Asset Management

Strategic Asset Management Plan

2023 Update

PALMY

PAPAIOEA
PALMERSTON
NORTH
CITY

This document was prepared by Palmerston North City Council, Asset Management Planning Division.

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Executive Summary

Manaaki whenua, manaaki tangata, haere whakamua.

Tihei mauri ora!

No reira, e te haukainga Rangitāne, nei rā te mihi nui ki a koutou e pupuri nei i te mauri o te whenua me ngā wai e rere atu e rere mai.

Tēnā koutou, tēnā koutou, tēnā tātou katoa.

Why Is Asset Management Important?

We manage a wide range of assets on behalf of our community.

These assets are essential to the delivery of services that support the social, economic, environmental and cultural wellbeing of our community. Our community expect us to extract the maximum value out of our assets for the lowest possible cost from the time the asset is created to the end of the asset's life. This approach forms the basis of our Asset Management (AM) practice.

What is the purpose of the Strategic Asset Management Plan?

The Strategic Asset Management Plan (SAMP) describes how we plan to manage and make decisions about our assets in a way that achieves the Council's strategic direction for the city.

Every asset based service we deliver to our community contributes to achieving the Vision, Goals and Strategies that form the strategic direction our Councillors have set for the city. The SAMP sets out our plan to manage our assets in a way that achieves our strategic direction for the city. Our strategic direction is as follows:

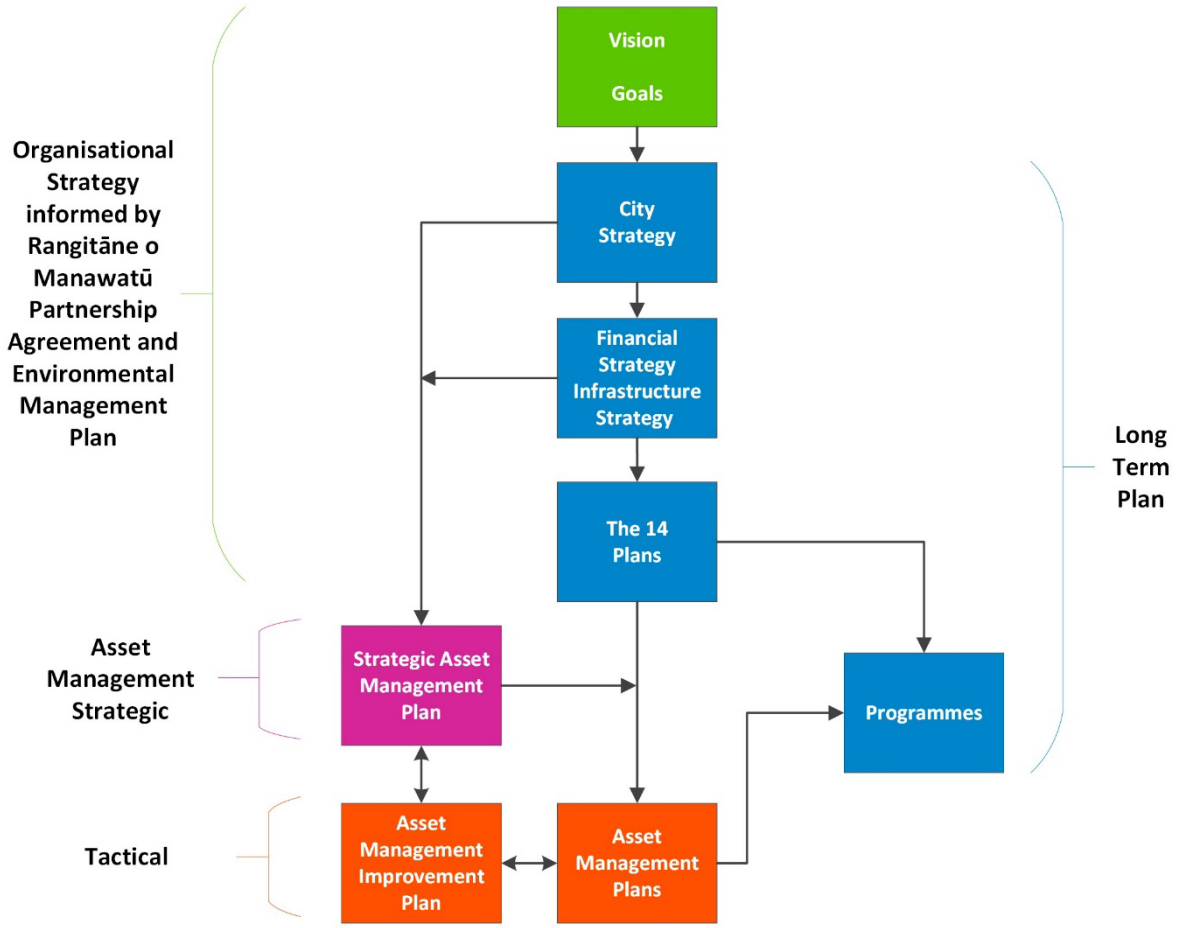
Our vision: Small City Benefits, Big City Ambition.

