get more people in Work others to meet the recreational needs of current and future generations and protect values of regional significance	Ageing infrastructure performance and condition of assets.	 Develop and implement conservation plans. Preventative maintenance and inspection cycles. Increasing use of technology to future- proof our information and supporting systems. 	Biocide treatment for Belmont bunkers.	Implement conservation plans.
Degraded environments are restored Develop and implement conservation plans for high priority heritage sites	Increase in demand and intensity of use resulting in strain on Parks assets.	 Preventative maintenance. Improvement/ upgrade assets. Increased/diversification of service provision. 	 Kaitoke Pakuratahi Forks swingbridge access improvement. Upper Terrace campground development. Upgraded toilets at Tunnel Gully. Wainuiomata Lower Dam loop track construction. 	Parks development in partnership. Buildings solar power installation and sustainability improvements.

Most likely scenarios are based on the following assumptions specific to the parks:

Lifecycle of significant assets	We will maintain and renew assets to agreed levels of service, in accordance with asset management (IIMMs) and industry best practice.Asset data reliability and confidence is based on best available information at the time. We are implementing an ongoing programme to improve the knowledge of asset condition and performance.A focus on maintenance to maintain agreed levels of service.The maintenance and upkeep of legacy assets will continue to be parks responsibility
Growth or decline in the demand for the service	Wellington region's population is growing; becoming older and more diverse in culture, ethnicity, lifestyle, interests, tastes, leisure preferences, and in many other ways. We are planning for increasing need for services and supporting the parks activity. Natural disasters, or other events, will not change the demography of the region, or the parks asset base, over the planning period
Level of service	We do not propose any significant changes to our current levels of service. However increasing population and diversity is likely increase the need for supporting services infrastructure and increased operation and maintenance requirements, for the levels of service to be maintained.

Significant capital expenditure decisions

Our significant decisions about capital expenditure for parks assets required over the next 30 years are in the table below. This includes when we expect to make those decisions, what principal options we expect to have to consider, and the approximate scale or extent of the costs associated with the decision.

Significant decision required	Timing of project	Principal options	Costs
	2018 2019	Pakuratahi Forks swingbridge upgrade	\$20,000 design \$180,000
	2018	Upper Terrace campground development	\$300,000
Maintain and enhance the Park experience due to increasing	2022	Wainuiomata Lower Dam loop track construction	\$150,000
demand.	2018	Upgrading toilets at Tunnel Gully	\$150,000
	2018		\$1.446 million
	2019	Continue to maintain, replace and, where	\$2.003 million
	2020	required, build new asset infrastructure	\$1.979 million
	2021	sufficient to handle	\$2.329 million
	2022		\$2.303 million
Adaptation of assets and services	2018	QEP coastal erosion facilities relocation	\$323,0000
Belmont Munitions bunkers conservation	2021/22	Biocide treatment	\$50,000 pa
	2020		\$10,000
Sustainability improvements	2021	Buildings solar power installation	\$36,000
	2022		\$36,000

Estimates of capital and operating expenditure

The indicative estimates of the projected capital and operating expenditures for parks assets are shown in Figure 10 below.



Figure 10: Parks annual expenditure 2018-48. Capital expenditure inflated dollars

Environmental science

We monitor rainfall, river flows, groundwater levels and quality, fresh water coastal water quality, air quality and land quality and biodiversity.

Assets	Number
River/flow monitoring	59
Rainfall monitoring	58
Groundwater monitoring	74
Lake level monitoring	5
Wetland level monitoring	6
Tide level monitoring	2
Air quality monitoring inc 2 mobile	8
Climate monitoring stations	9
Turbidity monitoring stations	3

	Value ODRC	Condition	Performance	Data confidence	AM Maturity	Criticality
Environmental science	\$5,737,000	1 -Very Good- 2 -Minor defects only	2 -Good	2 -Reliable	3 - Core	2- High river flow and rainfall monitoring equipment

Thirty year goal

To be a leader in environmental science, we need the data we collect to be relevant, of the highest standard and accessible. We are planning for unprecedented technological advances, with greater dissemination of information than experienced and customers who expect instant availability of more and more accurate data.

To do this we need safe and secure infrastructure, state of the art, accurate and reliable monitoring equipment (sensors and data loggers), systems and software to handle these data, alongside a well-designed network that provides enough environmental data to enable good future decision making.

Significant issues and challenges

Ageing Infrastructure

A number of recorder structures are over 50 years old, whilst some level of maintenance has been carried out over the years, some of these structures will need complete replacement in the near future. Alterations to monitoring structures are also required to improve health and safety, by installing handrails etc.

The fast pace of technological advancements makes equipment obsolete and aged quickly. Regular replacement of monitoring equipment is recommended to ensure it is utilised to collect accurate and continuous information to effectively satisfy the user requirements. Generally, the replacement or refurbishment will meet the agreed level of service, but sometimes, especially in the case of electronic equipment, an upgrade is incorporated.

Resilience

Climate change will not have an impact on the assets managed by Environmental Science, but there will be increased demand on the information collected and services provided by the asset base.

Affordability

Additional funding is required to install new and upgrade existing monitoring sites to provide regionalscale climate monitoring data needed for the climate science programme to deliver information needed by Greater Wellington and its stakeholders.

The changes in policy and standards (for example the National Policy Statement for Fresh water Management, and the National Environmental Standard for Air Quality) along with monitoring the effectiveness of councils own draft Natural Resources Plan –will increase demand for both the services provided by staff and the supporting equipment.

There is also a growth in demand for water monitoring sites – mainly groundwater monitoring sites- as a result of increased land development. In the Wairarapa, there is increasing demand for domestic take and stock use water, a lack of information on water quantity and quality, and no current monitoring to inform consent applications and decisions.

Responding to the Long Term Plan assumptions

Pressure to maintain/enhance biodiversity and water, air, and soil quality in the face of increasing urban growth and intensification will require additional monitoring equipment.

Level Of Service	lssues	Options	Most likely scenario	Principle alternative option
Environmental information is available in the right way to the right people at	ronmental mation is able in the t way to the	Regular replacement/ upgrade of monitoring equipment.	Replacement / upgrade of monitoring equipment.	
right people at the right place and the right time for good decision making.	Increasing demand for monitoring.	 Consolidating the number and types of monitoring stations. Increasing the number of monitoring sites. 	Install new and upgrade existing monitoring sites.	

Most likely scenarios are based on the following assumptions specific to environmental science:

	We will maintain and renew assets to agreed levels of service, in accordance with asset management (IIMMs) and industry best practice.
Lifecycle of significant assets	Asset data reliability and confidence is based on best available information at the time. We are implementing an ongoing programme to improve the knowledge of asset condition and performance.
	We are making asset management decisions based on our strategic plans.
	A focus on renewals to maintain agreed levels of service, with a focus on increasing demand.
	Equipment and systems will be upgraded in a cost effective way that keeps pace with technological updates.
Growth or decline in the demand for the	Wellington regional population is growing. We are planning for a steady increase in demand from land use changes and monitoring standards and policy.
Service	Natural disasters, or other events, will not change the demography of the region over the planning period.
Level of service	We do not propose any significant changes to our current levels of service.

Estimates of capital and operating expenditure

We do not have the data to produce this graph at present. Environmental science operates as part of the broader environmental group, and operating expenditure for this aspect of the business is not recorded separately.

Harbours

We provide useful and relevant aids to navigation to assist all users of the region's water to navigate safely on these waterways. This includes providing accurate, relevant and timely information via our Harbour Communication Station (Beacon Hill).

Assets	Number
Navigation Aids with lights	18
Unlit channel markers	6
Large floating steel buoys with lights	2
Signal station operated 24/7	1
Vessels	3

Replacement value	Condition	Performance	Data confidence	AM Maturity	Criticality
\$1,642,855	2 -Minor defects only	2 -Good	2-Reliable	4 -Basic	3 -moderate Signal station at Beacon Hill

Thirty year goal

To continue to operate a safe, clean and efficient harbour, ensuring co-operative and safe use of the water for the different requirements for the various users, current and future. Ensuring the services provided are appropriate, relevant and useful to the users.

Significant issues and challenges

Ageing Infrastructure

Several of the lighthouse structures are relatively old, almost historic in some cases. These assets are highly reliant on preventative maintenance and inspection cycles as the means of extending remaining life expectancy.

The navigation aids in place have been built up over time as demand and requirements changed. They may not necessarily be the same if we designed the network fresh, however they are fit for purpose and allow us to adapt to changes as required. Any new developments would require review of the current assets and best practicable options. Reliability and efficiency are considerations when replacements and upgrades are planned.

Resilience

The technology employed on the lights is regularly reviewed and more efficient technologies are used where sensible and beneficial, for example use of LED lights allows smaller battery capacity.

Due to the robust nature of most of our lights because of the exposed locations they are in, sea level rise is unlikely to be an issue within the next 30 years.

A small number of our navigation aids are exposed to risk of damage by shipping, for which temporary arrangements can be made until they are re-instated or replaced at the vessels cost. The size of ship necessary to cause this kind of damage will carry insurance for replacement.

Affordability

There are no immediate affordability issues with habours infrastructure.

Funding of the activity is split between user charges and rates. Centreport contribute a significant proportion of the costs of the navigation aids and the operational costs of Wellington Harbour Radio. The service level agreement contains provisions to adjust charges for additional navigation aids that are requested by Centreport.

We receive funding from Maritime NZ for costs associated with oil spill training and response. Additionally there is funding available for recreational activities. This is currently on application on a year by year basis.

Responding to the Long Term Plan assumptions

Changes in shipping volumes have little impact on services provided by Harbours, these would impact more directly on Centreport Ltd. Any implications for Greater Wellington, as a CentrePort shareholder, will be included in future Infrastructure Strategies and asset management plans. Changes in the type and/ or size of vessels calling may alter the requirements of the navigation aids required to provide safe guidance in and out of the harbour. The technology employed on the lights is regularly reviewed and more efficient technologies are used where sensible and beneficial e.g. use of LED lights allows smaller battery capacity.

The proposed Pencarrow light upgrade is a reaction to this, if Centreport proceeds with their plan to dredge the channel we will upgrade the light, if they do not there is no need to upgrade the light.

Recreational use of the regions waters is likely to increase with population; however the impact of this change would have a relatively low impact on the Harbours assets. These increased and competing activities on the harbours mean an increased demand on the harbours ranging service.

Issues and options

Level of service	Issues	Options	Most likely scenario	Principle alternative option
Provide safe and competent maritime management for	Keeping pace with new technology and/or equipment available and updating/ upgrading navigation equipment in a cost effective way.	 Harbour safety plans. New and/or renewals to Navigation Aids to provide safe guidance in and out of the harbour. 	Timely renewals or upgrades introduce new technology.	Pencarrow lighthouse (\$0.2M timing to TBC).
commercial and recreational users of our region's waters.	Increasing and competing uses on the harbours mean an increased demand on harbours ranging service.	 Raise knowledge and awareness of maritime safety. Workboat provision. Additional ranger service resources. 	Workboat replacement (\$0.3M in 2030/31).	Harbour safety plans.

Most likely scenarios are based on the following assumptions specific to harbours:

	 We will provide infrastructure that can deliver services in a manner that meets agreed levels of service now and into the future
	 We will maintain and renew assets to agreed levels of service, in accordance with asset management (IIMMs) and industry best practice.
	 Asset data reliability and confidence is based on best available information at the time.
Lifecycle of significant assets	 We are implementing an ongoing programme to improve the knowledge of asset condition and performance.
	- A focus on maintenance and renewals to maintain agreed levels of service.
	 Continued approach of evidenced-based decision-making tools for any infrastructure investment proposal.
	 Integration of upgrade works with renewals to reduce cost and disruption.
Growth or decline in the demand for the	-Wellington's population is growing. We do not expect any change in demand on the service due to population or economic growth.
service	 Natural disasters, or other events, will not change the demography of the region over the planning period.
	 We do not propose any significant changes to our current levels of service, unless requested by customers (CentrePort).
Level of service	 Improvements to services will generally only be made where there is a gap in our service offering and the increase in service level is agreed.
	– There will be no change to levels of service unless recommended otherwise.
	 Agreed service levels will be funded, in some cases as shared cost with stakeholders.
	-Assume that shared funding percentages with external stakeholders will continue.

Significant capital expenditure decisions

There are no significant expenditure decisions expected.

Estimates of capital and operating expenditure

The indicative estimates of the projected capital and operating expenditures for Harbours assets are shown in Figure 11.





Appendix 1 - Technical appendices

Lifecycle management

The lifecycle management approach covers the monitoring of the assets and service, the operations and maintenance, capital renewals and development programmes. The objective is to look at lowest long term cost (rather than short term savings) when making decisions.

Good quality asset management relies on good quality asset knowledge. It is important that asset managers can analyse how particular assets perform, understand the lifecycle costs and the risks associated with failure. Uncertainty about data for an asset can impact on financial sustainability.

Asset knowledge needs to cover a description of the assets, their age, condition, performance, and value. This information, whether it be detailed or based on judgement, is essential to the broader lifecycle discussion. Data confidence gives us the ability to quantify the relationship between any given level of service (benefit), its associated funding requirements (cost), and the increasing or decreasing of any consequential 'risks' associated with changing a level of service. Greater Wellington's assets are maintained and rehabilitated until they reach the end of their useful life, when they are renewed, or upgraded. An asset's useful life is first assumed when constructed. It is then updated periodically based on:

- Age and condition profile
- Performance and customer service issues
- Growth and changing demands
- Criticality and risk
- Ongoing maintenance requirements
- The differing economic lives of individual assets.

The Council uses updated condition and performance assessment data with relevant asset life expectancy rates to forecast an asset's likely end of life.

Significance

In determining, what are decisions are significant, in the context of this strategy; reference has been made to Greater Wellington's Significance and Engagement Policy. Generally, a significant infrastructure decision, in the context of this strategy, will have two or more of the following characteristics:

- Has a substantial tangible impact on the whole region based on changes to services levels or the manner in which revenue is to be obtained
- Has a significant multi-year change in the levels of service at an activity level
- The decision represents a new strategic direction for Greater Wellington
- A decision or proposal on a matter where the majority of a community expresses considerable interest, or the community is deeply divided.

Assumptions

Underlying this strategy is a number of key assumptions regarding asset management approach, these are:

- We will provide infrastructure that can deliver activities in a manner that meets agreed levels of service now and into the future
- We will maintain and renew assets to agreed levels of service, in accordance with asset management (IIMMs) and industry best practice
- Wellington region's population is growing; becoming older and more diverse – in culture, ethnicity, lifestyle, interests, tastes, leisure preferences, and in many other ways
- Natural disasters, or other events, will not change the demography of the region over the planning period
- We are making asset management decisions based on our strategic plans
- We will comply with all legislation and national standards that apply to assets and service provision
- Although the statutory environment for local government will evolve, the broad requirements for infrastructure will remain static
- Improvements to services will generally only be made where there is a gap in our service offering and the increase in service level is agreed
- There will be no change to levels of service unless recommended otherwise
- Asset data reliability and confidence is based on best available information at the time.
 Acknowledging this does have ability to impact on the reliability of the plan.
- We are implementing an ongoing programme to improve the knowledge of asset condition and performance
- Agreed service levels will be funded, in some cases as shared cost with central government and/or alternative funding
- Assume that shared funding percentages with external stakeholders will continue
- Budgets for the out years will assume a recognised inflation indices
- A focus on renewals to maintain agreed levels of service, within an agreed risk environment with a focus on increasing resilience.

Section 5

Assumptions Ngā Whakaaro

Planning for the next 10 years requires us to look at the opportunities and challenges that the region will face and how any changes might affect the services we deliver and the ways we deliver them. We have reviewed our previous assumptions and considered the wide ranging impacts across all of our services.

Non-financial assumptions

Understanding our future environment and the possible impacts on the region underpins much of our forward planning. Consequently, we reviewed and further developed the assumptions that underpin our planning to help inform the work programme in this Long Term Plan.

These assumptions have been applied across all of our work and are relatively consistent with the assumptions being made by the territorial authorities in our region. Assumptions are only that, they are the best estimate we can make at the time with the information available. However, when consistently applied to our work it can aid us in being better prepared for the future.

Den	nographic change
Assumption	The region's population is projected to increase from around 504,000 in 2017 to 538,000 by 2027 and 596,000 by 2047. This represents a compounded population growth of 0.06%. The ageing of the baby boom generation and increased life expectancies means those aged 65+ will make up a larger proportion of the region's population. These changes will impact across Greater Wellington. The Māori population is expected to increase. The impact of this and a possible increase in Māori returning to the region following the completion of the Treaty settlement process could lead to an increase in tertiary qualifications for post settlement mana whenua and higher wages for Māori generally.
Level of uncertainty	Low
Sources of uncertainty	The current Forecast ID data may not reflect residential location choices due to future social/infrastructure changes - for example the impact of the Kāpiti expressway and Transmission Gully. Forecast ID data was last reviewed in March 2017 and is based on Statistics New Zealand sub national projections of 2016. The region may also be subject to economic developments that will lead to a different pace of job growth and therefore population growth than currently projected.
Estimate of potential effects	Statistics New Zealand highest national population projections are consistent with there being an extra 150,000-200,000 living in Wellington in the 2040s compared with the current projections. It was also noted that the ID forecast process does not include job growth on a regional/sub regional basis.
Data	Statistics New Zealand (http://www.stats.govt.nz) population projections are used for all Wairarapa territorial authorities. Forecast.id (http://forecast.idnz.co.nz) population projections are used for all other Wellington region territorial authorities. Tourism projections: international visitation numbers increase 6% annually year on year; domestic tourism growth sustained but lower growth expected.
Key challenges	These trends will impact on services Greater Wellington provides as well as ways that people work, e.g. possible increases in contract workers or people working from home. If the population increases, will public transport be able to cope? Will parks be able to provide the same customer experience? Affordability issues may be a growing consideration as the number of 65+ grows, i.e. as more of the population may enter retirement.



Demographic change

	1-3 years	4-10 years	10+ years
mplications or the whole organisation	Population of the region will continue to increase. Wellington Central Business District will have the most growth in the region, particularly the Te Aro area. Kāpiti Expressway/Transmission Gully may impact on population growth along the coast.	Revisions to Wellington City Council .ID forecasts show population growing at a faster rate in the next 10 years compared with 2013 projections. There will continue to be an increase in the older demographic and possible increased pressure on urban areas.	Population still predicted to be increasing to 569,900 by 2033. The predicted increase in those aged 65+ could impact on the services we need.
	Public Transport: High public transport patronage growth, driven by an increasing population, could impact on level of services and/or bring forward the need to invest in improvements to service capacity. Harbours: There is a risk of an increase in shipping movements (partly driven by increasing demand for goods/ transportation).	Public transport: Could see a shift in the demand for services including timing and accessibility as both the demographics and working culture changes. This demand may be offset by the emergence of shared and autonomous vehicles and a change in working locations. Harbours: Continued and sustained growth in ownership of small private vessels/jet skis, paddle boards etc. Parks: Increased and sustained	Public Transport: Considerable uncertainty about demand for public transport as population increases and the population ages. Harbours: Pressure from recreational demand may require a bolstered ranging presence. Parks: A possible demand on open space areas as havens for recreation due to intensification of housing developments
mplications or specific areas	Parks: Increased demand for accessible recreational services and facilities. Freedom camping for budget focused tourists may stimulate further demand for paid regional park facilities. Environment: Growth in demand for ground water monitoring sites – including those triggered by recidential	demand for higher standard and accessible facilities in parks to cater for growth in the 65+ age bracket. Increased demand to manage relationships/ expectations as volunteers age. Changes and increased diversity of recreational usage reflective of increased cultural diversity of New Zealand's population.	Increased pressure on all park/ reserve lands as potential locations for re-siting homes/ businesses. Environment: Smaller households could increase pressure on urban areas.
	development.	could increase pressure on urban areas. Growth in demand for ground water monitoring sites- including those triggered by residential development.	

Adverse events (including climate change impacts)

Assumption	The region will continue to be at risk from adverse events, including earthquakes and climate change. Events that are driven primarily by climatic factors such as floods, erosion, slips, pest incursions etc. will increase. This will impact on the region's infrastructure, vulnerable communities (particularly those near the coast or on flood plains) and our ability to access services. New Zealand will remain a signatory to international agreements designed to reduce greenhouse gas emissions and consequent policy changes will affect the economy in the Wellington region.
Level of uncertainty	Low
Sources of uncertainty	Greater Wellington has commissioned studies to better understand how the impacts of climate change will affect the region. Further analysis is required to determine the implications of those impacts on communities, flora and fauna, infrastructure and the regional economy and to identify appropriate adaptation responses. Projections of climate change depend on future greenhouse gas emissions, which are uncertain. There are four main global emissions scenarios ranging from low to high greenhouse gas concentrations. The assumptions below span these scenarios, representing the range of values associated with a low to a high emissions future. The projected changes are calculated for 2031–2050 (referred to as 2040) and 2081–2100 (2090) compared to the climate of 1986–2005 (1995). Greater Wellington will incorporate updated projections as they are developed during the lifetime of this Long Term Plan.
Estimate of potential effects	Some communities may be isolated if transport links are disrupted. There may be public health issues around water quality. Communities may have to move from coastal areas and there are the costs of upgrading the region's infrastructure in order to ensure service delivery to the region is maintained. A multi stakeholder approach will be required for almost every response due to the complexity of the issues to realise a vision of a region with strengthened long term resilience.
Data Source: Ministry for the Environment (MfE) 2017	The figures used in these assumptions were all drawn from the Ministry for the Environment's (MfE) climate change web pages (18th May 2017). The projected changes for temperature, rainfall and wind are calculated for 2031–2050 (referred to as 2040) and 2081–2100 (2090) compared to the climate of 1986–2005 (1995). Compared to 1995, temperatures are likely to be 0.7°C to 1.1°C warmer by 2040 and 0.7°C to 3.0°C warmer by 2090. By 2090, Wellington is projected to have from 6 to 40 extra days per year where maximum temperatures exceed 25 degrees, with around 5 to 13 fewer frosts per year. Rainfall will vary locally within the region. The largest changes will be for particular seasons rather than annually. The frequency of extremely windy days in Wellington by 2090 is likely to increase by 2 to 3 percent. Future changes in the frequency of storms are likely to be small compared to natural inter-annual variability. Some increase in storm intensity, local wind extremes and thunderstorms is likely to occur. Out to 2090-2099 a base value sea level rise of 0.5m relative to the 1980–1999 average is predicted. At the very least, planning should allow for a mean sea level rise of at least 0.8 meters relative to the 1980–1999 average. Further information relating to these projections can be found in the June 2016 Climate Change Projections for New Zealand report (Publication reference number: MFE 1247). http://www.mfe.govt.nz/node/21990.
Key challenges	 Greater Wellington will need to ensure infrastructure is resilient to the impacts of adverse events. A key challenge will be funding the cost of our infrastructure . In regards to climate change, the region needs to prepare for the inevitable (and ongoing) impacts associated with greenhouse gases that have already been emitted globally. Decisions will need to allow for future global emissions. Greater Wellington will need to apply a 'dynamic adaptive pathways planning approach' to all of its functions and services to ensure future global emissions trajectories are appropriately considered. In addition, the Wellington region needs to play its part in the global effort to avoid the worst impacts of climate change by reducing greenhouse gas emissions. This presents an opportunity to realise the multiple co benefits associated with de carbonising the region's economy.