Goals:

1. An innovative and growing city
2. A creative and exciting city
3. A connected and safe community
4. A sustainable and resilient city

Our Strategic Documents:

- Rangitāne O Manawatū Partenrship Agreement
- Oranga Papaioea City Strategy
- Infrastructure Strategy
- Financial Strategy



Our Big Picture Demands and Drivers

When we understand what is driving change we can better plan for the future. Some of the big picture demands and drivers that may impact on how we plan for the service our assets deliver to our community are:

Big Picture Issues	Impact on Asset Management Planning
Council Strategy Our Oranga Papaioea City Strategy sets out our priorities to achieve our vision and goals	**What we will do** Good asset management practice will ensure every asset and service that we deliver to our community will contribute to achieving our vision and goals.
Iwi Partnerships Rangitāne o Manawatū are acknowledged as having a significant and special relationship with the Council	**What we will do** Our infrastructure will enable us to provide levels of service that are

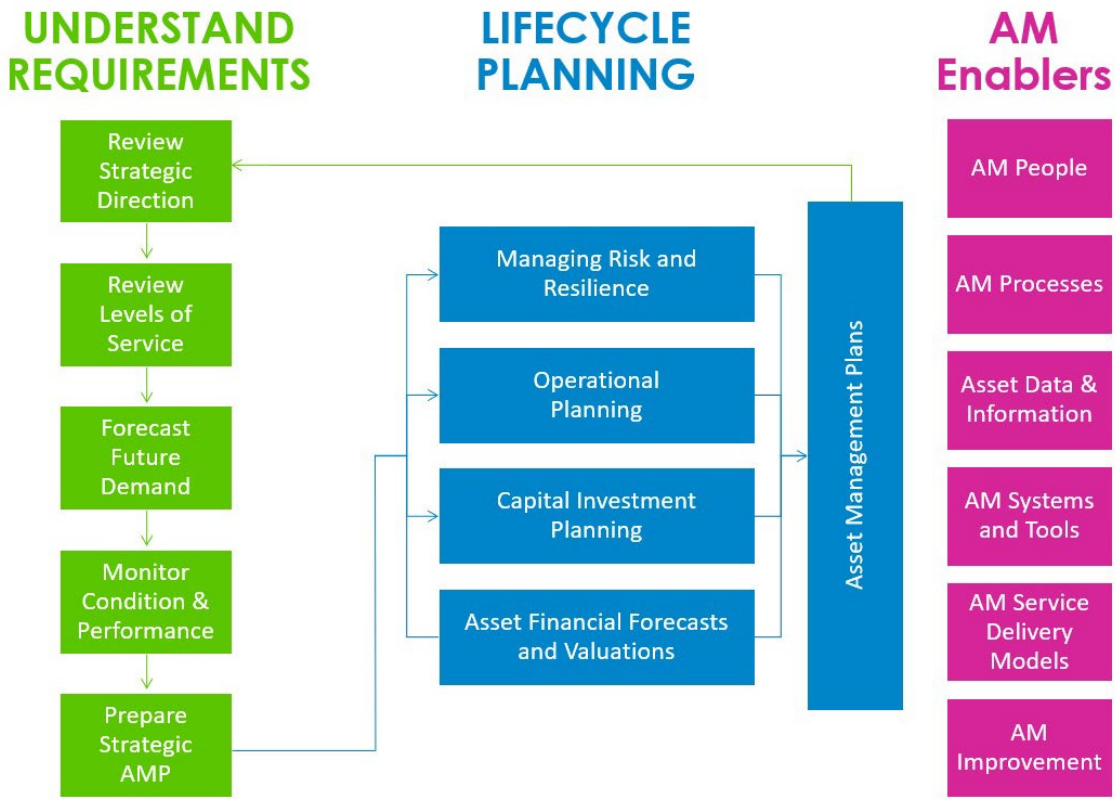
Big Picture Issues	Impact on Asset Management Planning
by virtue of them being Tangata Whenua.	considerate of the aspirations of iwi and our commitment to them.
Growth The city will have strong economic growth for the next fifteen years. The city is the major economic hub for the region for education, research, health services, retailing, defence, government administration, agribusiness and logistics. The city's population is growing. By 2054 we will have 22,880 more people living here and will need an additional 9,884[1] houses here. There will be more greenfield development in the North, East and West of the City. Based on previous trends, housing density will increase with new infill housing developing throughout the city. The City is poised for industrial growth with plans for a Kiwi Rail Regional freight hub and a growing industrial sector. The North East Industrial Zone provides the City with development options for large industrial businesses.	**What we will do** Our infrastructure will position the City as a competitive option for business and enables economic growth opportunities. New infrastructure will be in place to support housing development in greenfield areas. Our existing infrastructure will have enough capacity to support infill development. New infrastructure will be in place to support industrial growth in new areas, providing businesses with "spade ready land" and essential services when needed.
Legislative Change Central Government has extensive programme that will impact on how our infrastructure is delivered	**What we will do** All our statutory obligations for quantity and quality of service will be considered in asset management planning.
Sustainability & Climate Change Climate change is a significant environmental challenge. In the future the city's climate will be different from now and will require changes to infrastructure assets.	**What we will do** We will consider climate change as part of our asset management planning. This includes adapting to the effects of climate change, as well as addressing its causes by considering greenhouse

[1] Including NPSUD margins

Big Picture Issues	Impact on Asset Management Planning
	gas emissions and waste across the whole asset life cycle of an asset.
Technology Advances Technology is rapidly changing the way infrastructure is built and operated.	**What we will do** We will assess whether new technology advances our Asset Management Planning practices and/or levels of services.
Liveability Infrastructure can contribute to the liveability of a place by being planned with people's wellbeing in mind.	**What we will do** We will consider our Asset Management Planning processes and how we can integrate urban design principles our practices.
Resilience Our infrastructure is vulnerable to many kinds of risks, such as natural hazards and unforeseen failure.	**What we will do** In our Asset Management Planning we will review risks and plan for resilience to them.

Our Asset Management System

The elements of our asset management system are based on the New Zealand National Asset Management Support's International Infrastructure Management Manual (IIMM). The IIMM provides us with a way to assess the maturity of our asset management system.



In 2019 our asset management maturity assessment placed us at 'Core', with a score of 51. Our 2022 our maturity was assessed as the top of 'Core' with a score of 60. A nine point improvement over that time period is significant, but we still have improvements to make in the way we manage our assets.