Adverse events (including climate change impacts)

	1-3 years	4-10 years	10+ years
Implications for the whole organisation	There will be an increased expectation on Greater Wellington to provide a leadership role in this space. The possibility that the region will have to cope with a severe adverse event in this timeframe is perceived as being greater than previously thought. There are growing expectations on effectively communicating during and after adverse events. Business Continuity Planning is critical so that we can continue to perform the functions needed when adverse effects happen. Greater Wellington will need to continue to reduce greenhouse gas emissions across all its areas of influence, including its own operations, helping to create the conditions for a smart, innovative, low-carbon regional economy. Impacts from storm water and flood channelling may be an issue depending on the methods employed for managing extreme rainfall/flooding events. Risk of increased closures on transport networks (roading and rail) in coastal, low lying or slip prone areas.	Building resilience into infrastructure may result in increased capital costs. Future flooding, storm and earthquake events are likely to result in increased closures of transport networks in coastal, low lying or slip prone areas with links to some communities disrupted by adverse events and sea level rises. Increasing insurance costs. Greater Wellington will require a comprehensive adaptation plan(s) covering all functions and services. There is likely to be a greater need for Greater Wellington to work with the community in raising awareness of climate change mitigation and adaptation solutions. Greater Wellington greenhouse gas emissions reduction work will continue across all its areas of influence.	The likelihood of a severe adverse event in this timeframe is greater. Building increased resilience into infrastructure will likely result in increased capital costs. It is possible that by this time there will be a national approach in place to address the possible impacts of climate change. Adaption to low/ no emission methods for maintenance and construction of facilities and services.

Adverse events (including climate change impacts)

Transport: Increased size and nature of weather events will drive increased repair costs, increased insurance costs, and drive need for capital expenditure. Likely to also result in increased closures on transport networks in coastal, low lying or slips prone areas. Any major earthquake could have significant impacts on transport networks, including medium/long term closures of some key elements of the transport network. Increased pressure to reduce transport fleet emissions.
 Environment: Growth in demand for water monitoring sites – mainly ground water monitoring sites.

Parks: Consideration and planning will be required to allow for the relocation of essential low lying infrastructure, further retirement of riparian areas, and continued resilience improvement work. Higher vegetation growth rates will mean more vegetation tracks, cutbacks, more regularly. This may lead to uninsurable risks in low lying areas or increased insurance premiums.

There may be issues with heritage/legacy assets exposed to extreme weather events (dams, heritage culverts, pipelines, water supply intakes).

Transport: Planning for resilience in the network will continue in response to the predicted impact of adverse events and climate change. Funding of building this resilience will likely be an issue. Increased pressure to reduce bus fleet emissions. Risk that electric/ hybrid technology takes longer to become viable than anticipated. Increased requirement for capital expenditure for resilient Public Transport network.

Parks: Continued issues with legacy/heritage assets, together with the possibility of an increased risk of biosecurity related issues. Expect it to become more difficult to maintain remote facilities due to climate change policies and the demand for low or no emissions with no option to offset/mitigate. Effects of climate change may require further migration of essential services inland or away from riparian edges.

Transport: Planning for resilience in the network will continue in response to the predicted impact of adverse events and climate change. Funding will likely remain an issue.



Implications

for specific

areas



Technology

Assumption	Technological innovation will increasir organisational level. How we manage needs to keep up with technological of projected changes to modes of transp All of these are unknown and mean th	ngly impact the Wellington region as a our services, infrastructure and commu hanges and the way people use techno ort, the ways in which we work and ho hat we need to plan to adapt to include	whole both at an individual and inications with the community ology in their daily lives. There are w we send and obtain information. e new technology in our ways of
	working.		
Level of uncertainty	High		
Sources of uncertainty	We are living in a time of great chang for public transport, what will public t	e. It is unclear what the impact of tech ransport look like in the future and what	nology change will be- for example at will be Greater Wellington's role.
Estimate of potential effects	Changes to technology could affect the way environmental impacts are monitored- water quality, air quality- the collection of statistical data, jobs, nature of roles at Greater Wellington- and could lead to a decrease in the cost of services. The way we use information will change. Communities will access more information on mobile devices. They will connect to organizations and each other through enabling technology. Wearable and implantable technologies will enhance people's "digital presence", allowing them to interact with objects, one another and organizations in new ways		
Key challenges	 It is unclear what the extent of the intechnology, driverless vehicles (cars, transport look like? How will this aff The ways people/communities acces develop new ways of connecting to Individuals who might otherwise have increase the need for local authorities co-creation and citizen input in Court 	mpact of technology will be. Will the r buses, trains) mean more or less use of ect road congestion? s and consume information will continu organizations and each other through e ve remained voiceless will now connect es to engage broadly and meaningfully. ncil business that was historically hand	ise of artificial intelligence i public transport, what will public ue to change; people will continue to enabling technology. and voice their concerns. This will It will also increase expectations for s off.
Key risks	The key risk is the lack of clarity as to what the extent of the impact of technology will be on areas that Greater Wellington has responsibility for and what resources will be required into the future		
	1-3 years	4-10 years	10+ years
Implications for the whole organisation	Greater Wellington will need to plan for the impact of technological change across the range of services provided, including for public transport, critical infrastructure, the way that Greater Wellington engages with the community and internal operations.	Real time monitoring and analysis of environmental data likely to be machine or artificial intelligence influenced. Changes in the way Greater Wellington does its business. The spread of communication technology may increase ability for workers to work from home, and hence reduce need for peak time travel. Planning for impact of technological change for Public Transport, infrastructure, the way that Greater Wellington engages with the community, the way	Planning for impact of technological change for public transport, infrastructure, the way that Greater Wellington engages with the community, the way Greater Wellington operates. Policies and practices need to match preferences.
		Greater Wellington operates. Policies and practices need to match preferences.	



Technology

	1-3 years	4-10 years	10+ years
mplications or specific areas	Public transport: We anticipate there will be an increase in the uptake of electric cars; an increased demand for electronic ticketing solutions; and an increased demand for information to be available and provided to customer in 'real time'. Communications/marketing: Need to use digital tools so they are useful for people. We need to prepare the organization for opportunities for greater collaboration and encourage increased tech competencies. We need to invest in the right technology to keep people informed.	 Environmental: Monitoring of environmental data likely to be influenced by artificial intelligence. There are likely to be changes in the way Greater Wellington does its business. Public transport: Technology may increase ability for workers to work from home, and hence reduce need for peak time travel. Autonomous cars start to enter the market as early adopters including fleets like Uber, taxis public transport services invest. A reduced need for parking could shift road space allocation and free up parking space for other uses. Parks: Increased demand for information – from decision makers and others e.g. park users information updates, fresh water quality for swimming, flood 	Public transport: Autonomous technology within vehicles is expected to increase to the point where fully automated vehicles comprise a significant part of the vehicle fleet. This may occur alongside changes away from car ownership to shared ownership/ mobility as a service models. This could result in significant impacts to the way transport networks operate including potentially enabling more travel, less need for parking, lower costs of mobility.
		systems.	



Economic growth

Assumption	Economic projections suggest the We region's economy is expected to rema Business District, with primary and m production. As a consequence employ Tourism will also be a source of econ The combined impact of tourism and services, use of parks and recreationa The Māori economy will play an incre	Ilington Region will maintain its impor ain focussed on service provision, prima anufacturing production representing l yment numbers are expected to increas omic growth. employment growth will increase dem Il activities, and for water management asing role in our region as the Treaty s	tance for the national economy. The arily from the Wellington Central ess than 10 percent of the region's se by 3-4,000 per year (1.2 percent). and in the region for transport t services. ettlement process is complete.
Level of uncertainty	Low		
Sources of uncertainty	Economic prospects in the Wellingtor government policies and by technolog prospects and incomes at the person	n region will be influenced by changes gy changes. Although economic vagar al level, the community on the whole t	in global prospects, changes in ies can have profound impacts on job ends to be more resilient.
Estimate of potential effects	Global economic trends and global p economy.	olitical events (such as Brexit) have the	e potential to affect our regional
Data	 Tourism will also be a source of eco from 3.049 million in 2016 to 3.8 n a compounded growth rate of 2.0 p 274,000 in 2016 to 322,000 by 20 annual growth rate 1.2 percent out Although the whole region is expect percent) are expected to continue to to increase from \$29.9 billion in 20 2010 prices). This equates to an av national outlook of 1.7 percent per 	nomic growth with guest nights in the nillion in 2021, 4.5 million in 2028, an percent per annum. Employment numb 28, and then increasing to 397,000 by to 2048, compared with a national ou ted to share in this job growth, the ma b be located in Wellington City. The reg 16 to \$37.9 billion in 2028, and \$54.0 erage annual growth rate of 1.9 perce annum	region are expected to increase d 5.8 million in 2048. This represents pers are expected to increase from 2048. This equates to an average itlook of 1.0 percent per annum. jority of the region's jobs (56 jion's contribution to GDP is expected b billion by 2048 (all expressed in nt out to 2048, compared with a
Key challenges	Uncertainty about the impact of glob	al economic trends and global politics	on the region (Brexit etc.).
Key risks	Global economic trends and global p economy- employment numbers, job	olitical events (such as Brexit) have the growth etc	potential to affect our regional
	1-3 years	4-10 years	10+ years
Implications for the whole organisation	While the predicted strong economic outlook for the region is overall positive, the demand for world-class services will put pressure on Greater Wellington, especially in terms of affordability versus levels of service. Increased tourism numbers will be a consideration for Greater Wellington's services.	The implications of affordability to maintain high levels of service to meet the growing tourism growth and needs of the working community will possibly become a larger pressure point. Greater Wellington will need to maintain its eye on the future and continue to evolve its thinking and delivery methods. More demand for destination based tourism opportunities.	It is expected that the region will continue to grow in accordance with projections.
Implications for specific areas	 Public Transport: Increased tourism may drive increase demand for presentation of information and payment options for public transport. Parks and Harbours: There may be effects on freshwater values affecting recreational usage. Conversely, improvements in this area may increase recreational use. Tourism growth may put pressure on parks facilities to meet growing demands. 	Parks: Economic growth will affect local demands for services based on residential growth; participation rates (i.e., usage of protected natural areas increases with socio-economic standards). There will likely be an increased opportunity to partner with corporates/philanthropic interests for restoration planting.	Parks: There will likely continue to be increased demands in the type of and delivery of services.

Pressures on land use/the environment

Assumption	Increases in urban growth and intensification could lead to increased pressure on transport, water supply, Three Waters capacity building, biodiversity, regional infrastructure and fresh water. There will be pressure to ensure that biodiversity values are maintained, air and soil quality improves, rivers are swimmable and our water supply continues to comply with drinking water standards. Increases in urban growth and intensification could lead to increased pressure on transport, water supply, Three Waters capacity building, biodiversity, regional infrastructure and fresh water. There will be pressure to ensure that mana whenua values, and approaches to land use and management, influence the challenges presented by a communities desire for growth and intensification
Level of uncertainty	Low
Sources of uncertainty	Uncertainty about ground water /surface water interaction and impact on water security- both for rural and urban areas- smaller households/lifestyle changes could lead to loss of habitat and green space. Also, how to accurately and fairly apportion responsibility/ costs for maintaining and improving water quality. Could lead to changes in peak time demand for public transport, increase in demand on roads, changing public transport/public amenity requirements, changing requirements for WREMO as population shifts, increase in wastewater flows, greater stormwater management, pressure to develop in high hazard areas. It could also lead perceived unfairness in disparity between urban and rural – expectations and investment in maintaining environment. Urban growth could be matched by rural decline.
Estimate of potential effects	A greater than anticipated urban growth pattern could lead to higher overall demand for services. Increased pressure on land use could impact on our ability to maintain drinking water quality and availability to community, sustain industry and agricultural needs, provide water for recreational and cultural needs.
Key challenges	 Pressure could impact on our ability to maintain drinking water quality and availability to our communities, sustain industry and agricultural needs, provide water for recreational and cultural needs. Pressure could lead to increased demand for fresh water for different abstractive purposes (water supply, irrigation). We need to be aware of the tension between different parties when working in the environment space. Insight will be valuable to determine our position and in order to understand the values associated with these points of view. Language needs to change (less statutory, more conversational). There is an increased perception of linkages between natural resource management and population health. Could lead to increased demand for citizen science programmes.
Key risks	 Lack of effective and joined up planning between agencies and councils could constrain growth opportunities leading to housing supply constraint/ increasing affordability concerns. Increased pressure on land use could impact on our ability to maintain drinking water quality and availability to community, sustain industry and agricultural needs, provide water for recreational and cultural needs. Lack of support for innovation, collaboration, technology facilitation. That we won't be able to meet our water quality objectives under the National Policy Statement- Fresh water quality.
Key opportunity	 Opportunities provided by technology in environmental monitoring. Technological change could lead to reductions on transport demands. It could encourage smart design for urban sustainability, innovative solutions such as daylighting.



	1-3 years	4-10 years	10+ years
Implications	 Ensuring the 3 waters infrastructure is fit for purpose. Increased intensification will change travel patterns with more travel in, to and through the Wellington CBD and along the Ngauranga to airport corridor. This will cause increased demand for public transport and conflicts between modes. Relationships continue to be developed and maintained between territorial authorities and Greater Wellington. Water supply and quality models and infrastructure will need to be considered alongside land use change and development. Whaitua processes will continue and Whaitua Implementation Plans will begin to be implemented. The Regional Natural Hazard Strategy supports environmental outcomes. Increasing pressure to look at lower emission options for the provision of public transport, including hybrid/electric buses. 	The Regional Natural Hazard Strategy will support environment outcomes. Increased urban intensification will change travel patterns with more travel in, to and through the Wellington CBD and along the Ngauranga to airport corridor. This may result in increasing demand for public transport and conflicts between modes. This will drive the need for new infrastructure, reallocation of road space and dedicated right of way for Public Transport. Leadership: Greater Wellington will play a leadership role in maintaining and facilitating relationships with other Territorial Authorities. Support for completion of the Whaitua Implementation Plans and the implementation of those plans.	Greater Wellington will base future decisions on the research and projections that it carries out over the next 10 years. As with previous years.



Assumption	Any changes to key legislation will affect how and what we do. For the region, any law changes could affect the ways we utilise land, the allocation of water, the management of key infrastructure or the cost of providing services and the ways we engage with mana whenua.			
Level of uncertainty	High			
Source of uncertainty	Changes to our key legislative frameworks could affect the ways our rural communities utilise land, the allocation of water or the provision of more Council Controlled Organisations to manage key infrastructure.			
Estimate of potential effects	Changes to legislation /governance could result in increasing compliance costs and unclear accountabilities. This could affect Greater Wellington's mandate or have funding implications			
Data	Not applicable.			
Key challenges	 The development of different local authority structures, could impact on Greater Wellington's funding/cost of services The development of different local authority structures, could impact on the Council's funding/costs of services. 			
	1-3 years	4-10 years	10+ years	
Implications for Greater Wellington	Governance: Changes in Governance connects directly with the engagement trend and will change the landscape/ conversations that we have with customers. Changes to legislation could result in changes to structures and roles between central, regional and local government. Safety legislation may require additional capital expenditure to eliminate/minimise hazards/risks. Changes to legislation in response to the Productivity Commission report on Urban Planning and Urban Development Authorities could see changes to structures and roles between central, regional and local government. Greater coordination of urban growth and infrastructure planning may have greater tools to manage revenue and demand such as through road pricing. Public transport: Greater coordination of urban growth and infrastructure planning. Local/ regional government may have greater tools to manage revenue and demand such as through road pricing. Review of metropolitan rail operating model may affect funding for Rail Network.	Governance: Changes to legislation in response to the Productivity Commission report on Urban Planning and Urban Development Authorities could result in changes to structures and roles between central, regional and local government. Greater coordination of urban growth and infrastructure planning may have greater tools to manage revenue and demand such as through road pricing. Public transport: Greater coordination of urban growth an infrastructure planning. Local/ regional government may have greater tools to manage revenue and demand such as through road pricing. Potential for wider governance changes, that may impacts on the role and structure of Greater Wellington in relation to provision of public transport and regional land transport planning. Potential for the creation of a "Wellington Public Transport" Council Controlled Organisation, similar in structure and governance to Wellington Water. Communications /marketing: With increased governance comes increased effort to coordinate and communicate. We will need to ensure that Greater Wellington has the strength to put elements of their	Changes to legislation will continue to impact on Greater Wellington. Public transport: Greater coordination of urban growth an infrastructure planning. Local/ regional government may have greater tools to manage revenue and demand such as through road pricing. Potential for wider governance changes, that may impacts on the role and structure of Greater Wellington in relation to provision of public transport and regional land transport planning. Potential for the creation of a "Wellington Public Transport" Council Controlled Organisation, similar in structure and governance to Wellington Water. Communications /marketing: With increased governance comes increased effort to coordinate and communicate. We will need to ensure that Greater Wellington has the strength to put elements of their work in the hands of the community.	



Assumption	Successfully achieving outcomes requires strong collaboration with our many partners, and a commitment to shared outcomes. A key focus for Greater Wellington will be to maintain and foster key relationships to deliver these outcomes, both in the region and nationally. We will continue to work with our mana whenua through Memoranda of Partnership or other mechanisms. As a regional council we will strengthen our relationships with district and city councils across the region and work collaboratively with them and central government. Volunteers who chose to give their time and skills will continue to play an important part in what we do.			
Level of uncertainty	Low			
Source of uncertainty	The role and function of central government versus local government going forward and the impacts of Te Mana Whakahono $-a -$ rohe provisions (Resource Legislation Amendment Act 2016) for Greater Wellington.			
Estimate of potential effects	Resourcing, capacity and capability building may impact on the ability of Greater Wellington, our mana whenua partners and our volunteers especially as our whaitua and citizen science programmes develop			
Key challenges	Wider community involvement, including increased involvement by iwi/hapū/Māori, is likely to impact on the time to reach mutual decisions. While this is not necessarily a negative consequence in terms of the outcome, it could potentially impact on the projected timing of some of Greater Wellington's work programmes.			
Risks	Resourcing, capacity and capability building may impact on the ability of Greater Wellington, our mana whenua partners and our volunteers especially as our whaitua and citizen science programmes develop.			
	1-3 years	4-10 years	10+ years	
Implications for the organisation	How Greater Wellington works with its partners will need to be reviewed. There will likely be new partnerships established and the redefining of roles and responsibilities with various partners including iwi/hapū/Māori.	Greater Wellington will need to adapt to any post Treaty settlements. The working relationship with Māori/ mana whenua will likely be different. The number and age of volunteers is likely to change.	The role of partners in decision making will continue to evolve and influence how Greater Wellington delivers its services.	



Assumption	Our society is becoming more culturally and ethnically diverse. The ways that we work, play and travel are changing. The way people want to interact with us and one another is likely to change, particularly with changes in technology and social media.		
Level of uncertainty	Low		
Sources of uncertainty	People/communities may have unrealistic expectations about how much information they will receive.		
Estimate of potential	People/communities are likely to have high expectations about how much information they will receive that Greater Wellington may have to work harder to address		
Data	Visitor number to regional parks. Research showing key markers of social values e.g. heroes and influencers, media and online preferences, respected or loved organisations and brands, sports and leisure activities, attitudes to governance, living styles, work attitudes, family expectations.		
Key challenges	 Increased need for Greater Wellington to engage meaningfully with its communities. This will impact the physical documentation that is created at Greater Wellington the way we report findings. We can also expect to consume the information a lot faster than previously. Increased perception of linkage between natural resource management and population health. Need for more certainty. Individuals who might otherwise have remained voiceless will now connect and voice their concerns. This will increase the need for local authorities to engage broadly and meaningfully. It will also increase expectations for co-creation and citizen input in Greater Wellington I business that was historically hands off. There is an increase expectations for co-creation and citizen input in Greater Wellington business. Develop strategies to identify or engage with people who hold specific values (what we would need to do to benefit from the societal changes). Develop ways to build stronger connections and relationships with people who don't currently like or understand our organisation's perspectives. We need to understand the changes in communities better so we can lead the conversation around regional leadership and guardianship. As communities become more aware of the challenges there is a likelihood that they will want to be more involved and we need to be able to accommodate this. 		
Key risks	 Our communities lose confidence in Greater Wellington's ability to manage our natural resources. Greater Wellington may also have to work harder to provide key messages against a background of 'fake'news. 		


Social change

1-3 years	4-10 years	10+ years
General: Opportunities for greater collaboration, increase our competency in co-creating, create accessible information. An increased need to manage stakeholder relationships.Parks: Volunteers continue to make themselves available to assist with biodiversity and land management activities.Technology: Use our digital tools so they are useful for people, designed for the customer. Need to invest in the right technology to keep people informed.Public Transport: Expectations about public transport information will increase, there will be demand for better quality real time information and for information to be released to app developers and third party platforms.Communications/marketing: Need to design for digital first and use our digital tools so they are useful for people. Designed for the customer. We need to prepare the organization for opportunities for greater collaboration. Mandate to communicate has increased and will increase over time. We need to talk to people about themes and not projects. Increase our competency in co-creating.	Parks: Increased expectations that Greater Wellington will use emerging technologies in regional parks. Technology: Open data will impact our work- it has the potential to make information more readily accessible, to enable people to engage more readily on issues.	Technology: Open data will impact our work- it has the potential to make information more readily accessible, to enable people to engage more readily on issues.

Financial assumptions

	Assumptions							Level of uncertainty	potential effects				
Debt	The existing and future debt can be raised at levels noted in the plan on a timely basis, and within the cost assumptions of the plan								Medium				
Insurance	Insurance rates are volatile and moving in an upward path therefore we have assumed an increase at the rate of inflation over our 2018/19 estimate supplied by our Broker Aon.							Medium					
Inflation	Moderate over the period of this Long Term Plan. We use the cost adjustors by BERL - (Local Government Cost Index which are calculated specifically for local authorities and CPI for general operating costs. BERL adjustors are used by the majority of local authorities. Over the life of the plan the index averages 2 percent per annum. For the infrastructure Strategy years 2029-48 we have used the 2027/28 index value. Estimates this far out are uncertain, 2 percent balances continued inflation expectations with productivity gains expected over the longer term.								Medium				
Interest Rates	Greater W Bank of N based 90 The fixed i place. A m budgeted 2018- 2019 4.95% 4 For the Infi percent pe	Vellingt ew Ze day fo interest arket at 0.7 2019- 2020 1.60%	ton has laland 9 irward r st rate is determi '0% ove 2020- 2021 4.53% cture St um.	used a 0 day b ates for based ined cre er the for 2021- 2022 4.67%	compo oank bi r its flo on the edit ma precast 2022- 2023 4.72% years 2	existe fo ll rate f ating ir existir rgin is period 2023 4.819 2029-4	recast forecast interest ing pay added - - 202 - 200 - - 202 - - 202 - - 202 - - 8 we h	based it and rate p fixed r this. T 24- 2 25 2 9% 4 nave as	on the im rojecti ate sv his ha 025- 2026	e Reser plied n on. vaps in s been 2026- 2027 4.63% d a flat	ve harket 2027- 2028 4.73%	Medium	
	We are as	sumin	g growt	th on ra	ail as o	utlined	below						
	Patronage Growth	2018- 2019	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024	2024- 2025	2025- 2026	2026- 2027	2027- 2028		
	Bus	1.40%	1.00%	1.00%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%		
	Rail	4.50%	2.50%	2.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%		
	Fare increase		Inflation ⁽¹⁾										
	Bus	3.00%	1.60%	1.60%	1.70%	1.70%	1.80%	1.80%	1.90%	1.90%	2.00%		
	Rail	3.00%	1.60%	1.60%	1.70%	1.70%	1.80%	1.80%	1.90%	1.90%	2.00%		
Fare revenue	Patronage Growth Rail. Based on past growth rates trends. New operator is anticipated to increase growth due to better service performance and customer satisfaction levels. This rate of growth is expected to reduce after first years of new operator. Bus. Based on past growth rates trends. Increased growth in early years due to new bus network initiative and new operations.							Medium					

We have assumed a 3 percent fare increase in 2018/19 and a reduction to total fares of \$7.5 million to pay for new initiatives related to the new fare structure, e.g. free transfers, tertiary concessions, and off-peak discounts. Fares will increase with inflation in subsequent years.

(1) – Based on the BERL CPI adjustor SoLGM Sept 2017

	Assumptions	Level of uncertainty	Estimate of potential effects
FAR rates	NZTA co funding is provided at the agreed financial assistance rate (FAR) for all eligible transport planning activities and there are no unexpected changes to FARS. All transport projects and services will receive funding assistance from the NZTA at the following levels (percentage of cost) Rail services 53 percent in 2018/19 reducing by 1% per year to 51 percent by 2020/2121 Total Mobility services – 60% Rail access and assets - 51 - 60 % All other transport activities – 51% in 2018/19	High	NZTA reviews FAR rates periodically. If rates change, GWRC will review budgets in subsequent Annual Plans
Government Funding	We have made an assumption that we will receive 90 percent Government funding for the purchase of new long distance commuter trains to service the Wairarapa Line and the Capital Connection. There is a level of uncertainty with this assumption and should the assumed level of funding is not provided from central government, Greater Wellington will need to consider alternative options and consult further with the community at that time.	High	If rates change, GWRC will review budgets in subsequent Annual Plans

Assumptions concerning the useful life of significant assets and sources of funds for replacing significant assets are included in the statement of significant accounting policies.

In addition to the potential effect associated with the assumptions we have identified the following risks:

- The credit risk margin and that floating rates may change
- Insurance rates are volatile and moving in an upward path. A review of the insurance strategy and risk has been undertaken. This risk will be monitored and GW will ensure appropriate insurance is taken to cover risks.

Section 6

Council Controlled Organisations and Investments Tā te Kaunihera Rōpū me ngā Mahi Haumi

Greater Wellington has a significant portfolio of investments, comprising of:

- Liquid financial deposits
- Contingency investments for flood protection and Water supply
- Material Damage and Business Interruption Fund
- Administrative properties (e.g. depots)
- Forestry and business units
- Equity investments in the WRC Holdings Group (including CentrePort Ltd and Greater Wellington Rail)
- Local Government Funding Agency
- Wellington Water and the Wellington Regional Economic Development Agency (WREDA)

Overview

Greater Wellington's approach in managing investments is to balance risk against maximising returns. We recognise that as a responsible public authority, investments should be held for the long term benefit of the community, with any risk being managed appropriately. We also recognise that lower risk generally means lower returns.

From a risk management point of view, Greater Wellington is well aware that investment returns to the rate line are exposed to the success or otherwise of two main investments – the WRC Holdings Group (including CentrePort Ltd) and our liquid financial deposits.

Investments offset the need for rates revenue. Regional rates would need to be 8 percent higher without the revenue from Greater Wellington's investments.

Treasury management

Greater Wellington's treasury management is carried out centrally to maximise our ability to negotiate with financial institutions.

We then on-lend these funds to activities that require debt finance. This allows the true cost of debt funding to be reflected in the appropriate areas. The surplus is used to offset regional rates.

Liquid financial deposits

Greater Wellington holds \$33 million in liquid financial deposits as a result of selling our interest in CentrePort Ltd to one of our wholly-owned subsidiaries, Port Investments. We regularly review the rationale for holding these liquid financial deposits, taking into account the general provisions of our Treasury Management Policy, including our attitude to risk and creditworthy counterparties.

Contingency Investments for Flood Protection and Water

Greater Wellington Regional Council holds a number of short term contingency investments. They have been established with the purpose of having funds available to pay for the uninsured part of the damage to water and flood protection assets in case a disaster (earthquake, major floods etc.) strikes.

Administrative properties

Our interests in the Upper Hutt and Mabey Road depots and the Masterton office building are grouped to form an investment category, administrative properties.

Forestry and business units

Greater Wellington and our predecessor organisations have been involved in forestry for many years, primarily for soil conservation and water quality purposes.

We currently hold 6,000 hectares of forested land of which around 4,000 hectares is in the western or metropolitan part of the region, with the remaining 2,000 hectares in Wairarapa.

The cutting rights to these forests were sold for a period of up to 60 years in the 2013/14 year.

Our overall investment policy with regard to forestry is to maximise long term returns while meeting soil conservation, water quality and recreational needs.

Civic Financial Services Limited and Airtel Ltd

Greater Wellington has minor equity interests in Civic Financial Services Limited and Airtel Ltd. These investments are owned directly by Greater Wellington rather than via the WRC Holdings Group.

Local Government Funding Agency

Greater Wellington is a founding shareholder in the Local Government Funding Agency (LGFA). The LGFA was established by statute in December 2011 and Greater Wellington has subscribed to \$1.866 million shares in the LGFA. The LGFA assists local authorities with their wholesale debt requirements by providing funds at better rates than are available to us directly in the market place. Greater Wellington sources term debt requirements from the LGFA and receives an annual dividend.

As part of the arrangement Greater Wellington has guaranteed the debt obligations of the LGFA along with the other shareholders of the LGFA in proportion to its level of rates revenue. Greater Wellington believes the risk of this guarantee being called on is extremely low, given the internal liquidity arrangements of the LGFA, the lending covenants of the LGFA and the charge over rates the LGFA has from all council's borrowers.

Wellington Regional Economic Development Agency (WREDA)

WREDA is the region's economic development agency, which was established to implement the Wellington Regional Strategy. Greater Wellington has a 20 percent shareholding in this Agency with the other 80 percent being held by Wellington City Council. Grow Wellington and Creative HQ which were 100 percent owned by Greater Wellington have been absorbed into WREDA.

Westpac Stadium

The Westpac Stadium is a regional facility, which provides a high-quality, multi-purpose venue for sporting and cultural events.

Greater Wellington provided a \$25 million loan to the Wellington Regional Stadium Trust to plan and build the stadium. It is the Trust's principal funder. Greater Wellington has serviced and repaid this loan through a targeted stadium rate, which expires in June 2018.

Greater Wellington appoints one of its Councillors to the Wellington Regional Stadium Trust and jointly with the Wellington City Council appoints other trustees. Greater Wellington also monitors the Trust's performance against its statement of intent.

What is a Council Controlled Organisation?

A Council Controlled Organisation is any organisation (trading or not) where one or more local authorities own or control 50 percent or more of the voting rights or appoint 50 percent or more of the directors. Greater Wellington has established the following Council controlled organisations (CCOs) and Council Controlled Trading Organisations (CCTOs) which assist in promoting our objectives for the region.



(1) - Council-Controlled Trading Organisations in accordance with the Local Government Act 2002

(2) – Commercial Port Company pursuant to the Port Companies Act 1988 and not a Council-Controlled Organisation in accordance with the Local governance Act 2002

(3) - Council-Controlled Organisation in accordance with the Local Government Act 2002

The tables on the following pages explain what these organisations do, how their performance is measured and Greater Wellington's objectives for them with regards ownership and control.

Wellington Regional Economic Development Agency (WREDA)

WREDA is the key provider for economic development in the region, combined with tourism, venues and major events management for Wellington City. WREDA was established in late 2014 and is owned jointly by Wellington City Council (80 percent shareholding) and Greater Wellington (20 percent shareholding). The ownership reflects the proportion of funding by the two shareholding councils. It is run by an independent Board of Directors and is accountable to the Wellington Regional Strategy Committee – a standing committee of Greater Wellington with membership from the councils in the region. WREDA implements the Wellington Regional Strategy and supports other plans which are currently being developed.

Wellington Water

Wellington Water manages Greater Wellington's bulk water supply function. Wellington Water also manages local supply, storm-water and waste-water service delivery in the four cities of the Wellington Region. Wellington Water is jointly owned by Greater Wellington, Wellington City Council, Hutt City Council, Upper Hutt City Council and Porirua City Council, who each have a 20 percent shareholding. It is run by an independent Board of Directors and is accountable to the Wellington Water Committee – a joint committee of elected representatives from each of the shareholding councils.

Performance targets

Wellington Water's performance targets, and performance for the 2017/2018 year, are set out in the water supply activity in this Long Term Plan.⁽¹⁾

^{(1) –} The detailed information contained in the Water Supply Activity sets out the performance report against the Long Term Plan 2015-25 measures, as included in the Wellington Water Annual Report.

WRC Holdings Group

Greater Wellington has established the following equity investments in the WRC Holdings Group:



1 - Council-Controlled Trading Organisation in accordance with the Local Government Act 2002

2 – Commercial Port Company pursuant to the Port Companies Act 1988 and not a Council-Controlled Organisation in accordance with the Local Government Act 2002

WRC Holdings Ltd and Port Investments Ltd are, in essence investment holding companies. The main operating companies in the Group are CentrePort Ltd and Greater Wellington Rail Limited. Each year WRC Holdings Ltd provides to Greater Wellington, as 100 percent shareholder, a Statement of Intent for the WRC Holdings Group.

The WRC Holdings Group structure was set up for the following reasons that are still applicable:

- Appropriate separation of management and governance
- Imposing commercial discipline on the Group's activities to produce an appropriate return by ensuring appropriate debt/equity funding and requiring a commercial rate of return where appropriate
- Separating Greater Wellington's investment and commercial assets from its public good assets
- To determine appropriate strategies for the Group and its subsidiary companies
- To provide a structure to allow external Directors with commercial background to provide advice and expertise at the governance level
- Minimise the risk of owning commercial assets such as rail rolling stock

The WRC Holdings Group is Greater Wellington's prime investment vehicle and the main mechanism by which it will own and manage any additional equity investments should they be acquired in the future. Periodically, Greater Wellington reviews the structure to determine if it is still an appropriate vehicle for holding its investments.

Organisation	WRC Holdings Ltd
Ownership	100 percent
Directors	– Samantha Sharif (Chair) – Prue Lamason (Deputy Chair) – Roger Blakeley – Barbara Donaldson – Nick Leggett – Ian McKinnon
Nature and scope of activities	WRC Holdings Ltd is the holding company for Port Investments Ltd, Greater Wellington Rail Ltd and indirectly CentrePort Ltd. WRC Holdings Ltd effectively manages any other investments held by the Group in order to maximise the commercial value to the shareholders and to protect the shareholders' investment.
Significant policies and objectives on ownership and control	The primary objectives of WRC Holdings Ltd are to support Greater Wellington Regional Council's strategic vision and operate successful, sustainable and responsible businesses, manage its assets prudently and, where appropriate, provide a commercial return. WRC Holdings Ltd has adopted policies that prudently manage risks and protect the investment.

Organisation	Greater Wellington Rail Ltd (GWRL)
Ownership	100 percent
Directors	– Samantha Sharif (Chair) – Prue Lamason (Deputy Chair) – Roger Blakeley – Barbara Donaldson – Nick Leggett – Ian McKinnon
Nature and scope of activities	Greater Wellington Rail Ltd owns Greater Wellington's investments in metro rail assets, which include: -18 – SW carriages -6 – SE Carriages -1 – AG luggage van -2 – remote controlled electric shunt crabs -83 – two Matangi two car units -Thorndon electrical multiple unit depot and train wash, metro wheel lathe and building -48 - rail stations (excluding Wellington Central Station) -14 - pedestrian over-brides -11 - pedestrian underpasses Various carparks, other station improvements and ancillary rail related assets. Greater Wellington Rail Limited is responsible for all aspects of asset management, procurement and stewardship, implemented through a management contract with Greater Wellington. An asset management plan is in place which articulates a structured programme to minimise the life cycle costs of asset ownership while maintaining the desired levels of service and sustaining the assets. Operational delivery of the services is the responsibility of Greater Wellington, delivered via a long term (expiry 2031) contract performance based "partnering contract" with Transdev Wellington Limited for rail services and rolling stock maintenance. Transdev have subcontracted the rolling stock maintenance services to Hyundai-Rotem Company. Hyundai- Rotem were the manufacturers of the GWRL Matangi fleet. GWRL has a \$78 million capex programme over the next three years.
Significant policies and objectives on ownership and control	GWRL is owned by WRC Holdings Ltd. All capital purchases are funded via issuance of shares from WRC Holdings. The board of GWRL has external directorships providing advice and expertise, common with WRC Holdings Ltd. GWRL is as asset holding (rolling stock and rail infrastructure) and contracts out the maintenance of these assets. GWRL is wholly owned by WRC Holdings Ltd who in turn is wholly owned by Greater Wellington.

Key annual objectives and performance targets

CUSTOMER SATISFACTION WITH RAIL ASSETS 2018/19 2019/20 2020/21 Level of service Current Target Target Target Percentage of passengers who are satisfied with 91.4% ≥92% ≥92% ≥93% their current trip Percentage of customers who are satisfied with 94% ≥93% ≥93% ≥93% the cleanliness of the trains Percentage of passengers who are satisfied with 93% ≥91% ≥92% ≥92% overall station Percentage of passengers who are satisfied with the cleanliness of the station 86% ≥80% ≥80% ≥80% Percentage of customers feel safe while using 89% ≥89% ≥90% ≥91% the station facility Percentage of passengers who are satisfied with the information at the station 89% ≥90% ≥91% ≥89%

ROLLING STOCK – ASSET MANAGEMENT							
Level of service Current 2018/19 2019/20 2020/21 Target Target Target Target							
Matangi – mean distance between failure	44,000km	≥40,000km	≥40,000km	≥40,000km			
Carriage – mean distance between failure	97,000km	≥80,000km	≥80,000km	≥80,000km			

RAIL FIXED ASSET – ASSET MANAGEMENT						
Level of service	Current	2018/19 Target	2019/20 Target			
Percentage of pedestrian bridges and subways which meet at least 67 percent of NBS earthquake rating	27%	36%	45%			
Percentage of stations with CCTV coverage	79%	81%	85%			
Average condition grade of:						
Station buildings and shelters:	2.4	≤2.5	≤2.5			
Structures (pedestrian subways & bridges):	2.5	≤2.5	≤2.5			
Park & Ride:	2.4	≤2.5	≤2.5			
Percentage of assets in condition grade 4 (poor) or worse						
Station buildings and shelters:	10%	8%	6%			
Structures (pedestrian subways & bridges):	12%	10%	8%			
Park & Ride:	29%	25%	20%			

Key annual objectives and performance targets	Financial performa	nce targets					
	OPERATING COSTS, AND CAPITAL EXPENDITURE ARE MAINTAINED OVERALL WITHIN BUDGET.						
		2018/19 Target	2019/20 Target	2020/21 Target			
	Operating expenditure	\$37.7million	\$39.9 million	\$40.9 million			
	Capital expenditure	\$30.7 million	\$20.7 million	\$26.6 million			
	Shareholder's funds to total assets	83%	85%	86%			

	Objectives of the Group
	The core role of the Board of WRC Holdings Limited is to determine the Group's strategy and monitor the Group's investment in Rail infrastructure and CentrePort, both of which service the region's infrastructure needs and to ensure they deliver on the Group's objectives as follows:
	 Support the Greater Wellington's Regional Council's strategic vision; operate successful, sustainable and responsible businesses.
	b. Manage its assets prudently.
	c. Where appropriate, provide a commercial return to Shareholders except in the case of GWRL which will provide agreed outcomes to the Greater Wellington Regional Council.
Key annual	d. For GWRL, prudently manage and maintain the rail rolling stock and rail infrastructure (GWRL's rail assets) through a management service agreement entered into with the Greater Wellington Regional Council, providing for asset management, accounting, advisory, secretarial and general administration services and in particular:
	 Ensure the Regional Council as its appointed agent carries out all services and activities, in relation to the GWRL's Rail Assets, that are reasonably necessary to enable the Regional Council to provide quality rail services to the public in accordance with the contractual obligations entered into with the current rail operator of the rail services and maintenance provider of GWRL's Rail Assets;
	 Ensure GWRL complies with its responsibilities as a rail participant under the Railways Act 2005, current health and safety legislation and any other legislation affecting GWRL's Rail Assets and operations;
performance targets	 Ensure Greater Wellington Regional Council develops and maintains a systematic approach for the long-term management of GWRL's public transport rail assets in a manner consistent with industry best practice.
	e. For CentrePort via Port Investments Limited to ensure Centreport:
	 Maximises the commercial value of CentrePort to the Shareholder and protect the Shareholder's investment while maintaining the strategic value to the economy of the region
	– Delivers competitive financial returns compared to industry benchmarks (port and comparable sectors)
	 Adopts policies that prudently manage risk and protect the investment of stakeholders
	 Ensures that a recovery plan from the recent earthquakes is developed in consultation with stakeholders taking into account the strategic needs of the stakeholders and the region
	 Ensures resilience plans are featured in the recovery plan and the CentrePort's planning process takes a longer term view of opportunities for redevelopment of the port and for this work to be undertaken in collaboration with the regional council, local councils and other key stakeholders, and in consultation with the public
	 Adopt policies that prudently manage risks and protect the investment of its shareholders
	 Exhibit a sense of social and environmental responsibility by having regard to the interests of the community in which it operates and by endeavouring to accommodate or encourage these when possible
	 Conduct its affairs in accordance with sound business practice
	 Achieve the objectives and performance targets of the Shareholder.

Operational performance target WRC Holdings:

- -WRC Holdings Ltd to act as a responsible and inquiring shareholder
- -WRC Holdings Board to meet at least six times a year to review the operational and financial position of the company
- -WRC Holdings Group to report quarterly on the financial performance of WRC Holdings Group to Council
- -WRC Holdings Group to present quarterly on WRC Holding Group activities to Council and to keep Council informed of significant matters as they occur.

Statement of Intent and Annual Accounts are in compliance with statutory requirements. WRC Holdings financial performance targets:

Financial performance targets

W	RC HOLDINGS LIMITED)	
	2018/19	2019/20	2020/21
Dividend distribution (\$000s)	1,461	2,035	2,631
Dividend distribution %	100%	100%	100%
Return on equity ⁽¹⁾	0.6%	0.7%	0.9%
Return on assets ⁽²⁾	0.9%	1.1%	1.3%
Shareholder's funds to total assets	85.2%	86.0%	86.9%

Key annual objectives and performance targets

	2018/19	2019/20	2020/21
Surplus/(Deficit) before tax (\$000s)	80,928	79,062	(11,042)
Surplus after tax	81,562	81,274	(8,276)
Earnings before interest , tax and depreciation	109,084	111,575	25,110
Return on total assets	11.3%	9.8%	-0.8%
Return on shareholders' equity	16.0%	13.7%	-1.3%
Shareholders' equity to total assets	70.0%	71.8%	69.0%
Dividends	1,461	2,035	2,631

Comment

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The financial performance and ratios of return on total assets and return on shareholder's equity are being distorted (higher returns) by the insurance proceeds from the 14 November Kaikōura earthquake. In the 2020/21 year when insurance proceeds cease, the deficits are due to GWRL depreciation which is not funded, which exceed the profits from CentrePort.