Our asset management system is currently based on an approach that relies on documented processes and a mix of planned and reactive management. We utilise visual and interrogative inspections for asset performance monitoring, complaint and fault management, and regular condition-based assessments. This approach aligns with the assessment of our system as 'Core'.

Given the size of our organisation, the complexity of our assets and the level of risk we manage our recommended AM maturity level should be high 'Intermediate', a score of 80. We are increasing our overall organisational maturity to include the assessment of assets and their respective services based on risk and criticality frameworks. This approach is already being undertaken with some of Council's asset portfolios and will be expanded to other asset portfolios over this next planning period.

The asset management system elements with the greatest room for improvement and our response are:

Asset Management Processes

If we follow formalised processes for asset management we can improve effectiveness and efficiency, increase customer satisfaction and better manage risks associated with our assets. We do not have a robust suite of AM policies, processes or procedures being used by our staff. We have relied heavily on experienced staff in the past. Because we have little AM process documentation, we have been vulnerable when experienced staff and institutional knowledge has left the Council.

Although we have started mapping our processes in webbased software we still have work to do. Our focus will be on progressing the mapping of all our asset management processes, particularly those that relate to data quality. We also plan to further develop our AM Policy and investigate a quality system to track the documents that relate to our AM System.

Managing Risk and Resilience

Understanding our risk profile will enable us to better prioritise inspections, condition assessments and renewals in order to maintain our assets within a tolerable risk level. Risk Management has improved since 2020, but is still one of the weakest areas of our asset management practice. Our Risk Policy and Risk Management Framework now clearly set out the basis for managing risk across the organisation to achieve our strategic goals and objectives.

The first round of a well formulated risk register for the key processes has been undertaken by our Activities. This process is currently driven by the Risk Management Advisor and is not yet embedded in Activity level business processes. A risk management platform will be considered as our organisational approach matures.

We have produced business rules that apply the Risk Management Framework consistently across different asset types to classify their criticality. The process of embedding this into operations has begun but needs to be extended to all Activities. We need to ensure the criticality rating of each asset is captured in our asset information systems and assess the risk rating for each asset using performance and risk attribute data.

We also need to comprehensively assess the resilience to all of these risks of all of the services that we provide. This will also need to be carried out on an Activity by Activity basis.

Review Levels of Service

Customer enquiries and the Residents' Survey show general satisfaction with the current levels of service that we provide to our customers. However, outside of the Long Term Plan consultation there has not been a coordinated cross-activity levels of service engagement with the community since 2005. Prior to the next LTP the levels of service and strategic objectives for each activity need to be reviewed through customer engagement.

The current measures that assess our performance on the service levels we provide to our customer require further refinement. This will also help us determine the appropriate level of service. Options need to be developed and workshopped with Elected Members to balance the trade-off between risks, costs and benefits.

Service Delivery Models (Procurement)

We have a range of options available to deliver services associated with assets and asset management. Service delivery options range from full in-house delivery of all asset activities by our staff, to outsourcing part, or all asset services and functions.

In 2021 a Contract Management centre of excellence was created to improve the management of contracts. We are now concentrating on further developing inhouse contract management system capabilities.

We have progressively put in place contracts with our infrastructure service providers, and we will continue to formalise these arrangements. In 2022 an external design panel was established which provides us delivery of design management. We will continue to refine and standardise project management processes, including the design process.

In addition, there are other parts of our system that were relatively mature but need to improvement to better support what we do at Council:

Operational Planning

Good operational planning will ensure that our assets can deliver the appropriate level of service to the community and meet our strategic objectives. Our operational plans have not been reviewed and brought into line with Levels of Service and strategic outcomes for several years. Associated operational budgets are overdue a review from the 'bottom up' that identifies the tasks and resources required to deliver the Levels of Service. Each of the activities needs to document or develop these Operational Plans and budgets and align them with the review of Levels of Service (above).

Asset Data and Information

Data and information are key to us being able to understand and manage our assets, thus enabling us to make good decisions and plan for the future. While progress has been made in the last three years there are still significant gaps in our asset data records. The gaps vary from Activity to Activity and include basic attribute data, maintenance data and performance data.

We need to review asset information needs for each activity, conduct a gap analysis, and implement a data improvement project. This will include improvement of our as-built processes to ensure that all data and information are contained within the correct system.

We have developed frameworks to define our critical assets. We now need to apply these frameworks and populate the asset criticality fields in the asset information systems.

1 Introduction

1.1 Background

Our vision for Papaioea is **"he iti rā, he iti pounamu | small city benefits, big city ambition"**, where our community enjoys the benefits of living in a small city yet has the advantages of a big city.

We provide a range of services to our community in Palmerston North to support their cultural, social, environmental, and economic wellbeing. Many of these services are enabled by $2 billion worth of infrastructure assets and, as guardian of these assets, we take account of the present and future needs of the community in order to provide these services and support these outcomes.

As an organisation, we need a coordinated and strategic approach to Asset Management so that these asset-based services are provided more cost-effectively and efficiently.

For this reason, a Strategic Asset Management Plan was adopted in 2020. This is the first revision of this document.

1.2 Document Purpose and Scope

The purpose of this Strategic Asset Management Plan (SAMP) is threefold:

- To effectively define the Asset Management System (including giving effect to our Asset Management policy);
- To establish how Asset Management Objectives are linked to our organisational objectives; and
- To provide direction to our Asset Management Plans.

Figure 1-1 (below) shows how this document relates to other documents in our management framework. Documents are listed in terms of strategic importance and are grouped in terms of "how" and "what".