(1) – Based on net surplus before tax and divided by average equity, but excluding revaluation gains and losses

(2) – Based on earnings before interest and tax and divided by average assets

Organisation	Port Investments Ltd (PIL)							
Ownership	100 percent							
	Samantha Sharif (Chair)							
	Prue Lamason (Deputy Chair)							
Directors	Roger Blakeley							
	Barbara Donaldson							
	Nick Leggett							
	Ian McKinnon							
Nature and	Port Investments Ltd is an investment vehicle that owns 76.9 percent of CentrePort Ltd.							
activities	The Board of Port Investments Ltd monitors performance of CentrePort.							
Significant policies and objectives on ownership and control	PIL is owned by WRC Holdings Ltd. Its sole asset is a majority shareholding in CentrePort limited. PIL manages Greater Wellington's commercial investment. The Board of PIL has external directorships providing advice and expertise, common with WRC Holdings. The purpose of having the company is to separate the commercial assets from the public good assets of Greater Wellington. PIL monitors CentrePort via its annual Statement of Corporate Intent. PIL is wholly owned by WRC Holdings who in turn is wholly owned by Greater Wellington.							
	Port Investments to act as a responsible	e and inquiring Sha	hareholder of CentrePort.					
	CentrePort to report at least four times a year to Port Investments Limited and for the Boar to approve significant transactions of CentrePort as determined by the constitution. Performance indicators for CentrePort as noted below.							
Key annual objectives and	Production of Annual Accounts is in con	npliance with statu	itory requirement	S.				
performance		2018/19	2019/20	2020/21				
targets	Dividend distribution \$ 000s	1,644	2,227	2,829				
	Dividend distribution %	100%	100%	100%				
	Return on equity1	62.0%	84.0%	106.8%				
	Return on assets2	6.3%	7.7%	9.2%				
	Shareholders funds to total assets	5.4%	5.4%	5.3%				

(1) – Based on net surplus before tax and divided by average equity, but excluding revaluation gains and losses (2) – Based on earnings before interest and tax and divided by average assets

Organisation	CentrePort Ltd
Ownership	76.9 percent by Greater Wellington
Ownership	23.1 percent by MWRC Holdings Ltd (owned by Horizons Regional Council)
	Lachie Johnstone (Chair)
	David Benham
Directors	Richard Janes
Directors	John Monaghan
	Mark Petersen
	Sophie Haslem
	The major activities of CentrePort are:
	Port infrastructure (land, wharves, buildings, equipment, utilities)
	Shipping and logistical services (pilotage, towage, berthage)
Nature and scope of activities	 Operational service (cargo handling, warehousing, facilities management, property management, security, emergency services)
	 Integrated logistics solutions (networks, communications, partnerships)
	Property services (development, leasing management)
	• Joint ventures (coldstore, container repair, cleaning, packing, unpacking and storage).
Significant policies and objectives on ownership and control	CentrePort is Port Company under the Port Companies Act 1988. PIL holds the shares of CentrePort Limited. PIL is a wholly owned subsidiary of WRC Holdings. CentrePort is a commercial organisation and is run by an independent board of directors, unrelated to the Council. The Port provides a commercial return to PIL by way of dividends.

Safety and Security performance targets:

		D. (Performance target	
	Objective	Performance measure	2018/19	2019/20	2020/21
		Lost Time Injury Frequency (per 200,000 hours worked)	≤ 3.5	≤ 3.5	≤ 3.2
		Lost Time Injury Severity (per 200,000 hours worked)	≤ 10	≤ 10	≤ 8
	Year on year improvement towards	Safe Reports (incident and near miss reports)	> 900	> 900	> 1,000
	zero nami	Site inspections	>120	>120	>120
		Safety interactions	>120	>120	>120
Key annual		Random Drug and Alcohol Testing (as a percentage of total employees)	>40%	>40%	>40%
objectives and performance targets	Comply with the AS/ NZS 4801: Occupational Health and Safety Management Systems	AS/NZS 4801 audit completed in alternate years to WSMP	Compliance with AS/NZS 4801	Compliance with AS/NZS 4801	Compliance with AS/NZS 4801
	Maintain a Health and Safety Policy that leads our zero harm aspiration and actions	Policy reviewed annually against CentrePort's objectives and external benchmarks	Compliance with policy	Compliance with policy	Compliance with policy
	Maintain and promote excellence in Marine	The requirements of the PHSC continue to be met	No breaches of the PHSC	No breaches of the PHSC	No breaches of the PHSC
	Operations consistent with the Port and Harbour Safety Code (PHSC)	Risk assessments of new tasks or reviews post incident completed	All new task risk assessments and post incident reviews complete	All new task risk assessments and post incident reviews complete	All new task risk assessments and post incident reviews complete
	Maintain compliance with the International Ship & Port Security (ISPS) Code	Compliance is maintained, all incidents are reported to MNZ and NZ Customs Service, and learning reviews are undertaken and recommend-ations implemented	Compliance maintained	Compliance maintained	Compliance maintained

	Objective	Dorformones mossime		Performance target	
	Objective	Performance measure	2018/19	2019/20	2020/21
	Ensure regulatory compliance	Compliance breaches	Zero	Zero	Zero
		System: consistency with ISO14001	Audit and first stage certification complete	Audit and second stage certification complete	Audit and third stage certification complete (full ISO 14001 compliance)
	Minimise risk to the environment	Incidents: number of registered environmental incidents. Full year 2015 year base line 32	Minimum 15% decrease from base line	Minimum 20% decrease from base line	Minimum 25% decrease from base line
		Complaints: number of complaints from external stakeholders about environmental performance	Zero	Zero	Zero
y annual	Dueline encodercities de	Greenhouse gas emissions (quantity CO2equivalent)- emissions measured in accordance with ISO 14064-1:2006 and greenhouse gas protocol.	Meet targets identified in Emissions Management Plan	Meet targets identified in Emissions Management Plan	Meet targets identified in Emissions Management Plan
jectives and rformance gets	be more sustainable	Ozone depleting substances used (quantity methyl bromide released to atmosphere)	100% recapture	100% recapture	100% recapture
		Solid waste to landfill (quantity)	Waste minimization integrated into EQ recovery projects.	Waste minimization integrated into EQ recovery projects.	Waste minimization integrated into EQ recovery projects
		Environmental Consultative Committee meeting frequency	At least three per annum	At least three per annum	At least three per annum
	Improve stakeholder relations	lwi engagement	Pre lodgment consultation undertaken for 100% of resource consent applications	Pre lodgment consultation undertaken for 100% of resource consent applications	Pre lodgment consultation undertaken for 100% of resource consent applications
		Transparency	Performance against targets reported in Annual Report	Performance against targets reported in Annual Report	Performance against targets reported in Annual Report
	Develop a culture of awareness and	Board sub-committee (Health Safety and Environment) meeting frequency	At least four per annum	At least four per annum	At least four per annum
	responsibility	Internal 'sustainability subcommittee' meeting frequency	At least three per annum	At least three per annum	At least three per annum

Environmental performance targets:

Social performance targets:

Contribute to the desired outcome of the Wellington Regional Strategy through:

- i. The provision of workplace opportunities and skills enhancements of our employees.
- ii. Ensuring the regional economy is connected by the provision of high quality port services to support international and coastal trade.
- iii. Collaborating with key partners of CentrePort's business to improve service outcomes by:
- iv. gaining insights into stakeholders' expertise and experience to improve decision making; and
- v. Provision of higher quality input as a result of stakeholders having a more through understanding of CentrePort operations and objectives.

Supporting the regional community by investing in community sponsorship and engaging community activities to enhance relationships resulting in a positive authorising environment

To meet regularly with representative community groups to further develop enduring relationships for the benefit of all parties, and to inform these stakeholders and manage expectations.

Targets for engagement with stakeholder groups are included in the environmental targets above.

Key annual objectives and performance targets

Regeneration performance targets

Objective	Desfermentes management		Performance target	
Objective	Performance measure	2018/19	2019/20	2020/21
Planning supports the appropriate regeneration and growth of the port	Planning completed on time and with input from key stakeholders	Medium Term Operating Plan finalised in full by Dec 2018 Port Regeneration Plan developed by June 2019	Port Regeneration Plan updated	Port Regeneration Plan updated
	Demolition programme on target as contained in Medium Term Operating Plan	On target	On target	On target
	Natural hazard resilience programme developed	Performance standards determined Sea level rise adaptation strategy developed Results fed into Port Regeneration Plan	N/A	N/A
	Restoration of buildings on target as contained in Medium Term Operating Plan	On target	On target	On target
	Traffic and pedestrian management solutions on target as contained in Medium Term Operating Plan	On target	On target	On target
	Objective Planning supports the appropriate regeneration and growth of the port	Objective Performance measure Planning supports the appropriate regeneration and growth of the port Planning completed on time and with input from key stakeholders Demolition programme on target as contained in Medium Term Operating Plan Demolition programme on target as contained in Medium Term Operating Plan Natural hazard resilience programme developed Restoration of buildings on target as contained in Medium Term Operating Plan Traffic and pedestrian management solutions on target as contained in Medium Term Operating Plan Traffic and pedestrian management solutions on target as contained in Medium Term Operating Plan	ObjectivePerformance measure2018/19Planning supports the appropriate regeneration and growth of the portPlanning completed on time and with input from key stakeholdersMedium Term Operating Plan finalised in full by Dec 2018 Port Regeneration Plan developed by June 2019Demolition programme on target as contained in Medium Term Operating PlanOn targetDemolition programme on target as contained in Medium Term Operating PlanOn targetNatural hazard resilience programme developedPerformance standards determined Sea level rise adaptation strategy developed Results fed into Port Regeneration PlanRestoration of buildings on target as contained in Medium Term Operating PlanOn targetImage: Demolition programme on target as contained in Medium Term Operating PlanOn targetImage: Demolition programme on target as contained in Medium Term Operating PlanOn targetImage: Demolition programme on target as contained in Medium Term Operating PlanOn target	Objective Performance measure Performance target Planning supports the appropriate regeneration and growth of the port Planning completed on time and with input from key stakeholders Medium Term Operating Plan finalised in full by Dec 2018 Port Regeneration Plan developed by June 2019 Port Regeneration Plan updated Demolition programme on target as contained in Medium Term Operating Plan On target On target Natural hazard resilience programme developed Natural hazard resilience programme developed Sea level rise adpation strategy developed Results fed into Port Regeneration Plan Natural hazard resilience programme developed Sea level rise and patient in strategy developed Results fed into Port Regeneration Plan Traffic and pedestrian management solutions on target as contained in Medium Term Operating Plan On target On target

General performance targets:

- a. The company will, in consultation with the shareholders, continue to develop performance targets in the financial, environmental and social and regeneration areas.
- b. CentrePort will report achievement against the above targets in the quarterly reports to shareholders and the annual report. The report will include specific initiatives to enhance the environment in which we operate.
- c. CentrePort will also report in its quarterly report to shareholders the company's strategy when it is completed with quarterly updates of any amendments to the strategy. This will include updates to CentrePort's strategy in relation to its property portfolio.

	Financial performance targets:	2018/19 (\$000)	2019/20 (\$000)	2020/21 (\$000)
	Underlying net profit before tax	21.9	18.0	13.3
	Underlying net profit after tax	17.1	14.1	9.8
Key annual	Return on total assets	8.5%	5.2%	3.4%
objectives and	Return on port assets	9.4%	5.8%	4.3%
performance	Return on property assets	6.6%	3.5%	-0.4%
targets	Return on equity	6.7%	4.0%	2.4%
	Dividend distribution	3.0	4.0	5.0
	Dividend distribution (%)	17.6%	28.3%	51.2%
	Declining returns reflect increasing equity ar assets from insurance proceeds. Return on assets for each business segme	nd asset base as a result	of aged assets being	g replaced by new
	total fixed assets and investments in assoc	iates.	tes earnings divided	by the average of
Definition of	 Property: EBIT plus share of associate eau investment in associates. This calculation is properties and the total portfolio. 	rnings divided by the va performed separately c	lue of investment pro on the value of develo	perties plus pped investment
Terms	Return on equity is defined as the underly	ing net profit after tax o	divided by average ed	quity.
	Equity is defined as the total issued capital capital reserves less any minority interests of ("the Group").	plus the balance of unc f the parent company, C	listributed profits and entrePort Limited an	all revenue and dits subsidiaries,
	Total assets are defined as all the recorded value as determined by the Group's account	tangible and intangible ing policies.	e assets of the Group	at their current

Organisation	Wellington Water
Ownership	20 percent Greater Wellington 80 percent Wellington City Council, Hutt City Council, Upper Hutt City Council, Porirua City Council (20 percent each)
Directors	David Wright (Chair) David Benham Nicki Crauford Geoff Dangerfield Cynthia Brophy Phil Barry
Nature and scope of activities	Wellington Water manages the water treatment and supply, storm-water and waste-water service delivery in the Wellington region.
Significant policies and objectives on ownership and control	 Wellington Water was established in September 2014. It is run by an independent Board of Directors and is accountable to the Wellington Water Committee – a joint committee of elected representatives from each of the shareholding councils. Wellington Water manages the councils' water supply activities, delivers capital works programmes and provides councils with asset management and planning advice.
Key performance targets	A full list of the specific targets for Wellington Water can be found at: https://.co.nz/publication-library/statutory-reports/

Organisation	New Zealand Local Government Funding Agency Limited (LGFA)
Ownership	8.3 percent
Representation (total	Thirty local authorities are shareholders of the LGFA with shareholding ranging from 8.3 percent to 0.4 percent of total share capital.
	The New Zealand government owns 11.1 percent of the total \$45 million of share capital.
Nature and scope of activities	LGFA raises debt funding either domestically and/or offshore in either NZ dollars or foreign currency and provides debt funding to New Zealand Local Authorities, and may undertake any other activities considered by the Board to be reasonably related or incidental to, or in connection with, that business.
	The LGFA will only lend to local authorities that enter into all the relevant arrangements with it (participating local authorities) and comply with the LGFA's lending policies.
Significant policies and	Providing savings in annual interest costs for all participating local authorities, Making longer-term borrowings available to participating local authorities, Enhancing the certainty of access to debt markets for participating local authorities, subject always to operating in accordance with sound business practice; and
objectives	Offering more flexible lending terms to participating local authorities.
	LGFA will monitor the quality of the asset book so that it remains of high standard by ensuring it understands each Participating Local Authority's financial position and the general issues confronting the Local Government sector.
Key annual performance targets	A full list of the specific targets for the LGFA can be found in their SOI at: http://www.lgfa.co.nz/for-investors/annual-reports-and-statement-of-intent

Organisation	Wellington Regional Economi	c Development Agency (WREDA)
Ownership	20 percent Greater Wellington 80 percent Wellington City Counc	il
Directors	Peter Biggs (Chair) Matt Clark Tracey Bridges Thomas Pippos	Dave Gibson Grant Gilford Kylie Archer Wayne Mulligan
Nature and scope of activities	WREDA is the key provider for ecc and major events management fo following previous organisations a – Grow Wellington (and its subsid – Positively Wellington Tourism – Positively Wellington Venues – Wellington City Council's major	pnomic development in the region, combined with tourism, venues r Wellington city. It encompasses the functions, and funding, of the and programmes: iary Creative HQ) events team
Significant policies and objectives on ownership and control	WREDA was established in late 20 shareholding) and Greater Welling proportion of funding by the two and is accountable to the Welling Wellington with membership repr Regional Strategy and will suppor	014. It is owned jointly by Wellington City Council (80 percent gton (20% percent shareholding). The ownership reflects the shareholding councils. It is run by an independent board of directors ton Regional Strategy Committee – a standing committee of Greater esenting the councils in the region. WREDA implements the Wellington t other plans which are currently being developed.

	innovation developm – This includes the fun community, enterpris entrepreneur program A list of the specific ta wellington.govt.nz/~/r WREDA's Statement of reported annually to G	ent and facilitating pro ding of WREDA's subsid e innovation developm mmes rgets for WREDA can b media/your-council/wre f Intent articulates thei Greater Wellington via t	ojects across key diary Creative H nent for commer be found in the V eda/wreda-soi.po r performance o he Wellington R	v sectors for Q who deliv cial clients a WREDA Stat df bjectives. The egional Stra	the region rer support i as well as yo ement of In hese perform itegy comm	for the start buth and M tent at: http mance mea: ittee.	-up āori p:// sures are
		Performance	Performance Ta	argets			
	Level of Service	Measures	Baseline (2017)	2018/19	2019/20	2020/21	2021/28
	Support sector events	No. of events supported in key sectors	New measure	4	5	6	6-9
Key annual performance		No of acceleration programmes (Lightning Lab and Venture Up)	New measure	2	3	3	3
targets	Support business growth (Creative HQ)	No. of "Start-up Garage" Events	New measure	5	5	5	5
		No. of companies becoming investable	New measure	5	5	5	5
	Support screen industry	Conversion rate of logged enquiries to confirmed production or business	New measure	25%	25%	25%	25%
	(Screen Wellington)	Value of facilitated screen production	New measure	\$100 million	\$100 million	\$110 million	\$120- 150 million
	Connect businesses with talented students and graduates (Student employment pathways)	Interns placed in priority sectors	New measure	200	225	250	\$280- 500 million
	Partner / Stakeholder Engagement	Partner/Stakeholder satisfaction score with engagement	New measure	80%	85%	90%	90%

Wellington Regional Economic Development Agency (WREDA) (cont.)

For the funding that Greater Wellington contributes to WREDA, the key performance targets are:

-Grow business and innovation across the Wellington Region through supporting business development,

		PRO	SPECTIVE ST FOR 1	INVESTM ATEMENT OF THE YEAR EN	IENTS REVENUE AN DING 30 JUN	id expenses e	10				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Sources of operating funding											
General rate ⁽¹⁾	(9,898)	(9,139)	(7,411)	(6,967)	(9,378)	(9,134)	(9,618)	(9,610)	(8,982)	(8,912)	(7,551)
Targeted rate	978			ı		ı		ı		·	·
Subsidies and grants for operating purposes											
Fines, infringement fees, and other receipts ⁽²⁾⁽³⁾	27,239	29,599	31,232	31,347	32,110	32,265	32,702	32,653	31,837	31,451	30,792
Total operating funding	18,319	20,460	23,821	21,380	22,732	23,131	23,084	23,043	22,855	22,539	23,241
Applications of operating funding											
Payments to staff and suppliers	2,462	205	1,170	1,134	1,172	1,300	1,242	1,262	1,325	1,384	1,657
Finance costs	19,244	22,004	21,495	19,346	20,156	20,292	20,576	20,460	20,153	19,791	20,167
Internal charges and overheads applied	1	(223)	363	447	494	565	538	550	565	515	516
Total applications of operating funding	21,706	21,986	23,028	20,927	21,822	22,157	22,356	22,272	22,043	21,690	22,340
Surplus/(deficit) of operating funding	(3,387)	(1,526)	793	453	910	974	728	771	812	849	901
Sources of capital funding											
Subsidies and grants for capital expenditure											
Increase / (decrease) in debt	9,966	5,999	2,072	(473)	1,916	(1,810)	(1,450)	(1,988)	(1,745)	(1,623)	(2,093)
Gross proceeds from asset sales	19	I	ı	ı	I		ı	ı	ı	ı	ı
Total sources of capital funding	9,985	5,999	2,072	(473)	1,916	(1,810)	(1,450)	(1,988)	(1,745)	(1,623)	(2,093)
Applications of capital funding											

		PRO	SPECTIVE ST FOR THE	INVETMI ATEMENT OF YEAR ENDING	ENTS REVENUE AN 3 30 JUNE (C	UD EXPENSES ONT.)					
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Capital expenditure											
- to meet additional demand				ı	,				1		
- to improve the level of service											
- to replace existing assets	719	250		ı							
Increase / (decrease) in investments	(1,519)	343	290	341	371	408	442	470	493	517	560
Increase / (decrease) in reserves	7,398	3,880	2,575	(361)	2,455	(1,244)	(1,164)	(1,687)	(1,426)	(1,291)	(1,752)
Total applications of capital funding	6,598	4,473	2,865	(20)	2,826	(836)	(722)	(1,217)	(633)	(774)	(1,192)
Surplus/(deficit) of funding					1				•		
Depreciation on Investment assets	368	195	204,000	220,000	220,000	98,000	000'86	98,000	98,000	98,000	98,000
 Net Investment surpluses are used to reduce the gr Other receipts include revenue from pest control. Greater Wellington manages community outcome (a) - Greater Wellington manages community unterion in 	eneral rate. It is app debt via an interna	lied to general rate I debt function. Oth	as all ratepayers er receipts includ	benefit the same p es internal interes	roportionally from income which is t	a reduction in the he total interest ch	e general rates. 1arged to the oper	ational activities. E	External investme	nts and debt are m	anaged
Internal interest revenue		26,299	25,780	25,670	26,181	26,169	26,868	26,797	26,031	25,646	24,922
This statement is not an income statem	ant It avrlud	ec all non rac	h trancactio	ns such as de	unaciation a	nd valuation	U				

For more information on the revenue and financing mechanisms applicable to investments, please refer to the "Revenue and Financing Policy" in the 10-Year Plan 2018-28. All figures on this page exclude GST.

		H H	OSPECTIVE 5 FOR 1	INVESTM STATEMENT C FHE YEAR ENI	ents df financia ding 30 Jun	l position Ie					
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
NET CONTRIBUTION TO GENERAL RATES FROM INDIVIDUAL INVESTMENTS											
Liquid financial deposits	3,092	1,075	1,161	1,280	1,465	1,567	1,637	1,674	1,679	1,683	1,754
WRC Holdings	2,242	4,140	3,958	3,959	3,958	3,955	3,952	3,953	3,952	3,954	3,955
Treasury management	3,596	4,852	3,823	5,874	5,486	5,123	5,574	5,548	4,926	4,865	3,308
Other Investments and Property	968	(928)	(1,530)	(1,146)	(1,530)	(1,511)	(1,545)	(1,564)	(1,575)	(1,590)	(1,465)
Total contribution to general rates	9,898	9,139	7,412	9,967	9,379	9,134	9,618	9,611	8,982	8,912	7,552

For more information on the revenue and financing mechanisms applicable to investments, please refer to the "Revenue and Financing Policy" in the this 10-Year Plan 2018-28 All figures on this page exclude GST

Section 7

Financial information He pūrongo pūtea

Statement of significant accounting policies

1. REPORTING ENTITY

Greater Wellington is a regional local authority governed by the Local Government Act 2002. It has not presented group prospective financial statements because it believes that the parent prospective financial statements are more relevant to users.

The main purpose of prospective financial statements in the Long Term Plan is to provide users with information about the core services that Greater Wellington intends to provide ratepayers, the expected cost of those services and, as a consequence, how much Greater Wellington requires by way of rates to fund the intended levels of service. The level of rates funding required is not affected by subsidiaries, except to the extent that Greater Wellington obtains distributions from, or further invests in, those subsidiaries. Such effects are included in the prospective financial statements presented.

For the purposes of financial reporting, the Greater Wellington group is designated as public benefit entities. Accordingly Greater Wellington has designated itself and the Group as public benefit entities (PBEs) and applies New Zealand Tier 1 Public Sector Public Benefit Entity accounting standards (PBE Accounting Standards).

The subsidiary companies comprise WRC Holdings, Port Investments Ltd, which owns 76.9% percent of CentrePort Ltd, Greater Wellington Rail Ltd, Greater Wellington Transport Ltd, Greater Wellington Infrastructure Ltd.

Greater Wellington also owns 20 percent of WREDA and Wellington Water Limited.

2. STATEMENT OF COMPLIANCE

The prospective financial statements of Greater Wellington have been prepared in accordance with the Local Government Act2002, which includes the requirement to comply with New Zealand generally accepted accounting practice (NZ GAAP). The statements are prepared in accordance with Tier 1 PBE accounting standards, and comply with PBE Standards. These prospective financial statements use forecast opening balances from the year ended 30 June 2019.

The preparation of financial statements in conformity with PBE Accounting Standards with NZ GAAP requires management to make judgements, estimates and assumptions that affect the application of policies and projected amounts of assets and liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances. These results form the basis of judgements on carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

3. ACCOUNTING POLICIES

Basis of preparation

The prospective financial statements are presented in New Zealand dollars, rounded to the nearest thousand, and have been prepared on an historical cost basis, except for investment properties, derivative financial instruments and certain infrastructural assets, which have been measured at fair value.

The accounting policies set out below have been applied consistently to all periods presented in these prospective financial statements.

Revenue recognition

Revenue is recognised when billed or earned on an accrual basis.

Rates and levies

Rates and levies are a statutory annual charge and are recognised in the year the assessments are issued.

Government grants and subsidies

Greater Wellington receives government grants from NZ Transport Agency, which subsidises part of Greater Wellington's costs in the provision of public transport subsidies to external transport operators and for capital purchases of rail rolling stock, rail stations and associated rail infrastructure within Greater Wellington's subsidiary Greater Wellington Rail Ltd and transport network upgrades owned by the central government owned KiwiRail.

Grants and subsidies for operational activities are recognised as revenue when eligibility has been established by the grantor. Other grants and contributions from territorial local authorities are recognised in the Statement of revenue and expenses when eligibility has been established by the grantor.

Grants and subsidies for finance costs and debt repayments for capital purchases are recognised as revenue in the year they are received.

Note: Revenue and expenditure associated with these capital purchases for other government entities are treated as operational revenue and expenditure in Greater Wellington's accounts. To aid clarity these items are separately detailed in these financial statements as transport improvement revenue and transport improvement expenditure.

Sale of goods

Revenue on the sale of goods is recognised when all risks are transferred to the buyer and there is no longer control or managerial involvement with the goods.

Rendering of services

Revenue from services rendered is recognised by reference to stage of completion of the service.

Dividends

Revenue from dividends is recognised on an accrual basis (net of imputation credits) once the shareholders' right to receive payment is established.

Interest

Interest is accrued using the effective interest rate method. The effective interest rate method discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount.

Other revenue

Other income is also recognised on an accrual basis. Where a physical asset is acquired for nil or nominal consideration the fair value of the asset received is recognised as revenue. Assets vested in Greater Wellington are recognised as revenue when control over the asset is obtained.

Borrowing costs

Borrowing costs are recognised as an expense in the period in which they are incurred on an accrual basis.

Property, plant and equipment

Property, plant and equipment consists of operational and infrastructure assets. Expenditure is capitalised when it creates a new asset or increases the economic benefits over the total life of an existing asset. Costs that do not meet the criteria for capitalisation are expensed. The initial cost of property, plant and equipment includes the purchase consideration and those costs that are directly attributable to bringing the asset into the location and condition necessary for its intended purpose.

Property, plant and equipment are categorised into the following classes:

- Operational land and buildings
- Operational plant and equipment
- Operational vehicles
- Flood protection infrastructural assets
- Transport infrastructural assets
- Navigational aids infrastructural assets
- Parks and forests infrastructural assets
- Water supply infrastructural assets
- Capital work in progress

All property, plant and equipment are initially recorded at cost.

Valuations

Valuations for water supply, parks and forests, flood protection and transport infrastructural assets are carried out or reviewed by independent qualified valuers at regular intervals. Any increase in the value of a class of assets on revaluation is recognised in other comprehensive income and accumulated in equity under the heading of revaluation surplus. However, if it offsets a previous decrease in value for the same asset recognised in the Statement of revenue and expenses, then it is recognised in the Statement of revenue and expenses. A decrease in the value of a class of assets on revaluation is recognised in the Statement of revenue and expenses where it exceeds the increase of that class of asset previously recognised in equity under the heading of revaluation surplus.

The remaining property, plant and equipment are recorded at cost, less accumulated depreciation and impairment. Cost represents the value of the consideration given to acquire the assets and the value of other directly attributable costs that have been incurred in bringing the assets to the location and condition necessary for their intended service. All property plant and equipment, except land, are depreciated.

Depreciation

Depreciation is provided on a straight-line basis on all tangible property, plant and equipment, other than land and capital works in progress, at rates which will write off assets, less their estimated residual value over their remaining useful life.

The useful life of major classes of assets has been estimated as follows:

- Operational land and buildings 10 years to indefinite
- Operational plant and equipment two to 20 years
- Operational vehicles three to 10 years
- Flood protection infrastructural assets 15 years to indefinite
- Transport infrastructural assets five to 50 years
- Navigational aids infrastructural assets five to 50 years
- Parks and forests infrastructural assets 10 to 80 years
- Water supply infrastructural assets three to 150 years

Capital work in progress is not depreciated.

Stopbanks included in the flood protection infrastructure asset class are maintained in perpetuity. Annual inspections are undertaken to ensure design standards are being maintained and to check for impairment. As such, stopbanks are considered to have an indefinite life and are not depreciated.

Rail rolling stock and stations are owned by Greater Wellington Rail Ltd.

Intangible assets

Software is carried at cost, less any accumulated amortisation and impairment losses. It is amortised over the useful life of the asset (2-10 years).

New Zealand Emission Trading Scheme

New Zealand Units (NZUs) received for pre 1990 forests are recognised at fair value on the date received. They are recognised as an asset in the balance sheet and income in the statement or revenue and expenses. The deforestation contingency is not recognised as a liability as there is no current intention of changing the land use. The estimated liability that would arise should deforestation occur has been estimated in the notes to the accounts.
NZU's in respect of post 1989 forest is recognised at fair value on the date received. As trees are harvested or carbon stocks decrease a liability and expense will be recognised for the NZUs to be surrendered to Government.

Impairment

All assets are reviewed annually to determine if there is any indication of impairment. An impairment loss is recognised when its carrying amount exceeds its recoverable amount. Losses resulting from impairment are accounted for in the Statement of revenue and expenses, unless the asset is carried at a revalued amount, in which case any impairment loss is treated as a revaluation decrease.

Recoverable amount

The recoverable amount of an asset is the greater of the net selling price and value in use.

Value in use

Value in use for Greater Wellington assets is calculated as being the depreciated replacement cost of the asset.

Financial instruments

Greater Wellington classifies its financial assets and liabilities according to the purpose for which they were acquired. Financial assets and liabilities are only offset when there is a legally enforceable right to offset them and there is an intention to settle on a net basis.

Financial assets

Greater Wellington's financial assets are categorised as follows:

- Financial assets at fair value accounted through the statement of revenue and expenses. Financial assets are classified in this category if acquired principally for the purpose of selling in the short term or if so designated by management. Gains or losses on re-measurement are recognised in the statement of revenue and expenses.
- Financial assets at fair value accounted through other comprehensive revenue and expenses.
 Financial assets are classified in this category if they were not acquired principally for selling in the short term. After initial recognition these assets are measured at their fair value. Any gains and losses are recognised directly in equity, except for impairment losses which are recognised in the statement of other comprehensive income.

 Available-for-sale financial assets are either designated in this category or not classified in any of the other categories. Available-for-sale financial assets are initially recorded at fair value plus transaction costs when that can be reliably estimated. Subsequent to initial recognition, they are measured at fair value, and changes therein, other than impairment losses, are recognised directly through equity. If there is no active market, no intention to sell the asset and fair value cannot be reliably measured, the item is measured at cost.

Fair value is equal to Greater Wellington's share of the net assets of the entity. Upon sale, the cumulative fair value gain or loss previously recognised directly in equity, is recognised in the statement of revenue and expenses.

• Loans and receivables

These assets are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial recognition they are measured at amortised cost using the effective interest method.

Gains and losses when the asset is impaired or sold are accounted for in the Statement of revenue and expenses.

• Held to maturity investments

These are assets with fixed or determinable payments with fixed maturities that Greater Wellington has the intention and ability to hold to maturity. After initial recognition they are recorded at amortised cost using the effective interest method. Gains and losses when the asset is impaired or settled are recognised in the Statement of revenue and expenses.

Cash and cash equivalents comprise cash balances and call deposits with up to three months maturity from the date of acquisition. These are recorded at their nominal value.

Financial liabilities

Financial liabilities comprise trade, other payables and borrowings. Financial liabilities with duration of more than 12 months are recognised initially at fair value, less transaction costs. Subsequently, they are measured at amortised cost using the effective interest rate method. Amortisation is recognised in the Statement of revenue and expenses, as is any gain or loss when the liability is settled.

Financial liabilities entered into with duration of less than 12 months are recognised at their nominal value.

Derivative financial instruments

Greater Wellington uses derivative financial instruments to manage exposure to interest rate and foreign exchange risks arising from our operational, financing and investment activities.

In accordance with its treasury policies, Greater Wellington does not hold or issue derivative financial instruments for trading purposes. Derivatives are accounted for as trading instruments. Derivative financial instruments are initially recognised at cost. Subsequent to initial recognition, derivative financial instruments are stated at fair value. For those instruments that do not qualify for hedge accounting, the gain or loss on remeasurement to fair value is recognised immediately in the Statement of revenue and expenses.

The fair value of an interest rate swap is the estimated amount that Greater Wellington would receive or pay to terminate the swap at balance date, based on current interest rates. The fair value of forward exchange contracts is their quoted market price at the balance date.

Financial guarantee contracts

A financial guarantee contract is a contract that requires Greater Wellington to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to meet a payment when due.

Financial guarantee contracts are initially recognised at fair value. If a financial guarantee contract is issued in a stand-alone arms length transaction to an unrelated party, its fair value at inception is equal to the consideration received. When no consideration is received a provision is recognised based on the probability that Greater Wellington will be required to reimburse a holder for a loss incurred discounted to present value. The portion of the guarantee that remains unrecognised, prior to discounting to fair value, is disclosed as a contingent liability.

Financial guarantees are subsequently measured at the initial recognition amount less any amortisation. However, if Greater Wellington assesses that it is probable that expenditure will be required to settle a guarantee, then a provision for the guarantee is measured at the present value of the future expenditure.

Non-current assets held for sale

Non-current assets (and disposal groups) classified as held-for-sale are measured at the lower of carrying amount and fair value, less costs to sell. Non-current assets and disposal groups are classified as held-for-sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the asset (or disposal group) is available for immediate sale in its present condition. The sale of the asset (or disposal group) is expected to be completed within one year from the date of classification.

Inventories

Inventories are valued at the lower of cost or net realisable value on a first-in first-out basis. The value of harvested timber is its fair value, less estimated point-of-sale costs at the date of harvest. Any change in value at the date of harvest is recognised in the statement of revenue and expenses.

Income tax

Income tax in the statement of revenue and expenses for the year comprises current and deferred tax. Income tax is usually recognised in the statement of revenue and expenses, except to the extent that it relates to items recognised directly in equity. In this case, that amount is recognised in equity.

Deferred tax is provided using the balance sheet liability method. This provides for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the asset can be utilised.

Foreign currency

In the event that Greater Wellington has any material foreign currency risk, it will be managed by derivative instruments to hedge the currency risk. Transactions in foreign currencies are translated at the foreign exchange rate at the date of transaction.

Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are translated into New Zealand dollars at the foreign exchange rate ruling at that date. Foreign exchange gains and losses arising on their translation are recognised in the statement of revenue and expenses.

Employee entitlements

A provision for employee entitlements is recognised as a liability in respect of benefits earned by employees but not yet received at balance date. Employee benefits include salaries, annual leave and long-service leave. Where the benefits are expected to be paid for within 12 months of balance date, the provision is the estimated amount expected to be paid by Greater Wellington

Obligations for contributions to defined contribution superannuation schemes are recognised as an expense in the Statement of revenue and expenses as incurred. Greater Wellington belongs to the Defined Benefit Plan Contributors Scheme (the scheme), which is managed by the Board of Trustees of the National Provident Fund. The scheme is a multi-employer defined benefit scheme. Insufficient information is available to use defined benefit accounting, as it is not possible to determine from the terms of the scheme the extent to which the surplus/deficit will affect future contributions by individual employers, as there is no prescribed basis for allocation. The scheme is therefore accounted for as a defined contribution scheme.

Provisions

A provision is recognised in the balance sheet when Greater Wellington has a present legal or constructive obligation as a result of a past event and it is probable that an amount will be required to settle the obligation. If the effect is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessment of the time value of money and, where appropriate, the risks specific to the liability.

Goods and services tax (GST)

All items in the financial statements are exclusive of GST, with the exception of receivables and payables, which are stated as GST inclusive.

Leases

Greater Wellington leases office space, office equipment, vehicles, land and buildings. Operating lease payments, where the lessor effectively retains substantially all the risks and benefits of ownership of the leased items, are charged as expenses in the period in which they are incurred.

Service concession asset and liability

Greater Wellington (as grantor) has entered into a service concession arrangement with Tranzit, NZ Bus, and Mana (the Operators) to provide bus services with double decker buses. These buses meet the definition of service concession asset and are initially recognised at fair value and subsequently measured in accordance with PBE IPSAS 32. They are depreciated over a useful life of 20 years on a straight-line basis. An initial financial liability is also recognised which is accounted for using the amortised cost model leading to finance expenses over 15 years.

Overhead allocation and internal transactions

Greater Wellington allocates overhead from support service functions on a variety of different bases that are largely determined by usage. The treasury operation of Greater Wellington is treated as an internal banking activity. Any surplus generated is credited directly to the statement of revenue and expenses. Individual significant activity operating revenue and operating expenditure is stated inclusive of any internal revenues and internal charges. These internal transactions are eliminated in Greater Wellington's prospective financial statements.

Democratic services costs have not been allocated to significant activities, except where there is a major, separate community of benefit other than the whole region, ie, water supply and transport.

Equity

Equity is the community's interest in Greater Wellington and is measured as the difference between total assets and total liabilities. Equity is disaggregated and classified into a number of components to enable clearer identification of the specified uses of equity within Greater Wellington.

The components of equity are accumulated funds and retained earnings, revaluation reserves and restricted funds.

Statement of cash flows

Cash means cash balances on hand, held in bank accounts, demand deposits and other highly liquid investments in which Greater Wellington invests as part of its day-to-day cash management.

Operating activities include cash received from all income sources of Greater Wellington and the cash payments made for the supply of goods and services.

Investing activities are those activities relating to the acquisition and disposal of non-current assets.

Financing activities comprise change in equity and debt capital structure.

Changes in accounting policies

There have been no changes from the accounting policies adopted in the last audited financial statements.

Standards, amendments and interpretations that are not yet effective and have not been adopted early No standards issued are considered to have a material future impact on Greater Wellington.

Local Government Funding Authority

Greater Wellington along with other shareholders guarantees the obligations of the NZLGFA. The guarantee will be initially recognised as a financial liability at fair value in the Statement of Financial Position and expense in the Statement of revenue and expenses. The guarantee will be revalued using the expected default loss method.

Greater Wellington also has unpaid subscribed capital which can only be called if there is an imminent risk of default by the NZLGFA. A contingent liability is disclosed in the notes to the financial statement per NZ IAS 37.

Borrower Notes

When Greater Wellington borrows funds from the NZLGFA it is required to invest a small percentage back as borrower notes. Borrower notes are repaid when debts to the NZLGFA are due to be repaid. The borrower notes also have a conversion feature that NZLGFA can trigger if it remains at imminent risk of default after it has called all of its unpaid capital and has exercised its options for commitment shares. Borrower notes without the conversion feature are classified as loans and receivables as the notes will have fixed and determinable payments and will be quoted on an active market. The borrower notes will be initially recognised at fair value. Subsequent to initial recognition borrower notes will be measured with a fixed interest rate.

Borrower notes with the equity conversion option will be recognised at fair value as a derivative under NZIAS 39, with changes in fair value recognised in profit or loss.

Total council financial statements

		PRO	SPECTIVE ST FOR 1	ATEMENT OF THE YEAR EN	REVENUE AN DING 30 JUN	ND EXPENSES IE					
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Operating Revenue											
General rates	42,479	47,283	52,132	51,491	55,196	57,237	58,325	60,093	62,672	64,956	67,995
Targeted rates	81,482	84,828	87,923	97,454	105,140	113,820	118,860	123,428	125,983	132,289	133,424
Regional rates	123,961	132,111	140,055	148,945	160,336	171,057	177,185	183,521	188,655	197,245	201,419
Water supply levy	30,863	33,069	34,230	35,892	38,305	41,214	44,126	47,240	47,906	48,336	48,427
Government subsidies	79,764	81,274	76,464	78,232	87,584	88,482	91,237	94,556	96,591	94,819	105,580
Transport improvement grants ⁽¹⁾	16,789	24,439	30,048	30,947	15,065	12,247	10,272	10,507	13,885	19,506	18,258
Interest and dividends	3,043	4,282	5,006	6,009	7,355	8,536	8,969	9,322	9,582	9,852	10,424
Other operating revenue	63,899	118,899	123, 121	121,932	122,032	123,207	126,750	130,395	132,235	142,648	139,010
Total operating revenue and gains	318,319	394,074	408,924	421,957	430,677	444,743	458,539	475,541	488,854	512,406	523,118
Operating Expenditure											
Employee benefits	46,244	49,989	49,304	50,381	51,483	52,513	53,563	54,636	55,731	56,845	57,984
Grants and subsidies	156,669	197,896	196,250	198,699	219,253	222,404	229,199	236,091	241,831	249,429	260,910
Finance expenses	19,921	22,581	23,712	23,432	27,023	30,424	34,017	35,823	35,854	35,509	36,233
Depreciation and amortisation	17,930	26,434	30,239	34,298	39,066	42,051	41,921	43,439	44,689	46,456	47,622
Other operating expenses	70,673	84,706	81,705	80,266	76,717	76,746	77,883	80,928	81,881	88,702	84,909
Total operating expenditure	311,437	381,606	381,210	387,076	413,542	424,138	436,583	450,917	459,986	476,941	487,658
Operating surplus/(deficit) before other items and tax	6,882	12,468	27,714	34,881	17,135	20,605	21,956	24,624	28,868	35,465	35,460
Other fair value changes	9,250	8,907	7,439	4,068	2,859	1,933	1,565	1,197	1,043	771	516
Operating surplus / (deficit) after tax	16,132	21,375	35,153	38,949	19,994	22,538	23,521	25,821	29,911	36,236	35,976
Other comprehensive revenue and expenses											
Increases / (decreases) in revaluations ⁽²⁾	54,655	1,140				130,875	883	2,184			151,783
Total comprehensive income	70,787	22,515	35,153	38,949	19,994	153,413	24,404	28,005	29,911	36,236	187,759
 (1) – GWRC now fully funds some public transport impr Where this expenditure is for rail rolling stock and Where this expenditure is for assers owned by oth 	rovement expenditu infrastructure that v	e at the time the e vill be owned by th	xpense is incurred le 100% council su	, and recovers a sh bsidiary Greater W	nare of the debt se /ellington Rail Limi	rrvicing costs from ited it is treated as	the NZ Transport , an investment in t	Agency. chis subsidiary.			

All figures on this page exclude GST

(2) – The revaluations are primarily for property plant and equipment.