This document provides a high-level summary of both our Asset Management Strategy ("how" we do Asset Management including making decisions) and our plan for implementing and improving good Asset Management Practice (ensuring we do "what" we plan to do to better manage our assets).

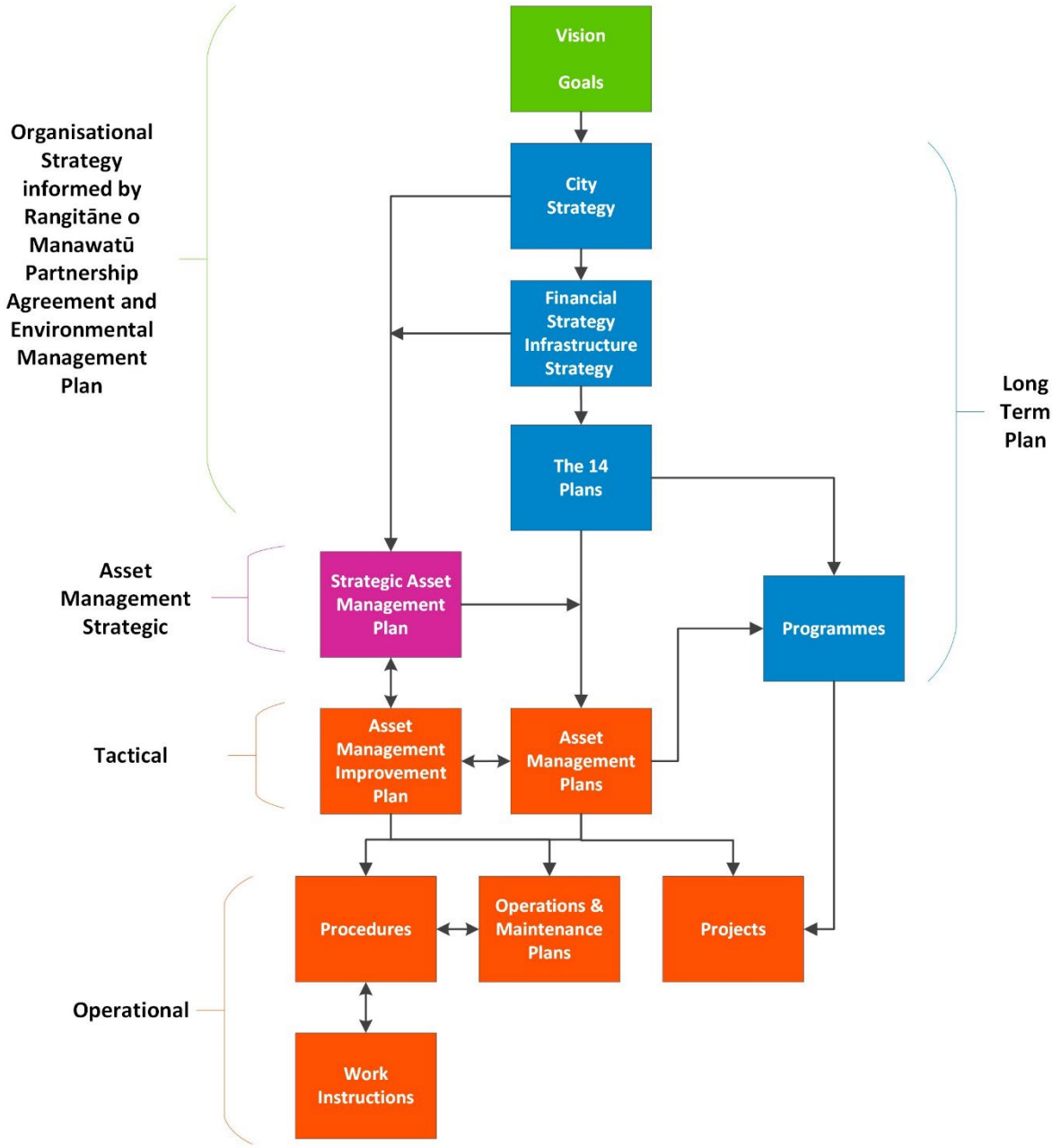


Figure 1-1: The SAMP and other Key Documents in our Management Framework

1.3 Stakeholder Outcomes

Table 1 summarises the users (primarily internal) that the SAMP is intended for and the outcomes they seek.

Table 1: SAMP Stakeholder Outcomes

SAMP Purpose	Users	Situation	Actions	Outcomes
Define the Asset Management System	Executive Leadership Team Infrastructure Leadership Team Asset Planning Leadership Team Asset Management Team	**When** providing Asset Management leadership	**I want to** clearly communicate our Asset Management system (people, processes, tools and other resources)	**So that** Asset Management is better understood and applied across our organisation.
Link Asset Management objectives to Organisational objectives	Asset Management leadership Business Assurance	**When** providing Asset Management advice leadership	**I want to** know the best AM improvement initiatives to implement	**So that** we improve our Asset Management maturity.
	Executive Leadership Team Elected Members	**When** giving effect to the Asset Management policy	**I want to** understand how the performance of our assets will change over time	**So that** we are better prepared to meet agreed levels of service in the future.
Guide Asset Management Plans	Service Managers Asset Management Advisors	**When** planning long-term for an Activity	**I want to** know what our current and future issues, risks and opportunities are and how to manage assets	**So that** AMPs and budgets more clearly align with our organisation's strategic objectives and the optimum decisions are made at the

SAMP Purpose	Users	Situation	Actions	Outcomes
			over their lifecycle	right time for the asset portfolio.

2 Strategic Drivers

2.1 Issues and Impacts

We seek to understand how future changes could impact on the city's assets and the demand for services. When we understand what is driving changes we can more accurately plan, develop assets to cater for growth, and consider levels of service that meet our community needs. In this section we identify significant and key issues and how they may impact on asset management planning and levels of service. The key issues correlate to the significant issues highlighted within our Infrastructure Strategy which are:

1. Growth and changing expectations on levels of service – this links to affordability, liveability and a well-functioning urban environment.
2. Deterioration of Infrastructure Assets – there is a disconnect between agreed and expected levels of service funding. This also effects meeting an increasing cost of renewals (based on condition, age, performance).
3. Risks, resilience and compliance

The key issues that result from these significant challenges are:

- Our Strategic Direction
- Iwi Partnerships
- City Growth
- Legislation Changes, Policy, and Guidelines
- Sustainability and the effects of Climate Change
- Technology Advances
- Liveability
- Resilience

The specific impact of these issues on each activity is described in the Asset Management Plans for each Activity and discussed briefly within this section.

2.2 Our Strategic Direction

We utilise strategy to provide direction and intent, the ideal conditions to support growth and development and provide a line of sight to our delivery of services.

2.2.1 Matawhānui Papaioea | Palmerston North Vision

He iti rā, he iti pounamu | Small city benefits, big city ambition

Palmerston North is the heart of the Manawatū region. We are a small city with a lot to offer, and we're ambitious about where we're going. We have many small city advantages – a great quality of life and easy access to services. We embrace our Rangitāne o Manawatū heritage and celebrate the diversity of our communities. We know that the talents and efforts of our whole city will help create the future we want.

2.2.2 Strategies and Strategic Plans

The Oranga Papaioea City Strategy, and the series of plans that sit beneath it, describe the actions we will take to achieve our four goals. The goals describe the outcomes we want to achieve for our communities:

- Whāinga 1: He tāone auaha, he tāone tiputipu
    - Goal 1: An innovative growing city
- Whāinga 2: He tāone whakaihiihi, tapatapahi ana
    - Goal 2: A creative and exciting city
- Whāinga 3: He hapori tūhonohono, he hapori haumaru
    - Goal 3: A connected and safe community
- Whāinga 4: He tāone toitū, he tāone manawaroa
    - Goal 4: A sustainable and resilient city

These are supported by 14 plans as shown in Figure 1-1 below in order to achieve the economic, social, cultural and environmental well-being of our community.

Figure 2-1: Strategic Plans

2.2.3 Strategic Priorities

Table 2 contains a summary of the outcomes that each of the Strategic Plans are seeking to realise and our priorities to achieve these. Not all of the priorities will necessarily require investment in infrastructure but have been included for context.

Table 2: Strategic Priorities

Outcomes by Strategic Plan	Strategic Priorities
Housing: Access to healthy and affordable housing. Support the development of more housing to meet community needs.	• rezone enough land and provide the right infrastructure to accommodate residential growth; • provide a proactive regulatory framework that enables more housing choices (e.g. duplexes, terraced housing), inner-city living, and less housing on productive soils; • provide social housing for older people, disabled people, and people on low incomes, and provide incentives to encourage other housing providers; and • facilitate new housing developments in partnership with city housing providers.

Outcomes by Strategic Plan	Strategic Priorities
Urban Design: Create great places for everyone.	• provide connected, diverse, safe and interesting public spaces (streets, open spaces, buildings, and infrastructure); • include the expression of Rangitānenuiarawa (Rangitāne expression of kaitiakitanga) in public art and places; • implement people-centred design in the city centre; • provide support for community-led public space projects; and • provide support for private development on high profile sites.
Economic Development: Create opportunities for employment and growth. An innovative, diversified, and low-carbon city economy.	• rezone enough land and provide the right infrastructure to accommodate business growth; • support business development (through CEDA, the economic development CCO); • retain and attract business and labour (through CEDA); • promote the city; • provide services for visitors, including the Conference and Function Centre, i-site, and holiday park; • provide and support major events; and • support international education and promote Palmerston North's interests to global city partners.
Transport: A transport system that links people and opportunities.	• provide a safe, integrated and multi-modal transport network; • include active and public transport needs in all transport network planning; and • encourage greater public and active transport choices.

Outcomes by Strategic Plan	Strategic Priorities
Arts and Heritage: Celebrate the arts and the city's history and cultural diversity. Lots to do in our creative and exciting city.	• support community arts organisations and initiatives; • provide and support cultural facilities, including cultural CCOs; • support Rangitāne o Manawatū in its role as kaitiaki of its heritage places; • promote, celebrate, and share knowledge of local history; • invest in cultural heritage buildings and places; and • provide, fund, and support community events.
Recreation and Play: Palmerston North to be one of the most active communities in New Zealand.	• provide accessible and well-maintained city, suburb, and local parks and reserves; • provide sports fields, walkways and shared paths, and swimming pools; • provide community sport and sport-event facilities at Arena Manawatū; • support and fund for-purpose organisations and community partners; • support the community-activation and facility development activities of the regional sports trust (Sport Manawatū); and • promote opportunities for play.
Community Support: Create a strong and connected community, where diversity is celebrated.	• provide and support community centres and Hancock Community House; • provide Central Energy Trust Wildbase Recovery in partnership with Massey University; • support and fund for-purpose organisations, local communities, and communities of interest; • provide cemetery services; and • provide public toilets throughout the city.