		PR	OSPECTIVE	statement (The year eni	JF CHANGES DING 30 JUN	IN EQUITY E					
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Total opening ratepayers' funds	880,067	1,144,562	1,167,077	1,202,230	1,241,179	1,261,173	1,414,586	1,438,990	1,466,995	1,496,906	1,533,142
Total comprehensive income	70,787	22,515	35, 153	38,949	19,994	153,413	24,404	28,005	29,911	36,236	187,759
Movement in ratepayers funds for year	70,787	22,515	35,153	38,949	19,994	153,413	24,404	28,005	29,911	36,236	187,759
Closing ratepayers' funds	950,854	1,167,077	1,202,230	1,241,179	1,261,173	1,414,586	1,438,990	1,466,995	1,496,906	1,533,142	1,720,901
Components of ratepayers funds											
Opening accumulated funds	349,253	359,782	385,044	422,771	461,357	483,804	505,097	527,451	551,583	580,066	615,009
Total comprehensive income	70,787	22,515	35, 153	38,949	19,994	153,413	24,404	28,005	29,911	36,236	187,759
Movements in other reserves	(47,098)	2,747	2,574	(363)	2,453	(132,120)	(2,050)	(3,873)	(1,428)	(1,293)	(153,537)
Movement in accumulated funds for year	23,689	25,262	37,727	38,586	22,447	21,293	22,354	24,132	28,483	34,943	34,222
Closing accumulated funds	372,942	385,044	422,771	461,357	483,804	505,097	527,451	551,583	580,066	615,009	649,231
Opening other reserves	32,116	32,909	29,022	26,448	26,811	24,358	25,603	26,770	28,459	29,887	31,180
Movements in other reserves	(7,557)	(3,887)	(2,574)	363	(2,453)	1,245	1,167	1,689	1,428	1,293	1,754
Movement in other reserves for year	(7,557)	(3,887)	(2,574)	363	(2,453)	1,245	1,167	1,689	1,428	1,293	1,754
Closing other reserves	24,559	29,022	26,448	26,811	24,358	25,603	26,770	28,459	29,887	31,180	32,934
Opening asset revaluation reserves	498,698	751,871	753,011	753,011	753,011	753,011	883,886	884,769	886,953	886,953	886,953
Movements in revaluation reserve ⁽¹⁾	54,655	1,140	ı		I	130,875	883	2,184		ı	151,783
Movement in asset revaluation reserve for year	54,655	1,140		•	•	130,875	883	2,184			151,783
Closing asset revaluation reserve	553,353	753,011	753,011	753,011	753,011	883,886	884,769	886,953	886,953	886,953	1,038,736
Closing ratepayers' funds	950,854	1,167,077	1,202,230	1,241,179	1,261,173	1,414,586	1,438,990	1,466,995	1,496,906	1,533,142	1,720,901
(1) – Movements in revaluation reserves are the projected r	revaluation of pr	operty, plant and ∈	quipment over th	e life of the plan							

JAL POSITION JNE	2022/23 2023/24 2024/25 2025/26 2026/27 2027/28 Plan Plan Plan Plan Plan Plan Plan \$000s \$000s \$000s \$000s		20,723 21,283 21,877 22,496 23,144 23,841	34,345 34,770 35,222 35,698 36,201 36,741	46,767 48,619 50,143 51,544 52,953 53,394	101,835 104,672 107,242 109,738 112,298 113,976	59,330 64,880 70,792 77,028 83,565 90,608	389,334 419,076 431,940 446,216 469,090 487,161	1,603,591 1,651,338 1,664,430 1,674,876 1,672,431 1,820,090	2,052,255 2,135,294 2,167,162 2,198,120 2,225,086 2,397,859	2,154,090 2,239,966 2,274,404 2,307,858 2,337,384 2,511,835		505,097 527,451 551,583 580,066 615,009 649,231	909,489 911,539 915,412 916,840 918,133 1,071,670	1,414,586 1,438,990 1,466,995 1,496,906 1,533,142 1,720,901		151,800 146,800 146,800 146,800 146,800 146,800	42,642 42,642 42,642 42,642 42,642 42,642	194,442 189,442 189,442 189,442 189,442 189,442	545,062 611,534 617,967 621,510 614,800 601,492	545,062 611,534 617,967 621,510 614,800 601,492	001 000 000 000 000 000 000 000 000 000	400,201 242,400 200,000 204,100 010,000 400,821	الاز المعامرة المعام
2021/22 2022/2: Plan Plan \$000s \$000s 20 20 20 70 7		2 0 2 0 2 0 2 0 2 0 2 0 2	101	33,948 34,3	44,690 46,7	98,840 101,8	54,169 59,3	355,792 389,3	1,427,780 1,603,5	1,837,741 2,052,2	1,936,581 2,154,0		483,804 505,0	777,369 909,4	1,261,173 1,414,5		126,800 151,8	42,642 42,6	169,442 194,4	505,966 545,0	505,966 545,0	675,408 739,5	1 026 591 7 154 D	>/
	2020/21 Plan \$000s		19,724	33,580	41,686	94,990	49,409	336,724	1,370,392	1,756,525	1,851,515		461,357	779,822	1,241,179		126,800	42,642	169,442	440,894	440,894	610,336	1 QE1 515	· · · · · · · · · · · ·
	2019/20 Plan \$000s		19,301	33,243	37,952	90,496	45,090	310,073	1,323,266	1,678,429	1,768,925		422,771	779,459	1,202,230		126,800	42,642	169,442	397,253	397,253	566,695	1 768 075	11/00/11
	2018/19 Plan \$000s		18,915	32,928	31,375	83,218	41,280	289,412	1,269,526	1,600,218	1,683,436		385,044	782,033	1,167,077		126,800	42,642	169,442	346,917	346,917	516,359	1 692 136	001-1000/I
	2017/18 Budget \$000s		alents 21,318	30,466	21,849	73,633	ent) 39,162	ary 271,527	luipment 989,389	1,300,078	1,373,711	2	372,942	577,912	unds 950,854		166,168	s 26,689	192,857	230,000	ties 230,000	422,857	hilition 1 373 711	
		ASSETS	Cash and other equival	Investments (current)	Other current assets	Current assets	Investments (non-curre	Investment in subsidiar	Property, plant and equ	Non-current assets	Total assets	RATEPAYERS' FUNDS	Retained earnings	Reserves	Total ratepayers' fur	LIABILITIES	Debt (current)	Other current liabilities	Current liabilities	Debt (non-current)	Non-current liabilitio	Total liabilities	Total and line hered	וטנמו בלעוול מווע וועי

			PROSPECT FOR 1	IVE STATEME FHE YEAR EN	ent of cash Iding 30 Jun	FLOWS IE					
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
CASH FLOWS FROM OPERATING ACTIVITIES											
Cash is provided from:											
Regional rates	123,961	132,111	140,055	148,945	160,336	171,057	177,185	183,521	188,655	197,245	201,419
Water supply levy	30,863	33,069	34,230	35,892	38,305	41,214	44,126	47,240	47,906	48,336	48,427
Government subsidies	79,764	105,713	106,512	109,179	102,649	100,729	101,509	105,063	110,476	114,325	123,838
Interest and dividends	3,043	4,282	5,006	6,009	7,355	8,536	8,969	9,322	9,582	9,852	10,424
Fees, charges and other revenue	63,899	118,899	123, 121	121,932	122,032	123,207	126,750	130,395	132,235	142,648	139,010
	301,530	394,074	408,924	421,957	430,677	444,743	458,539	475,541	488,854	512,406	523,118
Cash is disbursed to:											
Interest	19,686	22,528	23,712	23,432	27,023	30,424	34,017	35,823	35,854	35,509	36,233
Payment to suppliers and employees	273,587	332,591	330,522	334,070	352,729	357,368	366,907	378,343	386,513	402,649	411,311
	293,273	355,119	354,234	357,502	379,752	387,792	400,924	414,166	422,367	438, 158	447,544
Net cash flows from operating activities	8,257	38,955	54,690	64,455	50,925	56,951	57,615	61,375	66,487	74,248	75,574
CASHFLOWS FROM INVESTING ACTIVITIES											
Cash is provided from:											
Sale of property, plant and equipment	1,216	1,614	426	669	377	308	517	340	1,539	2,683	1,909
Cash is applied to:											
Purchase of property, plant and equipment	64,542	98,021	84,373	81,721	96,828	87,293	89,302	54,690	56,673	46,699	45,406
Investment additions	17,990	30,748	20,693	26,651	19,068	33,541	29,742	12,864	14,277	22,874	18,071
	82,532	128,769	105,066	108,372	115,896	120,834	119,044	67,554	70,950	69,573	63,477
Net cashflows from investing activities	(81,316)	(127,155)	(104,640)	(107,673)	(115,519)	(120,526)	(118,527)	(67,214)	(69,411)	(66,890)	(61,568)

			PROSPECT FOR THE	IVE STATEME YEAR ENDING	NT OF CASHI 3 30 JUNE (C	FLOWS ONT.)					
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	202 <i>7</i> /28 Plan \$000s
CASHFLOWS FROM FINANCING ACTIVITIES											
Cash is provided from:											
Loan funding ⁽¹⁾	77,183	85,184	80,906	81,706	103,995	111,047	111,002	60,031	60,419	53,077	48,242
Cash is applied to:											
Debt repayment	16,895	(6,767)	30,570	38,065	38,923	46,951	49,530	53,598	56,876	59,787	61,551
Net cashflows from financing activities	60,288	91,951	50,336	43,641	65,072	64,096	61,472	6,433	3,543	(6,710)	(13,309)
Net increase/(decrease) in cash and cash equivalents	(12,771)	3,751	386	423	478	521	560	594	619	648	697
Opening cash and cash equivalents	17,300	15,164	18,915	19,301	19,724	20,202	20,723	21,283	21,877	22,496	23,144
Closing cash and cash equivalents	4,529	18,915	19,301	19,724	20,202	20,723	21,283	21,877	22,496	23,144	23,841
(1) – GWRC now fully funds some public transport impro	ovement expenditu	re at the time the e	expense is incurred	d, and recovers a sl	hare of the debt se	rvicing costs from	the NZ Transport A	Agency.			

		PROSP	ECTIVE REGI FOR	ONAL RATES THE YEAR EN	and capita Ding 30 Jun	l expenditu e	IRE				
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
REGIONAL RATES											
Regional Leadership - excluding Warm Greater Wellington targeted rate	12,093	14,198	15,258	15,235	16,147	16,182	15,999	16,219	16,550	16,760	16,955
Public transport	64,656	68,110	70, 193	78,511	85,537	92,653	96,393	99,885	101,389	106,534	106,534
Environment	28,378	30,154	31,437	32,826	33,995	34,734	35,199	35,963	36,721	37,418	37,958
Flood Protection and Control Works	17,989	19,481	20,507	21,994	23,598	25,869	27,668	29,385	30,718	32,602	34,059
Parks	6,582	6,069	6,515	6,544	6,758	7,080	7,627	7,457	7,867	8,211	8,675
Investments ⁽¹⁾	(8,920)	(9,139)	(7,411)	(9,967)	(9,379)	(9, 134)	(9,618)	(9,611)	(8,982)	(8,912)	(7,552)
Total Rates excluding Warm Greater Wellington targeted rate	120,778	128,873	136,499	145,143	156,656	167,384	173,268	179,298	184,263	192,613	196,629
Regional Leadership - Warm Greater Wellington targeted rate	3,183	3,238	3,556	3,802	3,680	3,673	3,917	4,223	4,392	4,632	4,790
Total regional rates	123,961	132,111	140,055	148,945	160,336	171,057	177,185	183,521	188,655	197,245	201,419
CAPITAL EXPENDITURE											
Environment	1,721	3,056	2,922	2,168	1,829	1,485	1,363	1,726	1,548	1,409	1,881
Public transport ⁽²⁾	19,360	46,037	35,985	32,356	21,532	17,965	18,232	19,264	24,633	12,761	14,999
Water supply	12,918	14,645	14,732	23,015	48,543	40,989	42,300	5,483	3,771	4,888	8,078
Parks	3,609	3,980	2,691	2,325	2,919	2,912	2,446	2,522	2,213	2,764	2,639
Flood Protection and Control Works	21,381	17,963	21,006	19,253	18,098	20,932	21,650	21,901	21,536	21,561	13,671
Regional Leadership	745	995	787	108	527	243	296	172	141	404	135
Investments	719	250	·					·	·		ı
Other	4,089	11,095	6, 250	2,496	3,380	2,767	3,015	3,622	2,831	2,912	4,003
Total capital expenditure	64,542	98,021	84,373	81,721	96,828	87,293	89,302	54,690	56,673	46,699	45,406
Public Transport Investment in Rail	17,990	30,748	20,660	26,651	19,068	33,541	29,742	12,864	14,277	22,874	18,071
Total Capex and improvements	82,532	128,769	105,033	108,372	115,896	120,834	119,044	67,554	70,950	69,573	63,477
(1) – Investment raturns raduce the raduiram ant for rates											

(1) - investment returns reduce the requirement for rates
 (2) - Transport capital expenditure excludes investment in Greater Wellington Rail Limited for the purchase of rail rolling stock and infrastructure. This is disclosed separately as Public Transport Investment in Rail.

Financial Reserves

We have two types of council created reserves, which are monies set aside by the council for a specific purpose:

- Retained earnings any surplus or deficit not transferred to a special reserve is aggregated into retained earnings
- Other reserves any surplus or deficit or specific rate set aside or utilised by council for a specific purpose. Reserves are not separately held in cash and funds are managed as part of Greater Wellington's treasury risk management policy.

Other reserves are split in four categories:

- Area of benefit reserves any targeted rate funding surplus or deficit is held to fund future costs for that area
- Contingency reserves funds that are set aside to smooth the impact of costs associated with specific unforeseen events
- Special reserves funds that are set aside to smooth the costs of irregular expenditure
- Other reserves expenditure that has been rated for in one year when the project will not be completed until the following year.

Council Created Reserves	Purpose of the Fund	Opening Balance Jul-18 \$000s	Deposits	Expenditure	Closing Balance Jun-28
	AREA OF BE	NEFIT RESERV	ES		
Public transport reserve	Any funding surplus or deficit relating to the provision of public transport services is used only on subsequent public transport expenditure	12,579	2,271	(7,835)	7,015
Transport planning reserve	Any funding surplus or deficit relating to the provision of public transport planning services is used only on subsequent public transport planning expenditure	979	962	(1,440)	501
WREMO reserve	Contributions by other Local Authorities to run the WREMO	86	0	(35)	51
WRS reserve	Any funding surplus or deficit relating to the Wellington Regional Strategy implementation is used only on subsequent Wellington Regional Strategy expenditure	826	74	0	900
Catchment scheme reserves	Any funding surplus or deficit relating to the provision of flood protection and catchment management schemes is used only on subsequent flood protection and catchment management expenditure	5,127	5,208	(1,094)	9,241
	CONTINGE		S		
Environmental legal reserve	To manage the variation in legal costs associated with resource consents and enforecement	113	10	0	123
Flood contingency reserves	To help manage the costs for the repair of storm damage throughout the region.	5,543	5,955	0	11,498
Rural fire reserve	To help manage the costs of rural fire equipment.	74	25	0	99
	SPECIA				
Election reserve	To manage the variation in costs associated with the election cycle	348	818	(960)	206
Corporate systems reserve	To manage the variation in costs associated with key IT infrastructure and software.	2,033	1,618	(3,533)	118
Other reserve balances	Rebudgets and other funds	5,201	2,388	(4,407)	3,182
Total Reserves		32,909	19,329	(19,304)	32,934

			FORT	PROSPECTIV THE YEAR EN	ve debt Ding 30 Jun	ш					
	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Environment	4,453	6, 186	8,235	9,332	9,764	9,719	9,539	9,527	9,242	8,798	8,934
Public transport	275,010	279,696	294,284	305,725	312,283	328,954	342,407	337,711	334,577	320,713	305,263
Water supply	82,697	98,637	108,930	126,924	170,169	205,550	241,632	240,347	237,074	234,720	235,363
Parks	8,889	10,919	12,491	13,837	15,619	17,477	18,440	19,733	20,405	21,374	22,332
Flood Protection and Control Works	85,415	107,177	122,867	136,092	147,692	161,474	175,008	188,257	200,519	211,607	214,468
Regional leadership	19,324	19,674	20,392	20,201	20,071	19,939	20,250	20,655	21,269	22,194	22,419
Property and investments	6,186	34,591	34,090	33,980	33,443	32,879	32,595	32,297	31,982	31,650	31,311
Corporate systems	5,433	12,385	15,737	14,940	14,609	12,998	11,758	11,224	9,654	8,235	7,620
Total activities debt	487,407	569,265	617,026	661,031	723,650	788,990	851,629	859,751	864,722	859,291	847,710
Treasury internal funding ⁽¹⁾	(91,239)	(95,548)	(92,973)	(93,337)	(90,884)	(92,128)	(93,295)	(94,984)	(96,412)	(97,691)	(99,418)
Total external debt	396,168	473,717	524,053	567,694	632,766	696,862	758,334	764,767	768,310	761,600	748,292
External debt (current)	166,168	126,800	126,800	126,800	126,800	151,800	146,800	146,800	146,800	146,800	146,800
External debt (non-current)	230,000	346,917	397,253	440,894	505,966	545,062	611,534	617,967	621,510	614,800	601,492
Total external debt ⁽²⁾	396,168	473,717	524,053	567,694	632,766	696,862	758,334	764,767	768,310	761,600	748,292
 (1) – GWRC manages community outcome debt via an int (2) – Includes Finance Lease Liability from service conces 	ternal debt functic ssion arrangments	on. External investr	ments and debt are	e managed throug	h a central treasur	y management fur	nction in accordan	ce with the Treasu	ıry Managagment	Policy	

			PROSPECTIV FOR T	VE FUNDING THE YEAR EN	IMPACT STA DING 30 JUN	rement Ie					
Greater Wellington operations	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Sources of operating funding											
General rates	42,479	47,283	52, 132	51,491	55,196	57,237	58,325	60,093	62,672	64,956	67,995
Targeted rates	81,482	84,828	87,923	97,454	105,140	113,820	118,860	123,428	125,983	132,289	133,424
Subsidies and grants for operating purposes	89,351	81,274	76,464	78,232	87,584	88,482	91,237	94,556	96,591	94,819	105,580
Interest and dividends from investments	3,043	4,282	5,006	6,009	7,355	8,536	8,969	9,322	9,582	9,852	10,424
Fees, charges, and targeted rates for water supply	53,783	100,931	104,544	106,992	107,499	109,423	112,709	116,094	119,700	131,266	127,381
Fines, infringement fees, and other receipts $^{\left(1\right) }$	40,979	51,037	52,807	50,832	52,838	54,998	58,167	61,541	60,441	59,718	60,056
Total operating funding	311,117	369,635	378,876	391,010	415,612	432,496	448,267	465,034	474,969	492,900	504,860
Applications of operating funding											
Payments to staff and suppliers	273,587	332,591	327,259	329,350	347,456	351,665	360,646	371,656	379,442	394,973	403,803
Finance costs	19,686	22,528	23,712	23,432	27,023	30,424	34,017	35,823	35,854	35,509	36,233
Other operating funding applications		I		I	I				ı		
Total applications of operating funding $^{\scriptscriptstyle (2)}$	293,273	355,119	350,971	352,782	374,479	382,089	394,663	407,479	415,296	430,482	440,036
Operating surplus/(deficit)	17,844	14,516	27,905	38,228	41,133	50,407	53,604	57,555	59,673	62,418	64,824
Sources of Capital Funding											
Subsidies and grants for capital expenditure	7,202	24,439	30,048	30,947	15,065	12,247	10,272	10,507	13,885	19,506	18,258
Increase / (decrease) in debt	52,731	88,064	47,763	44,005	62,619	65,342	62,638	8,123	4,972	(5,417)	(11,554)
Gross proceeds from asset sales	416	1,214	426	299	377	308	517	340	1,539	2,683	1,909
Total Sources of Capital Funding	60,349	113,717	78,237	75,251	78,061	77,897	73,427	18,970	20,396	16,772	8,613

			PROSPECTIV FOR THE	VE FUNDING YEAR ENDING	IMPACT STA1 3 30 JUNE (C	EMENT ONT.)					
Greater Wellington operations	2017/18 Budget \$000s	2018/19 Plan \$000s	2019/20 Plan \$000s	2020/21 Plan \$000s	2021/22 Plan \$000s	2022/23 Plan \$000s	2023/24 Plan \$000s	2024/25 Plan \$000s	2025/26 Plan \$000s	2026/27 Plan \$000s	2027/28 Plan \$000s
Applications of Capital Funding											
Capital expenditure											
- to meet additional demand	5,976	4,267	1,533		12,810	13,104	13,629	13,956	14,305	316	247
- to improve the level of service	41,635	36,151	61,525	51,319	65,793	59,394	60,829	25,597	23,596	22,564	16,839
- to replace existing assets	16,931	57,604	21,315	30,402	18,225	14,795	14,844	15,137	18,772	23,819	28,320
Increase / (decrease) in investments	21,208	34,098	24,343	31,395	24,819	39,765	36,563	20,146	21,968	31,198	26,277
Increase / (decrease) in reserves	(7,557)	(3,887)	(2,574)	363	(2,453)	1,246	1,166	1,689	1,428	1,293	1,754
Total Applications of Capital Funding	78,193	128,233	106,142	113,479	119,194	128,304	127,031	76,525	80,069	79,190	73,437
Surplus/(Deficit) of Capital Funding	(17,844)	(14,516)	(27,905)	(38,228)	(41,133)	(50,407)	(53,604)	(57,555)	(59,673)	(62,418)	(64,824)
Funding Balance	I				I		ı		ı		
Depreciation on council assets	17,930	26,434	30,239	34,298	39,066	42,051	41,921	43,439	44,689	46,456	47,622
Water Supply Levy ⁽¹⁾	30,863	33,069	34,230	35,892	38,305	41,214	44,126	47,240	47,906	48,336	48,427
(1) – This includes the Water supply levy charged to Wellir	ngton, Hutt, Uppe	er Hutt and Porirua	city councils.								

All figures on this page exclude GST This statement is not an income statement. It excludes all non cash transactions such as depreciation and valuations.

Summary of rates and levies

Rates for Greater Wellington are mostly allocated to ratepayers on the basis of their capital values. Within the region, different territorial authorities undertake general revaluations at different times. To equalise the values, each year Council gets Quotable Value or another registered valuer to estimate the projected valuations of all the rateable land in the districts within the region. This means that rates are assessed on a consistent valuation basis, regardless of the timing of individual territorial authority revaluations.

The summary information in this section should be read in conjunction with the Funding Impact Statement and the Revenue and Financing policy.

All figures on this page exclude GST.

This table shows the rates and levies for Greater Wellington in 2018/19, with the changes from last year 2017/18. Rates comprise the general rate and various targeted rates. Greater Wellington also charges a water supply levy directly to the four city councils in the region, and they set their own rates to cover the cost of this levy.

The total rate increase in regional rates for 2018/19 is 6.7%. The water supply levy, which is charged to the four metropolitan city councils is proposed to increase by 7.1% compared to 2017/18. When the water supply levy is included, Greater Wellington overall increase is 6.8%

SL	IMMARY OF RATES AND LE	VIES		
	2017/18 Plan \$000s	2018/19 Plan \$000s	Change \$000s	Change %
General rate	42,482	47,283	4,802	
Targeted rates				
Region wide targeted rates ⁽¹⁾				
River management rate	5,827	6,459	632	
Public transport rate	64,656	68,110	3,453	
Stadium purposes rate	978	-	(978)	
Wellington regional strategy rate	4,822	4,908	86	
Specific area targeted rates:				
Pest management rate	472	532	60	
South Wairarapa district – river rates	93	95	2	
Wairarapa scheme and stopbank rates	1,452	1,487	36	
Total targeted rates ⁽²⁾	78,300	81,591	3,291	
Total regional rates	120,782	128,874	8,092	6.7%
Water supply levy	30,863	33,069	2,206	7.1%
Total regional rates and levies	151,645	161,943	10,299	6.8%
Warm Greater Wellington rates ⁽³⁾	3,182	3,237		
Total rates and levies	154,826	165,180		

(1)- Region-wide rates are charged to all ratepayers in the region. They exclude targeted rates for pest management, Wairarapa river and drainage schemes, and "Warm Greater Wellington", because those rates only apply to highly specific ratepayers in those work programmes.

(2) - This total excludes "Warm Greater Wellington" targeted rates because they only apply to ratepayers who participate in the scheme.

(3) - The Warm Greater Wellington scheme assists regional ratepayers to insulate their homes. Only ratepayers who participate in the scheme are charged this rate.

Impact on each City and District

Rates increases vary among cities and districts because of differing equalised capital values. Targeted rates are applied according to the Revenue and Financing policy. The next page shows the different rates paid in each city and district.