Outcomes by Strategic Plan	Strategic Priorities
Libraries: Libraries to provide opportunities for connection and learning.	• provide the Central Library, four community libraries, the mobile library, Blueprint, and Youth Space; and • provide library programmes for communities of interest and those with the greatest need.
Community Safety and Health: A healthy city, where our community is safe and feels safe.	• provide Civil Defence Emergency Management; • provide environmental health services, including regulatory functions of animal management and the sale and supply of alcohol; • promote community health (e.g. smokefree and sunsmart); and • co-ordinate and support safety initiatives.
Climate Change and Sustainability: Reduce the impact of climate change on the Council and the City. Make Council and community activities more sustainable.	• reduce Council activities that produce greenhouse gases (e.g. use of diesel, electricity and natural gas); • promote activities that support low-carbon city outcomes, including those that compensate for activities that produce greenhouse gases; • reinforce sustainable best-practice through Council policies and practices; • support and fund for-purpose organisations, local communities, and communities of interest; • encourage and promote sustainable practices locally and regionally; and • strengthen our city's adaptive capacity to Palmerston North's climate-related risks.

Outcomes by Strategic Plan	Strategic Priorities
Biodiversity and Manawatū River: Healthy Manawatū River, greater biodiversity, and a thriving native ecosystem.	• support and fund for-purpose organisations and local communities; • encourage and enable the community's connection with the Manawatū River; and • protect, enhance, and increase natural areas (e.g. bush remnants, gardens, stream banks and berms).
Resource Recovery: Minimise waste and its impact on the environment.	• promote waste reduction, including through public education and behaviour change initiatives • investigate and implement new opportunities for waste diversion • support and fund for-purpose organisations and local communities to advance circular solutions • provide recycling collection services, include kerbside recycling, drop-off centres and public space recycling bins • provide waste collection services, include kerbside collection, the Ashhurst transfer station and public space rubbish bins
Water: Provide safe and readily available water and to be safe from flooding. Wastewater to be safely collected, treated and disposed of.	• provide wastewater services for the safe collection, treatment and disposal of the city's wastewater; • provide water services for the provision of safe and readily available water; and • provide stormwater services to protect buildings from inundation from flooding in major events.

Outcomes by Strategic Plan	Strategic Priorities
Governance and Decision-Making: Make well-informed and strategic decisions. Actively engage with the community. Work in partnership with Rangitāne o Manawatū.	a) provide advice and support to elected members and other decision-makers; and b) provide clear and accessible opportunities for community input into Council decisions.

2.3 Rangitāne O Manawatū Partenrship Agreement

2.3.1 Overview of Partnership Agreement

In recent years Council has made a series of considered decisions to uphold the mana of Te Tiriti o Waitangi. These include signing the Partnership Agreement with Rangitāne o Manawatū (RoM) in 2019 and establishing a standing committee to consider matters of strategic significance to Māori.

We will:

- Work in partnership with Rangitāne o Manawatū on projects and initiatives of agreed priority (e.g. Te Motu o Poutoa);
- Encourage and enable Māori participation in Council decision-making and activities; and
- Support and embed a Whānau Ora approach in Council activities.

The relationship with Rangitāne o Manawatū and our commitment to this partnership is reflected in each of the plans that sit beneath the Oranga Papaioea City Strategy strategy.

2.3.2 Supporting Iwi Outcomes and Aspirations

Rangitāne O Manawatū have an operational Environmental Management Plan. This is equivalent to an Iwi management plan under the RMA and therefore provides insights into how we:

- Recognise and provide for Māori cultural values and interests; and
- Provide Rangitāne O Manawatū with opportunities to contribute to decision-making processes and the preparation of Long Term Plans.

Under the National Policy Statement for Freshwater Management 2020, we must give effect to the hierarchy of obligations and six principles of Te Mana o te Wai.

The hierarchy of obligations prioritises the following in order:

1. the health and well-being of water
2. the health needs of people (such as drinking water)
3. the ability of people and communities to provide for their social, economic and cultural well-being.

The National Policy Statement requires local authorities to take in an integrated approach to freshwater management and to actively involve tāngata whenua (to the extent they wish to be involved) in freshwater management (including decision-making processes. The Environmental Management Plan gives effect to this with the following statement;

"The most significant quality that flows through wai is mauri. The mauri is generated throughout the catchment and is carried through the connected tributaries, groundwater, wetlands and lagoons. It is the most crucial element that Binds the physical, traditional and spiritual elements of all things together, generating, nurturing and upholding all life, including that of Rangitāne o Manawatū. The health and well-being of Rangitāne is inseparable from the health and well-being of wai. The Manawatū Awa, its catchment, tributaries and connections, wetlands and lagoons are taonga and valued for the traditional abundance of mahinga kai and natural resources".

The Environmental Management Plan is based on the Whānau Ora Framework which consists of the following outcomes:

- Rangatiratanga | self-managing and empowered leaders;
- Hauoranga | leading healthy lifestyles;
- Kotahitanga | participating fully in society;
- Tuakiritanga | confidently participating in Te Ao Māori;
- Pūkenga rawa | economically secure and successfully involved in wealth creation;
- Pāporitanga | cohesive, resilient and nurturing; and
- Tiaki taiao | responsible stewards of their living and natural environments.

Table 3 contains a summary of the aspirations Rangitāne O Manawatū have expressed in relation to our infrastructure related Activities. In exercising Tino Rangatiratanga, Rangitāne O Manawatū expect our LTP is responsive to their priorities. Therefore our Asset Management Plans contain further details of how we will develop and manage infrastructure and provide levels of service in a manner that support these iwi aspirations.

Items marked with an * are listed in the Environmental Management Plan, which also contains a traffic light review indicating our progress towards giving effect to these.