All figures on this page exclude GST

IMPACT ON	EACH CITY AND DIST	TRICT		
Region-wide rates ⁽¹⁾	2017/18 Plan \$000s	2018/19 Plan \$000s	Change \$000s	Change %
Wellington city	62,574	66,367	3,793	
Hutt city	23,454	25,014	1,560	
Upper Hutt city	8,386	8,680	294	
Porirua city	9,887	10,301	414	
Kāpiti Coast district	9,326	10,320	994	
Masterton district	2,244	2,650	406	
Carterton district	1,094	1,270	176	
South Wairarapa district	1,798	2,154	356	
Tararua district	2	3	1	
Total region-wide rates	118,765	126,760	7,995	
Specific area targeted rates				
Pest management rate	472	532	60	
South Wairarapa district – river rates	93	95	2	
Wairarapa scheme and stopbank rates	1,452	1,487	36	
Total regional rates	120,782	128,874	8,092	6.7%
Water supply levy				
Wellington City Council	16,515	17,697	1,182	
Hutt City Council	7,660	8,206	546	
Upper Hutt City Council	3,096	3,318	222	
Porirua City Council	3,592	3,848	256	
Water supply levy	30,863	33,069	2,206	7.1%
Total regional rates and levies ⁽²⁾	151,645	161,943	10,299	6.8%
Warm Wellington rate ⁽³⁾	3,182	3,237		
Total rates and levies	154,827	165,180		

(1) – Region-wide rates are charged to all ratepayers in the region. They exclude targeted rates for pest management, Wairarapa river and drainage schemes, and "Warm Greater Wellington", because those rates only apply to highly specific ratepayers in those work programmes.

(2) - This total excludes "Warm Greater Wellington" targeted rates because they only apply to ratepayers who participate in the scheme.

(3) - The Warm Greater Wellington scheme assists regional ratepayers to insulate thier homes. Only ratepayers who participate in the scheme are charged this rate.

Residential region-wide rates

AVERAGE VALUE OF RESIDENTIAL PROPERTY IN EACH CITY OR DISTRICT				
	2017/18	2018/19		
Wellington city	\$551,092	\$554,460		
Hutt city	\$471,132	\$474,859		
Upper Hutt city	\$413,719	\$415,367		
Porirua city	\$488,077	\$495,585		
Kāpiti Coast district excl Ōtaki	\$414,346	\$571,429		
Ōtaki rating area	\$249,397	\$350,606		
Masterton district	\$251,836	\$329,153		
Carterton district	\$264,355	\$352,807		
South Wairarapa district	\$282,113	\$408,450		

2018/19 RESIDENTIAL REGION-WIDE RATES, FOR AN AVERAGE VALUE RESIDENTIAL PROPERTY						
	General r	ate	River managen	ient rate	Public transpo	ort rate
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Wellington city	\$261.68	\$282.66	\$0.53	\$0.52	\$197.90	\$218.80
Hutt city	\$183.74	\$205.63	\$94.32	\$111.16	\$298.57	\$299.55
Upper Hutt city	\$161.41	\$178.84	\$40.26	\$38.92	\$294.87	\$288.90
Porirua city	\$188.19	\$211.80	\$1.58	\$1.86	\$354.78	\$351.85
Kāpiti Coast district excl Ōtaki	\$187.98	\$218.22	\$59.41	\$59.41	\$151.40	\$177.35
Ōtaki rating area	\$113.15	\$133.89	\$35.76	\$36.45	\$91.13	\$96.78
Masterton district	\$102.71	\$127.46	\$0.00	\$0.00	\$29.26	\$39.99
Carterton district	\$107.55	\$137.13	\$3.23	\$3.58	\$54.97	\$67.40
South Wairarapa district	\$111.85	\$157.18	\$0.00	\$0.00	\$75.53	\$97.54
Wellington city	\$6.12	\$0.00	\$16.10	\$16.10	\$482.33	\$518.08
Hutt city	\$4.41	\$0.00	\$16.10	\$16.10	\$597.14	\$632.43
Upper Hutt city	\$3.29	\$0.00	\$16.10	\$16.10	\$515.93	\$522.76
Porirua city	\$3.81	\$0.00	\$16.10	\$16.10	\$564.47	\$581.62
Kāpiti Coast district excl Ōtaki	\$2.21	\$0.00	\$16.10	\$16.10	\$417.10	\$471.09
Ōtaki rating area	\$1.33	\$0.00	\$16.10	\$16.10	\$257.46	\$283.23
Masterton district	\$1.77	\$0.00	\$16.10	\$16.10	\$149.84	\$183.55
Carterton district	\$1.65	\$0.00	\$16.10	\$16.10	\$183.50	\$224.21
South Wairarapa district	\$2.12	\$0.00	\$16.10	\$16.10	\$205.60	\$270.82

2018/19 RESIDENTIAL REGION-WIDE RATES PER \$100K OF VALUED RESIDENTIAL PROPERTY						
	General r	ate	River managen	nent rate	Public transport rate	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Wellington city	\$47.48	\$50.98	\$0.10	\$0.09	\$35.91	\$39.46
Hutt city	\$39.00	\$43.30	\$20.02	\$23.41	\$63.37	\$63.08
Upper Hutt city	\$39.01	\$43.06	\$9.73	\$9.37	\$71.27	\$69.55
Porirua city	\$38.56	\$42.74	\$0.32	\$0.38	\$72.69	\$71.00
Kāpiti Coast district excl Ōtaki	\$45.37	\$38.19	\$14.34	\$10.40	\$36.54	\$31.04
Ōtaki rating area	\$45.37	\$38.19	\$14.34	\$10.40	\$36.54	\$27.60
Masterton district	\$40.78	\$38.72	\$0.00	\$0.00	\$11.62	\$12.15
Carterton district	\$40.69	\$38.87	\$1.22	\$1.02	\$20.79	\$19.10
South Wairarapa district	\$39.65	\$38.48	\$0.00	\$0.00	\$26.77	\$23.88

2018/19 RESIDENTIAL REGION-WIDE RATES PER \$100K OF VALUED RESIDENTIAL PROPERTY (CONT.)						
	Stadium purpose	es rate	Total region-wide rates excl Wellington regional strategy rate			
	2017/18	2018/19	2017/18	2018/19		
Wellington city	\$1.11	\$0.00	\$84.60	\$90.54		
Hutt city	\$0.94	\$0.00	\$123.33	\$129.79		
Upper Hutt city	\$0.79	\$0.00	\$120.81	\$121.98		
Porirua city	\$0.78	\$0.00	\$112.35	\$114.11		
Kāpiti Coast district excl Ōtaki	\$0.53	\$0.00	\$96.78	\$79.62		
Ōtaki rating area	\$0.53	\$0.00	\$96.78	\$76.19		
Masterton district	\$0.70	\$0.00	\$53.10	\$50.87		
Carterton district	\$0.63	\$0.00	\$63.33	\$58.99		
South Wairarapa district	\$0.75	\$0.00	\$67.17	\$62.36		

Region-wide rates are charged to all ratepayers in the region. They exclude targeted rates for pest management, Wairarapa river and drainage schemes, and "Warm Greater Wellington", because those rates only apply to highly specific ratepayers in those work programmes.

Average rates for each area and category

These tables show the region-wide rates that are charged to all ratepayers in the region. They exclude targeted rates for pest management, Wairarapa river and drainage schemes, and "Warm Greater Wellington", because those rates only apply to highly specific ratepayers in those work programmes.

Residential, including GST	Average capital value	Increase in 2018/19	lncrease per week	Rates 2018/19	Rates per week
Wellington city	\$554,460	\$36	\$0.69	\$518	\$9.96
Hutt city	\$474,859	\$35	\$0.68	\$632	\$12.16
Upper Hutt city	\$415,367	\$7	\$0.13	\$523	\$10.05
Porirua city	\$495,585	\$17	\$0.33	\$582	\$11.18
Kāpiti Coast district excl Ōtaki	\$571,429	\$54	\$1.04	\$471	\$9.06
Ōtaki rating area	\$350,606	\$26	\$0.50	\$283	\$5.45
Masterton district	\$329,153	\$34	\$0.65	\$184	\$3.53
Carterton district	\$352,807	\$41	\$0.78	\$224	\$4.31
South Wairarapa district	\$408,450	\$65	\$1.25	\$271	\$5.21

Rural, excluding GST	Average capital value	Increase in 2018/19	lncrease per week	Rates 2018/19	Rates per week
Wellington city	\$763,000	\$33	\$0.63	\$434	\$8.34
Hutt city	\$649,000	\$38	\$0.73	\$495	\$9.52
Upper Hutt city	\$682,000	\$40	\$0.77	\$444	\$8.54
Porirua city	\$1,005,000	\$42	\$0.81	\$562	\$10.81
Kāpiti Coast district	\$744,000	\$1	\$0.03	\$394	\$7.57
Masterton district	\$724,000	\$37	\$0.70	\$298	\$5.74
Carterton district	\$854,000	\$37	\$0.71	\$368	\$7.08
South Wairarapa district	\$955,000	\$49	\$0.95	\$406	\$7.81
Tararua district	\$1,076,000	\$39	\$0.75	\$263	\$5.06

Business, excluding GST	Average capital value	Increase in 2018/19	lncrease per week	Rates 2018/19	Rates per week
Wellington city	\$2,052,000	\$202	\$3.88	\$1,911	\$36.75
Wellington city - CBD	\$2,355,000	\$348	\$6.69	\$8,954	\$172.19
Hutt city	\$1,598,000	\$118	\$2.27	\$1,999	\$38.45
Upper Hutt city	\$1,641,000	\$90	\$1.74	\$1,940	\$37.31
Porirua city	\$1,380,000	\$64	\$1.23	\$1,536	\$29.54
Kāpiti Coast district	\$1,109,000	\$23	\$0.44	\$887	\$17.07
Masterton district	\$788,000	\$51	\$0.99	\$440	\$8.45
Carterton district	\$426,000	\$1	\$0.02	\$268	\$5.15
South Wairarapa district	\$679,000	\$34	\$0.65	\$446	\$8.58

These projected rates exclude the targeted rural pest and river management rates that are not charged to all ratepayers.

Rates calculator - Residential region-wide⁽¹⁾ rates

To calculate region-wide rates for all property types, use the calculator on our website <u>http://www.gw.govt.nz/regional-rates-calculator/</u>

Note: These calculations do not include Greater Wellington targeted rates that are specific to individual properties, and they do not include rates set by city or district councils. Greater Wellington rates are set and assessed by Greater Wellington but are invoiced and collected by the relevant city and district council within the region. This combined collection arrangement is cost effective and more convenient for ratepayers.

	2018/19 region-wide rates per \$100,000 of capital value		Enter the capital value of your property				Wellington regional strategy rate		Indicative rates on your property for 2018/19 ⁽¹⁾
Wellington city	\$78.73	×		÷	100,000	+	\$14.00	=	
Hutt city	\$112.86	×		÷	100,000	+	\$14.00	=	
Upper Hutt city	\$106.07	×		÷	100,000	+	\$14.00	=	
Porirua city	\$99.23	×		÷	100,000	+	\$14.00	=	
Kāpiti Coast district excl Ōtaki	\$69.24	×		÷	100,000	+	\$14.00	=	
Ōtaki rating area	\$66.25	×		÷	100,000	+	\$14.00	=	
Masterton district	\$44.24	×		÷	100,000	+	\$14.00	=	
Carterton district	\$51.29	×		÷	100,000	+	\$14.00	=	
South Wairarapa district	\$54.23	×		÷	100,000	+	\$14.00	=	
Hutt city example	\$112.86	×		÷	100,000	+	\$14.00	=	\$409.02
							includes GST @ 15%		\$470.37

(1) – Region-wide rates are charged to all ratepayers in the region. They exclude targeted rates for pest management, Wairarapa river and drainage schemes, and "Warm Greater Wellington", because those rates only apply to highly specific ratepayers in those work programmes.

Funding Impact Statement

Rating Mechanism

This section sets out how Greater Wellington will set its rates for 2018/19. It explains the basis on which each ratepayer's rating liability will be assessed.

Funding mechanism	Groups of activities funded	Valuation system	Matters for differentiation/ categories of land	Calculation factor
General rate	Regional leadership, Environment, Flood protection, parks	Capital value	All rateable land	Cents per dollar of rateable capital value
Targeted rate	S about each activity	within these Grou	ins of Activities refer to the activity cost	tion of this plan
		Canital value	Where the land is situated and the	Cents per dollar of rateable capital
		for business	use to which the land is put	value.
Wellington regional strategy	Regional leadership	n/a for residential	Where the land is situated and the use to which the land is put	Fixed dollar amount per rating unit
		n/a for rural	Where the land is situated and the use to which the land is put	Fixed dollar amount per rating unit
Warm Greater Wellington	Regional leadership	N/A	Provision of service to the land	Extent of service provided calculated as a percentage of the service
Public transport	Public transport	Capital value	Where the land is situated and the use to which the land is put	Cents per dollar of rateable capital value
Pest management	Environment	N/A	The use to which the land is put and the area of land within each rating unit	Dollars per hectare
River management	Flood Protection	Capital value/ land value	Where the land is situated.	Cents per dollar of rateable capital value / land value.
Wairarapa river management schemes	Flood Protection	N/A	Where the land is situated (in some cases set under section 146 of the Local Government (Rating) Act 2002 using approved classification and differential registers) and/or the benefits accruing through the provision of services and in some cases use	Dollars per hectare in the area protected, or dollars per point attributed to each rating unit and in some cases a fixed charge per separately used or inhabited part (dwelling) ⁽¹⁾
Wairarapa catchment schemes	Flood Protection	N/A	Where the land is situated (in some cases set under S146 of the Local Government (Rating) Act 2002 using approved classification and differential registers) and in some cases use and land value.	Dollars per hectare or cents per metre of river frontage in the area protected and in some cases a fixed charge per separately used or inhabited part (dwelling) and cents per dollar of rateable land value ⁽¹⁾
Wairarapa drainage schemes	Flood Protection	N/A	Where the land is situated (Set under S146 of the Local Government (Rating) Act 2002 using approved classification and differential registers).	Dollars per hectare in the area protected

(1) – "Separately used or inhabited part (dwelling)" includes any part of a rating unit separately used or inhabited by the owner or any other person who has the right to use or inhabit that part by virtue of a tenancy, lease, licence or other agreement. At a minimum, the land or premises intended to form the separately used or inhabited part of the rating unit must be capable of actual habitation or actual separate use. To avoid doubt, a rating unit that has only one use (i.e., it does not have separate parts or is vacant land) is treated as being one separately used or inhabited part (dwelling).

Differential on the general rate

There are no differentials on Greater Wellington's general rate.

Estimate of projected valuation

Greater Wellington uses an estimate of projected valuation under section 131 of the Local Government (Rating) Act 2002 to recognise that valuation dates vary across the region.

Uniform annual general charge

Greater Wellington Regional does not set a Uniform Annual General Charge.

Lump sum contributions

The Council will not invite lump sum contributions in respect of any targeted rates. Council has the discretion to accept lump sum contributions for Warm Wellington rates.

Rates categories

Each rating unit is allocated to a differential rating category based upon location and/or land use for the purpose of calculating general rates or targeted rates based upon capital or land value. As Greater Wellington rates are invoiced and collected by each of the territorial authorities in the Wellington region, Greater Wellington is limited to using rating categories based on those used by each of the territorial authorities. Set out below are the definitions used to allocate rating units into rating categories.

Location	Use	Description
	Regional CBD	All rating units classified as commercial, industrial and business properties within the downtown area boundary, currently shown on the Downtown Levy Area map of Wellington city, as may be amended from time to time by Wellington city See map on page 291 for Wellington city downtown city centre business area.
Wellington city	Wellington city business	All rating units classified as commercial, industrial and business properties in the rating information database for Wellington city outside the Downtown Levy Area map boundary
	Wellington city residential	All rating units classified as base (excluding rural and farm) in the rating information database for Wellington city
	Wellington city rural	All rating units sub-classified as rural or farm within the base category in the rating information database for Wellington city
	Lower Hutt city business	All rating units not classified as residential, rural or community facilities in the rating information database for Lower Hutt city
Hutt city	Lower Hutt city residential	All rating units classified as residential or community facilities in the rating information database for Lower Hutt city
	Lower Hutt city rural	All rating units classified as rural in the rating information database for Lower Hutt city
	Porirua city business	All rating units classified as business in the rating information database for Porirua city
Porirua city	Porirua city residential	All rating units classified as residential in the rating information database for Porirua city
	Porirua city rural	All rating units classified as rural in the rating information database for Porirua city
	Upper Hutt city business	All rating units classified as business or utilities in the rating information database for Upper Hutt city
Upper Hutt city	Upper Hutt city residential	All rating units not classified as rural, business or utilities in the rating information database for Upper Hutt city
	Upper Hutt city rural	All rating units classified as rural in the rating information database for Upper Hutt city
	Kāpiti Coast district business	All rating units used for a commercial, business, industrial purpose or utility network activity in the Kāpiti Coast district rating information database
Kāpiti Coast district	Kāpiti Coast district residential	All rating units located in the urban rating areas except those properties which meet the classification of rural, commercial, business, industrial purpose or utility network activity and all community activities in the Kāpiti Coast district rating information database
	Kāpiti Coast district rural	All rating units classified in the rural rating areas for the Kāpiti Coast district

Category 1 – R	ates based	on capital	or land value
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Location	Use	Description
	Masterton district business	All rating units classified as non-residential urban in the Masterton district rating information database
Masterton district	Masterton district residential	All rating units classified as urban residential in the Masterton district rating information database
	Masterton district rural	All rating units classified as rural in the rating information database for the Masterton district
	Carterton district business	All rating units classified as urban commercial, urban industrial or urban smallholding – greater than one hectare in the Carterton district rating information database
Carterton district	Carterton district residential	All rating units classified as urban residential in the Carterton district rating information database
	Carterton district rural	All rating units classified as rural in the rating information database for the Carterton district
	South Wairarapa district business	All rating units classified as commercial in the South Wairarapa district rating information database
	South Wairarapa district residential	All rating units classified as urban in the South Wairarapa district rating information database
South	South Wairarapa district rural	All rating units classified as rural in the rating information database for the South Wairarapa district
Wairarapa district	Greytown ward	All rating units classified in the rating area of the Greytown ward in the rating information database for the South Wairarapa district
	Greytown urban	All rating units classified in the urban area of Greytown in the rating information database for the South Wairarapa district. (Prefaced Nos 18400 and 18420)
	Featherston urban	All rating units classified in the urban area of Featherston in the rating information database for the South Wairarapa district. (Prefaced Nos 18440 and 18450)
Tararua district		All rating units within the Tararua district area are classified as being within the boundaries of the Wellington region

Category 2 – Public transport rate

Public transport is funded from a targeted rate, based on property value, with differentials based on where the land is situated and the use to which the land is put. The table below shows the rates differentials to be applied in 2018/19 under the first year of the transition provisions in the Revenue and Financing policy.

Location	Use	Description	Differential on the value for 2018/19
	Regional CBD	As in Category 1 above	6.79
Wellington	Wellington city business	As in Category 1 above	0.78
city	Wellington city residential	As in Category 1 above	0.72
	Wellington city rural	As in Category 1 above	0.18
	Lower Hutt city business	As in Category 1 above	1.42
Lower Hutt city	Lower Hutt city residential	As in Category 1 above	1.35
	Lower Hutt city rural	As in Category 1 above	0.34
	Porirua city business	As in Category 1 above	1.61
Porirua city	Porirua city residential	As in Category 1 above	1.54
	Porirua city rural	As in Category 1 above	0.39
	Upper Hutt city business	As in Category 1 above	1.56
Upper Hutt city	Upper Hutt city residential	As in Category 1 above	1.50
	Upper Hutt city rural	As in Category 1 above	0.38
Kāpiti Coast district	Kāpiti Coast district business	All rating units used for a commercial, business, industrial purpose or utility network activity in the Kāpiti Coast district rating information database	0.82
	Kāpiti Coast district residential excl Ōtaki	All rating units located in the urban rating areas except those properties which meet the classification of rural, commercial, business, industrial purpose or utility network activity and all community activities, and all residential rating unit in the Ōtaki rating area in the Kāpiti Coast district rating information database	0.75
	Ōtaki rating area residential	All residential rating unit in the Ōtaki rating area in the Kāpiti Coast district rating information database	0.67
	Kāpiti Coast district rural	All rating units located in rural rating areas except those properties that meet the classification of commercial, business, industrial purpose, utility network or community activity in the Kāpiti Coast district rating information database	0.19
Masterton district	Masterton district business	All rating units classified as non-residential urban in the Masterton district rating information database	0.37
	Masterton district residential	All rating units classified as urban residential in the Masterton district rating information database	0.29
	Masterton district rural	As in Category 1 above	0.10

Location	Use	Description	Differential on the value for 2018/19
Carterton district	Carterton district business	All rating units classified as urban commercial, urban industrial or urban smallholding – greater than one hectare in the Carterton district rating information database	0.54
	Carterton district residential All rating units classified as urban residential in the Carterton district rating information database		0.46
	Carterton district rural	As in Category 1 above	0.14
South Wairarapa district	South Wairarapa district business	All rating units classified as commercial in the South Wairarapa district rating information database	0.66
	South Wairarapa district residential	All rating units classified as urban in the South Wairarapa district rating information database	0.58
	South Wairarapa district rural	As in Category 1 above	0.17

Category 3 – Targeted rates based on land area, provision of service, land use or location

Some targeted rates (either in whole or part) are allocated to differential rating categories (based on the area of land, provision of service, the use to which the land is put, or the location of the land) for the purpose of calculating pest management rates, catchment scheme rates, drainage scheme rates and river management scheme rates.

Some schemes have an additional fixed charge per separate use or inhabited part.

Rating units subject to river management scheme rates are shown within an approved classification register for each scheme. For more information on whether your rating unit is allocated to one or more of these categories, please contact Greater Wellington's Masterton office.

All rural rating units of four or more hectares are subject to the Pest management rate.

Location	Use	Description
Wellington city	Wellington city rural	All rating units that are four hectares or more sub-classified as rural or farm within the base category in the rating information database for Wellington city
Hutt city	Hutt city rural	All rating units that are four hectares or more sub-classified as rural or farm within the base category in the rating information database for Lower Hutt city
Porirua city	Porirua city rural	All rating units that are four hectares or more sub-classified as rural or farm within the base category in the rating information database for Porirua city
Upper Hutt city	Upper Hutt city rural	All rating units that are four hectares or more sub-classified as rural or farm within the base category in the rating information database for Upper Hutt city
Kāpiti Coast district	Kāpiti Coast district rural	All rating units that are four hectares or more sub-classified as rural or farm within the base category in the rating information database for the Kāpiti Coast district
Masterton district	Masterton district rural	All rating units that are four hectares or more sub-classified as rural or farm within the base category in the rating information database for the Masterton district
Carterton district	Carterton district rural	All rating units that are four hectares or more sub-classified as rural or farm within the base category in the rating information database for the Carterton district
South Wairarapa district	South Wairarapa district rural	All rating units that are four hectares or more sub-classified as rural or farm within the base category in the rating information database for the South Wairarapa district
Tararua district	Tararua district rural	All rating units within the Tararua district area that are classified as being within the boundaries of the Wellington region, that are four hectares or more sub-classified as rural or farm within the base category in the rating information database of the Tararua district.