Table 3: Giving Effect to Rangitāne o Manawatū Outcomes

Activity / Area	Giving Effect to Rangitāne O Manawatū Outcomes
All	• Rangitāne tikanga is understood and incorporated into our practice.* • RoM representatives have a role in technical design teams as cultural advisors for our projects of priority to RoM.* • Environmental impacts on streams, wetlands and wāhi tapu will be reduced, mitigated and offset using robust Matauranga Māori scientific methods in consultation with RoM.* • RoM and whanau are supported to undertake Karakia and other tikanga such as place tapu and rāhui, for projects of significance to them.* • Develop greenfield housing in partnership. It must restore ecology, give access to new green spaces, public transport, recreation, shared use pathways and education and health facilities.* • Te Reo is included in signage or replaces English.* • Work in partnership with RoM to identify original place names, values, significant sites and tupuna names as projects progress.* • A Māori procurement policy is developed by Councils in partnership with RoM that supports commercial opportunities. * • Replace synthetic fertilizers with green waste/compost, biosolids, wastewater and animal manure.* • RoM hold a chapter in civil defence and emergency plans.* • Indigenous planting projects should use ecologically and culturally sourced seed and incorporate traditional plant species used for rongoā and RoM customary value.*
Resource Recovery	• Reduce landfill load. • Waste Management Plan needs clear goals and accountability for reducing waste. • Urban streams are no longer impacted by littering and fly tipping.

Activity / Area	Giving Effect to Rangitāne O Manawatū Outcomes
	• Council needs to support people who have a waste problem so that it doesn't get into the environment. • Need for a Waste Minimisation strategy. • Divert green waste and food waste from landfill.
Parks and Reserves	• Supported to plan for and co-manage reserve areas and the Manawatū Awa under co-governance agreements.* • Appropriate areas around streams, the Manawatū Awa and within the Tararua and Ruahine Ranges are developed for recreation in partnership with RoM.* • Prioritise signage, information boards and mahi toi within recreation areas to share RoM values and relationships with the land and waterways.* • Enable education and business opportunities by revitalising natural areas. Remove barriers to natural areas to collect seeds, medicinal plants, kai and rongoā for private and economic purposes.* • Invest in mapping food availability on fruit and nu trees accessible to the public.* • Support the inclusion of fruit and nut trees on public reserves and in restoration areas.* • Kai Forests are encouraged that support access to traditional food.* • Wāhi tapu to be managed collaboratively with RoM, especially along the Manawatū River. • Iwi involvement in work rather than contractors. • Wetlands should be enhanced, protected, and created wherever possible.
Transport	• Shared use pathways, bus routes, schools, employment hubs and natural spaces link in a safe and integrated manner.* • Stormwater sensitive design should be business as usual for roading renewals and capital new projects. • Expressions of Rangitāne are incorporated into streetscape designs.
Property	• Supported to access and restore wāhi tapu held in private ownership and on inaccessible Council holdings.*

Activity / Area	Giving Effect to Rangitāne O Manawatū Outcomes
	• Develop a space in partnership with RoM dedicated to Māori use including physical activity, kapa haka, pūrakau, building waka, mahi toi, teaching and training.* • Sustainability criteria needs to be considered in leases. • Climate change criteria should be considered in leases. • Council's Strategic Direction should apply to lease holders of public land. • Iwi representatives should be considered for leased land where there is a governance structure in place (e.g., Square Edge).
3 Waters	• RoM participate in 3 waters governance and technical decision-making processes.* • *E. coli*, nitrogen, phosphorous, sediment runoff and plastic pollution are reduced to levels that protect contact recreation, ecological communities and cultural health.* • Whānau can sustainably harvest mahingakai in sufficient quantities, and that kai is free from the risk of contracting gastric disease.* • There is a formal cultural monitoring framework in place for freshwater monitoring that is properly resourced and enables a whānau and RoM-based response.* • All fish barriers are systematically removed, all new stream and river works require fish pass installation in consultation with RoM.* • RoM fish plan is recognised and provided for.* • Wetlands of scale need developing in partnership with RoM, in regionally strategic locations to protect urban and rural water quality and provide for biodiversity.* • Establish forest and wetland nodes within all urban suburbs to treat stormwater.* • Future-proofing water supply is seen as important. • Climate change resilience is factored into water supply availability. • Water use information should be publicly available. • Water use is sustainable.

Activity / Area	Giving Effect to Rangitāne O Manawatū Outcomes
	• Rainwater collection encouraged for urban development.
Other	• Environmental impacts of bulk earthworks are offset with ecological restoration.

2.3.3 Commitments to Rangitāne O Manawatū

Our commitment to the relationship with Rangitāne o Manawatū and this partnership is reflected in actions in each of the plans that sit beneath the Oranga Papaioea City Strategy strategy. Understanding how our services and infrastructure can support these actions is a key driver in our Asset Management Planning.

Actions in the plans that reflect our commitments to Rangitāne that are relevant to Asset Management Planning include:

- Express Rangitānenuirawa[2] in public spaces
- Express Te Ao Māori in urban design principles and practice
- Provide urban design support and professional development opportunities to Rangitāne o Manawatū on their own development projects
- Work closely with Rangitāne o Manawatū and Māori to support opportunities for growth and development of the Māori economy
- Promote the important and distinct contribution of iwi Māori to the city and regional economy
- Provide opportunities for meaningful and effective relationships between iwi Māori and international partners
- Support projects that promote Māori creative practices
- Support cultural facilities to establish and maintain relationships with Rangitāne o Manawatū
- Collaborate with Rangitāne o Manawatū to protect, expand, and enhance sites of cultural and natural significance
- Support Rangitāne to access and restore wāhi tapu held in private ownership and on inaccessible Council holdings
- Provide Te Ao Māori events with Rangitāne o Manawatū
- Support Rangitāne o Manawatū to achieve their climate change aspirations
- Recognise and provide for the relationship of Rangitāne o Manawatū with freshwater sites

[2] Rangitānenuirawa is the Rangitāne expression of kaitiakitanga, or customary authority and guardianship.