Category 4 – Flood protection – property rate for the Lower Wairarapa Valley Development Scheme

The Lower Wairarapa Valley Development Scheme is a targeted rate allocated according to extent of services received (as measured in a points system) and in some cases an additional fixed charge per separately used or inhabited part.

Rating units subject to this rate are shown within an approved classification register for each scheme. For more information on whether your rating unit is located in this area and for the points allocated to your property, please contact Greater Wellington's Masterton office.

Category 5 – Warm Greater Wellington rate

The Warm Greater Wellington rate is a targeted rate set on properties that have benefited from the installation of insulation provided by Greater Wellington in respect of the property. The rate is calculated as a percentage of the service amount until the service amount and the costs of servicing the service amount are recovered.

In the final year of payment, the rate may be the actual balance rather than a percentage of the service amount.

Category 6 – Wellington Regional Strategy rate

The Wellington Regional Strategy rate is a targeted rate allocated on a fixed-amount basis for residential and rural ratepayers, and capital value for businesses. For residential properties the fixed amount per rating unit is \$14 plus GST and rural properties \$28 plus GST. This rate funds the Wellington Regional Strategy activities including funding for WREDA, the region's economic development agency.

Location	Use	Description
	Wellington city downtown city centre business	As per differential category 1
Wellington city	Wellington city business	As per differential category 1
5	Wellington city residential	As per differential category 1
	Wellington city rural	As per differential category 1
	Lower Hutt city business	As per differential category 1
Lower Hutt city	Lower Hutt city residential	As per differential category 1
	Lower Hutt city rural	As per differential category 1
	Porirua city business	As per differential category 1
Porirua city	Porirua city residential	As per differential category 1
	Porirua city rural	As per differential category 1
	Upper Hutt city business	As per differential category 1
Upper Hutt city	Upper Hutt city residential	As per differential category 1
	Upper Hutt city rural	As per differential category 1
	Kāpiti Coast district business	As per differential category 1
Kāpiti Coast district	Kāpiti Coast district residential	As per differential category 1
	Kāpiti Coast district rural	As per differential category 1
	Masterton district business	As per differential category 1
Masterton district	Masterton district residential	As per differential category 1
	Masterton district rural	As per differential category 1
	Carterton district business	As per differential category 1
Carterton district	Carterton district residential	As per differential category 1
	Carterton district rural	As per differential category 1
	South Wairarapa district business	As per differential category 1
South Wairarapa district	South Wairarapa district residential	As per differential category 1
	South Wairarapa district rural	As per differential category 1
Tararua district		As per differential category 1

Rates Funding Impact Statements

General rate	2018/19 Cents per \$ of rateable capital value	2018/19 Revenue required \$
Wellington city	0.04433	23,048,092
Hutt city	0.03765	8,059,093
Upper Hutt city	0.03752	3,064,993
Porirua city	0.03716	3,819,283
Kāpiti Coast district	0.03321	4,904,933
Masterton district	0.03367	1,968,728
Carterton district	0.03380	907,437
South Wairarapa district	0.03346	1,508,401
Tararua district	0.02187	2,353
Total general rate		47,283,314

Targeted rate River management rate based on capital value	2018/19 Cents per \$ of rateable capital value	2018/19 Revenue required \$
Wellington city	0.00008	42,679
Hutt city	0.02036	4,356,562
Upper Hutt city	0.00817	667,062
Porirua city	0.00033	33,588
Kāpiti Coast district	0.00904	1,335,375
Carterton district	0.00088	23,705
Total district-wide river management rate		6,458,971
Greytown ward	0.01252	92,549
Total river management rates based upon capita	l value	6,551,520

Targeted rate River management	2018/19 Cents per \$ of rateable capital value	2018/19 Revenue required \$
Featherston urban: Donalds Creek Stopbank	0.00161	2,615
Total river management rates based upon land value		2,615
Total river management rates		6,554,135

Targeted rate Warm Greater Wellington Based on extent of service provided	2018/19 Cents per \$ of rateable capital value	2018/19 Revenue required \$
For any ratepayer that utilises the service	15.000%	3,237,058

Targeted rate Public transport rate	2018/19 Cents per \$ of rateable capital value	2018/19 Revenue required \$
Wellington city		
Regional CRD	0 32454	25 844 164
Rusiness	0.03750	1 461 181
Residential	0.03432	13.567.288
Rural	0.00876	52,199
Hutt city		
Business	0.05756	2,181,033
Residential	0.05485	9,490,731
Rural	0.01395	43,450
Upper Hutt city		
Business	0.06194	742,079
Residential	0.06055	3,723,761
Rural	0.01537	131,467
Porirua city		
Business	0.06441	708,507
Residential	0.06174	5,279,333
Rural	0.01570	98,242
Kāpiti Coast district		
Business	0.02938	434,530
Residential excl Otaki	0.02699	2,758,230
Residential Otaki rating area	0.02400	265,176
Rural	0.00693	136,275
Masterton district		
Business	0.01359	58,905
Residential	0.01057	275,145
Rural	0.00368	103,344
Carterton district		
Business	0.01965	18,993
Residential	0.01661	140,193
Rural	0.00516	89,953
South Wairarapa district		
Business	0.02377	49,092
Residential	0.02077	273,878
Rural	0.00612	182,531
Total public transport rate		68,109,678
All figures on this page exclude GST.		

Greater Wellington Regional Council Long Term Plan 2018-28

Targeted rate Wellington regional strategy rate	\$ per rating unit	2018/19 Cents per \$ of rateable capital value	2018/19 Revenue required \$
Wellington city			
Regional CBD		0.01123	893,931
Business		0.01123	437,362
Residential – per rating unit	\$14.00		998,312
Rural – per rating unit	\$28.00		21,868
Hutt city			
Business		0.00954	361,297
Residential – per rating unit	\$14.00		508,354
Rural – per rating unit	\$28.00		13,440
Upper Hutt city			
Business		0.00948	111,371
Residential – per rating unit	\$14.00		206,920
Rural – per rating unit	\$28.00		32,816
Porirua city			
Business		0.00941	103,518
Residential – per rating unit	\$14.00		241,570
Rural – per rating unit	\$28.00		17,444
Kāpiti Coast district			
Business		0.00841	124,386
Residential – per rating unit	\$14.00		291,536
Rural – per rating unit	\$28.00		69,608
Masterton district			
Business		0.00853	36,954
Residential – per rating unit	\$14.00		110,558
Rural – per rating unit	\$28.00		96,376
Carterton district			
Business		0.00856	8,272
Residential – per rating unit	\$14.00		32,970
Rural – per rating unit	\$28.00		48,972
South Wairarapa district			
Business		0.00847	17,498
Residential – per rating unit	\$14.00		44,240
Rural – per rating unit	\$28.00		78,036
Tararua district – per rating unit	\$28.00		252
Total Wellington regional strategy rate			4,907,861

Targeted rate River management schemes 1		2018/19 \$ per hectare	2018/19 Revenue required \$
Waingawa	А	146.80987	4,980
	В	95.42642	12,424
	С	73.40494	8,381
	D	66.06444	154
	E	58.72395	9,854
	F	51.38346	1,334
	G	22.02148	1,030
	Н	14.68099	2,478
			40,635
Upper Ruamahanga	А	132.77572	11,820
	В	110.64644	730
	С	88.51715	11,044
	D	66.38786	1,169
	Е	44.25857	13,131
	F	22.12929	872
	S	1,246.77486	3,242
			42,007
Middle Ruamahanga	А	130.96220	5,283
	В	109.13517	5,957
	С	87.30814	446
	D	65.48110	7,413
	E	43.65407	1,316
	F	21.82703	6,453
	S	1,320.72904	2,774
			29,642
Lower Ruamahanga	А	63.01058	7,906
	В	54.00907	2,907
	С	45.00756	10,081
	D	36.00605	11,468
	E	27.00454	8,737
	F	18.00302	22,041
	SA	1,579.97137	4,108
	SB	789.98579	1,343
			68,591

Targeted rate River management schemes 1		2018/19 \$ per hectare	2018/19 Revenue required \$
Waiohine Rural	А	45.78519	5,150
	В	38.15433	14,614
	С	30.52346	39,001
	D	22.89260	8,505
	E	15.26173	12,230
	S	763.08656	13,049
			92,549
Mangatarere	А	34.61408	743
	В	33.10912	6,938
	С	28.05675	442
	D	24.83184	1,784
			9,907
Waipoua	А	111.47840	9,754
	В	89.18272	26,784
	С	66.88704	1,502
	D	44.59136	13,254
	SA	3,767.96976	377
	SC	2,251.86358	225
			51,896
Targeted rate River management schemes 1		2018/19 \$ per hectare	2018/19 Revenue required \$
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Kopuaranga	A2	122.71450	3,197
	A3	110.54410	7,617
	A4	61.45830	694
	A5	42.95090	2,479
	A6	24.54390	1,991
	B2	24.54390	1,504
	В3	22.08960	1,622
	B4	12.27250	114
	B5	8.59100	267
	B6	4.90940	590
	SA	153.57000	768
	SB	76.79000	1,075
			21,919
Lower Taueru	А	4.05877	1,654
	В	0.81175	229
	С	0.40588	72
	S	202.93843	308
			2,263
Lower Whangaehu	А	21.62307	722
	В	17.29846	1,126
	С	12.97384	706
	D	8.64923	662
	E	4.32461	754
	S	108.11535	145
			4,114
Total river management scheme rates 1			363,523

Targeted rate River management schemes 2		2018/19 \$ per dwelling ⁽¹⁾	2018/19 \$ per point	2018/19 Revenue required \$
Lower Wairarapa valley Development Scheme	А		0.23419	676,524
	Sa	18.80247		7,841
	Sb	37.61930		85,095
Total river management scheme rates 2				769,460
Total river management scheme rates				1,132,982

(1) – "Separately used or inhabited part" (dwelling) includes any part of a rating unit separately used or inhabited by the owner or any other person who has the right to use or inhabit that part by virtue of a tenancy, lease, licence or other agreement. At a minimum, the land or premises intended to form the separately used or inhabited part of the rating unit must be capable of actual habitation, or actual separate use. To avoid doubt, a rating unit that has only one use (ie, it does not have separate parts or is vacant land) is treated as being one separately used or inhabited part (dwelling).

Targeted rate Catchment schemes 1		2018/19 \$ per hectare	2018/19 Revenue required \$
Whareama	А	4.45921	3,190
	В	1.71893	1,637
	С	0.30085	13,711
	D	0.25781	0
	E	0.21488	3
	F	0.17184	474
			19,016
Homewood	А	1.97000	4,521
	В	1.71061	945
	С	1.55980	5,713
	D	0.22300	388
			11,566
Maungaraki	А	0.99000	3,272
	В	0.49000	1,456
			4,728
Upper Kaiwhata	А	9.80000	320
	В	4.20000	221
	С	0.62000	594
	D	0.39000	801
	E	0.27000	443
	F	0.14500	66
			2,444
Lower Kaiwhata	А	16.19000	744
	В	7.10000	315
	С	1.01901	1,181
	D	0.63858	1,890
	E	0.00000	0
	F	0.21183	74
			4,203
Catchment management scheme 1 rates			41,958

Targeted rate Catchment schemes 2		2018/19 Cents per \$ of rateable land value	2018/19 Revenue required \$
Awhea-Opouawe	Land value	0.00016	10,523
Mataikona-Whakataki	Land value within scheme area	0.00005	3,885
Catchment management scheme 2 rates			14,408

Targeted rate Catchment schemes 3		2018/19 \$ per dwelling ⁽¹⁾	2018/19 Revenue required \$
Awhea-Opouawe	Charge per dwelling	\$114.54 / \$57.27	11,821
Maungaraki	Charge per dwelling	\$22.18	421
Mataikona-Whakataki	Charge per dwelling	\$15.30	2,668
Catchment management scheme 3 rates			14,910

Catchment management scheme 3 rates

Targeted rate Catchment schemes 4		2018/19 Cents per metre of river frontage	2018/19 Revenue required \$
Maungaraki	River frontage	0.03540	1,686
Catchment management scheme 4 rates			1,686
Total catchment management scheme rates			72,962

(1) - "Separately used or inhabited part" (dwelling) includes any part of a rating unit separately used or inhabited by the owner or any other person who has the right to use or inhabit that part by virtue of a tenancy, lease, licence or other agreement. At a minimum, the land or premises intended to form the separately used or inhabited part of the rating unit must be capable of actual habitation, or actual separate use. To avoid doubt, a rating unit that has only one use (ie, it does not have separate parts or is vacant land) is treated as being one separately used or inhabited part (dwelling).

Targeted rate Pump drainage schemes		2018/19 \$ per hectare	2018/19 Revenue required \$
Те Нораі	А	44.28010	55,200
Moonmoot pump	А	130.42170	29,700
Onoke pump	А	72.51170	51,732
Pouawha pump	А	109.39220	103,430
Total pump drainage scheme rates			240,063

Targeted rate Pest management	2018/19 \$ per hectare	2018/19 Revenue required \$
Land area of 4 or more hectares in all rural classified areas	0.86682	532,000
Total pest management rate		532,000

Targeted rate Gravity drainage schemes		2018/19 \$ per hectare	2018/19 Revenue required \$
Okawa	А	7.00710	1,976
Taumata	А	6.31190	1,834
East Pukio	А	27.74030	3,150
Longbush	А	15.75450	3,437
Longbush	В	7.87730	990
Otahoua	А	32.35740	3,000
Te Whiti	А	9.54170	1,348
Ahikouka	А	27.16640	3,048
Battersea	А	15.03730	2,537
Battersea	В	12.42580	2,428
Battersea	С	9.72450	3,093
Battersea	D	5.87920	898
Battersea	E	5.02800	1,020
Battersea	F	5.06900	357
Manaia	А	22.75280	3,969
Whakawiriwiri	А	11.47640	8,273
Total gravity drainage scheme rates			41,357

Wellington City Downtown Levy Area Map

For the purposes of the Wellington City Downtown City Centre Business targeted transport rate, the downtown area refers to the area described by the following Wellington City Downtown Levy Area Map as amended by Wellington City Council from time to time.



Long-term plan disclosure statement for period commencing 1 July 2018

What is the purpose of this statement?

The purpose of this statement is to disclose the council's planned financial performance in relation to various benchmarks to enable the assessment of whether the council is prudently managing its revenues, expenses, assets, liabilities, and general financial dealings.

The council is required to include this statement in its long-term plan in accordance with the <u>Local Government</u> (Financial Reporting and Prudence) Regulations 2014 (the regulations).

The following graphs need to be read collectively and in conjunction with the attached financial statements. Individually these graphs show a particular view on one aspect of the financial health and management of the Council. So it is important to keep in mind the overall strategy and policies the council has also adopted when reading these graphs.

Rates (increases) affordability

The Council adopted an average increase of 5.0% per annum (around \$30, GST inclusive, per year for the average residential ratepayer) over the term of the Long Term Plan as it continues to significantly invest in improving the public transport network, develop an alternate water supply and the on-going flood protection programme. In the next five years the increases are ahead of the average as the major capital projects are undertaken. After this period the increases are expected to be less as the capital programme is not as extensive.

Putting the increase in 2018/19 in context of the average, the average increase in 2018/19 is \$33 (GST inclusive) per annum compared to \$30 (GST inclusive) per year average increase over the life of the plan.



Over the life the long term plan Greater Wellington is well within this benchmark.

Rates income affordability

This graph shows the total rates planned for the Long Term Plan comparted to the overall rates limit adopted by council. The limit adopted is the estimated rates requirement in year 2028 at 45 percent of total that years' operating expenditure



Over the life the long term plan Greater Wellington is well within this benchmark.

Balanced Budget

This graph shows whether the Council is planning to receiving revenue greater or less than its operational expenditure, i.e. whether the Council will be raising adequate revenue to meet its on-going operational costs including depreciation and other non-cash adjustments.



Over the life the long term plan Greater Wellington is well within this benchmark.

Greater Wellington plan to receive significant funding from Crown for new public transport assets. This graph eliminates that funding from operating revenue to provide an alternate view of this graph. This shows several years where operating expenditure exceed operating income. Please refer to the Financial Strategy.



Debt Servicing Benchmark

This graph shows the percentage of borrowing costs to revenue. A higher percentage indicates that there is more exposed to shifts in interest rates. The benchmark prudential limit is set by central government at 10% for non-high population growth regions.

Over the life the long term plan Greater Wellington is well within this benchmark and the local government funding agency sets the benchmark of net interest at 20% of total revenue, which is still considered prudent by this institution.



The council also adopt three measures of debt affordability in line with the LGFA limits on prudential lending to councils.

Debt affordability graphs - Debt Servicing

Percentage of borrowing costs to rates and levies. A higher percentage indicates that there is more exposure to shifts in interest rates. Over the life the long term plan Greater Wellington is well within this benchmark.



Debt affordability graphs - Debt balance

This graph shows the planned debt compared to the debt limit adopted in this LTP. The debt is projected to peak at \$763 million in 2024/25 as the full impact of the investment in upgrading the public transport network, the substantial flood protection work in the Hutt valley and the significant bulk water resilience projects are completed.



Over the life the long term plan Greater Wellington is within this benchmark.

Debt affordability graphs - Net debt to total revenue

This graph shows the proposed net debt as a percentage of total revenue. The net debt position provides a more accurate picture of the councils overall proposed debt position. Further offsetting net debt is our equity investments which return dividends to council.



Over the life the long term plan Greater Wellington is within this benchmark.

Essential Services – Flood protection and Water

This graph compares actual capital renewal expenditure with depreciation. The general concept is that over time capital expenditure will be similar to depreciation indicating that assets are being replaced in an appropriate and timely manner.

Over the Long Term Plan period we are not meeting this benchmark. With very long life assets such as pipelines this is not unexpected due to the extremely long replacement cycles. Assets like stop banks for flood protection are not expected to be renewed unless damaged by floods so do not have a renewal expectation. Over the long term there will be periods of significant replacement that counters the short term outlook of this particular benchmark.



Section 8

Audit Report Pūrongo Arotake

Independent auditor's report on Greater Wellington Regional Council's 2018-28 Long-Term Plan

I am the Auditor-General's appointed auditor for Greater Wellington Regional Council (the Council). Section 94 of the Local Government Act 2002 (the Act) requires an audit report on the Council's Long-term plan (the plan). Section 259C of the Act requires a report on disclosures made under certain regulations. We have carried out this work using the staff and resources of Audit New Zealand. We completed our report on 26 June 2018.

Opinion

In my opinion:

- The plan provides a reasonable basis for:
 - Long-term, integrated decision-making and coordination of the Council's resources
 - Accountability of the Council to the community
- The information and assumptions underlying the forecast information in the plan are reasonable\
- The disclosures on pages 309 to 315 represent a complete list of the disclosures required by Part 2 of the Local Government (Financial Reporting and Prudence) Regulations 2014 (the Regulations) and accurately reflect the information drawn from the plan

This opinion does not provide assurance that the forecasts in the plan will be achieved, because events do not always occur as expected and variations may be material. Nor does it guarantee the accuracy of the information in the plan.

Basis of opinion

We carried out our work in accordance with the International Standard on Assurance Engagements (New Zealand) 3000 (Revised): Assurance Engagements Other Than Audits or Reviews of Historical Financial Information. In meeting the requirements of this standard, we took into account particular elements of the Auditor-General's uditing Standards and the International Standard on Assurance Engagements 3400: The Examination of Prospective Financial Information that were consistent with those requirements. We assessed the evidence the Council has to support the information and disclosures in the plan and the application of its policies and strategies to the forecast information in the plan. To select appropriate procedures, we assessed the risk of material misstatement and the Council's systems and processes applying to the preparation of the plan.

Our procedures included assessing whether:

- The Council's financial strategy, and the associated financial policies, support prudent financial management by the Council
- The Council's infrastructure strategy identifies the significant infrastructure issues that the Council is likely to face during the next 30 years
- The information in the plan is based on materially complete and reliable information
- The Council's key plans and policies are reflected consistently and appropriately in the development of the forecast information
- The assumptions set out in the plan are based on the best information currently available to the Council and provide a reasonable and supportable basis for the preparation of the forecast information
- The forecast financial information has been properly prepared on the basis of the underlying information and the assumptions adopted, and complies with generally accepted accounting practice in New Zealand
- The rationale for the Council's activities is clearly presented and agreed levels of service are reflected throughout the plan
- The levels of service and performance measures are reasonable estimates and reflect the main aspects of the Council's intended service delivery and performance; and
- The relationship between the levels of service, performance measures, and forecast financial information has been adequately explained in the plan

We did not evaluate the security and controls over the electronic publication of the plan.

Responsibilities of the Council and auditor

The Council is responsible for:

- Meeting all legal requirements affecting its procedures, decisions, consultation, disclosures, and other actions relating to the preparation of the plan
- Presenting forecast financial information in accordance with generally accepted accounting practice in New Zealand
- Having systems and processes in place to enable the preparation of a plan that is free from material misstatement

I am responsible for expressing an independent opinion on the plan and the disclosures required by the Regulations, as required by sections 94 and 259C of the Act. I do not express an opinion on the merits of the plan's policy content.

Independence

In carrying out our work, we complied with the Auditor-General's:

- Independence and other ethical requirements, which incorporate the independence and ethical requirements of Professional and Ethical Standard 1 (Revised)
- Quality control requirements, which incorporate the quality control requirements of Professional and Ethical Standard 3 (Amended)

In addition to this report on the Council's Long-term plan and all legally required external audits, we have provided an assurance report on certain matters in respect of the Council's Debenture Trust Deed and been engaged to undertake assurance over aspects of the procurement of an Integrated Fares and Ticketing System. These assignments are compatible with those independence requirements. Other than these assignments, we have no relationship with or interests in the Council or any of its subsidiaries.

Andy Burns, Audit New Zealand

On behalf of the Auditor-General, Wellington, New Zealand

Section 9

Your Regional Councillors Ngā kaikaunihera ā Rōhe

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