- Provide opportunities for Rangitāne o Manawatū to be involved in city planning and delivery of Manawatū River projects

Our commitment to the partnership with RoM is articulated in other key strategic documents including S*tatutory acknowledgement*. Under the RoM Settlement Act any land-use or subdivision consents that are triggered adjacent to the Manawatū River or any of its tributaries requires RoM to be notified. Our District Plan directs us to engage with iwi early on resource management matters.

MoU co-management. A MoU with RoM was signed 2 August 2019 establishing a co-management Committee in Council to manage Anzac Park: Te Motu o Poutoa, which will have governance authority on any projects or programmes related to Te Motu o Poutoa. It is likely a Reserve Management Plan for Te Motu o Pouta will be developed at the request of this Committee. Asset Management Plans will reflect the direction or requirements outlined in the Reserve Management Plan.

Manawatū River Framework. This document provides strategic vision for any developments near the river and recognises the importance of the river to the city. There is specific reference to a requirement to express Rangitāne and Maori culture through storytelling and recognition of significant sites e.g., He ara kotahi bridge.

District Plan – Chapter 17: Natural and Culture Heritage. Wāhi tapu are protected from inappropriate activities and subdivision. A resource consent will be triggered for any activity or subdivision related to scheduled wāhi tapu, which are listed in Chapter 17 and shown on Council's GIS maps.

City Centre Framework. Co-ordinates public and private investment and identifies strategic development sites within the city. One of the sub-drivers in the framework is to ensure that there is an expression of Rangitāne culture in the city, and support for Rangitāne to create their own ways of sharing their stories and heritage, through symbols, stories and a range of artistic media will enrich the city's places. This should be a key consideration when undertaking projects in the City Centre, especially renewals and capital new programs for streetscapes, Te Marae o Hine (The Square) and other public spaces.

Vegetation Framework. RoM have expressed preference for native species when considering plantings. Fruit and nut tree plantings are also encouraged.

2.4 Growth

The population of and the number of households in Palmerston North is predicted to grow at a moderate rate over the next 30 years (2024-2054). In order to ensure we are enabling sustainable growth we are producing a Housing Business Needs Assessment (HBNA). This assessment is required under the National Policy Statement on Urban Development (NPS UD) and outlines where growth will occur and when. We are following the HBNA with a more in-depth future development strategy (FDS), which is also required by the NPS UD.

We expect residential land will be developed to accommodate greenfield population and household growth as shown on the map in Figure 2-2 below.

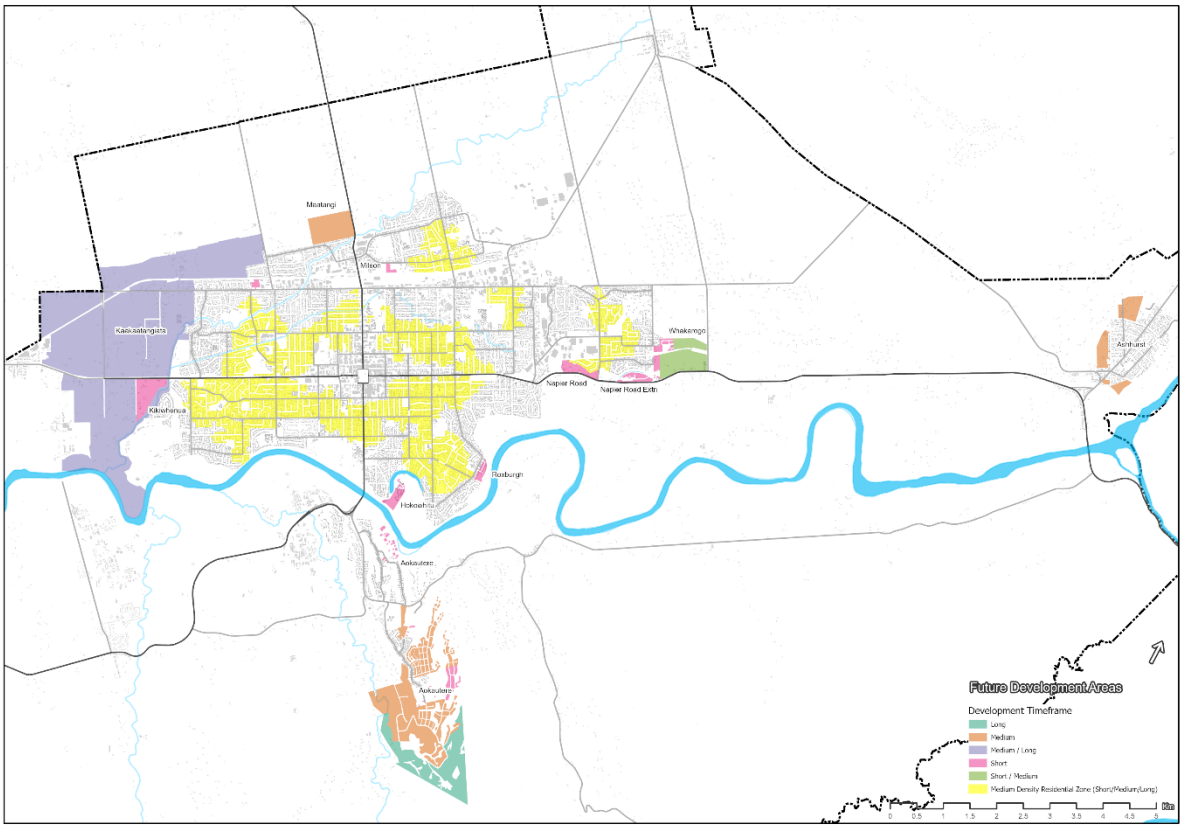


Figure 2-2: Future Development Areas Palmerston North

Figure 2-3 shows the expected sequencing of future greenfield residential development for the planning horizons: short-term (1-3 years); medium-term (4-10 years) and long-term (11-30 years).

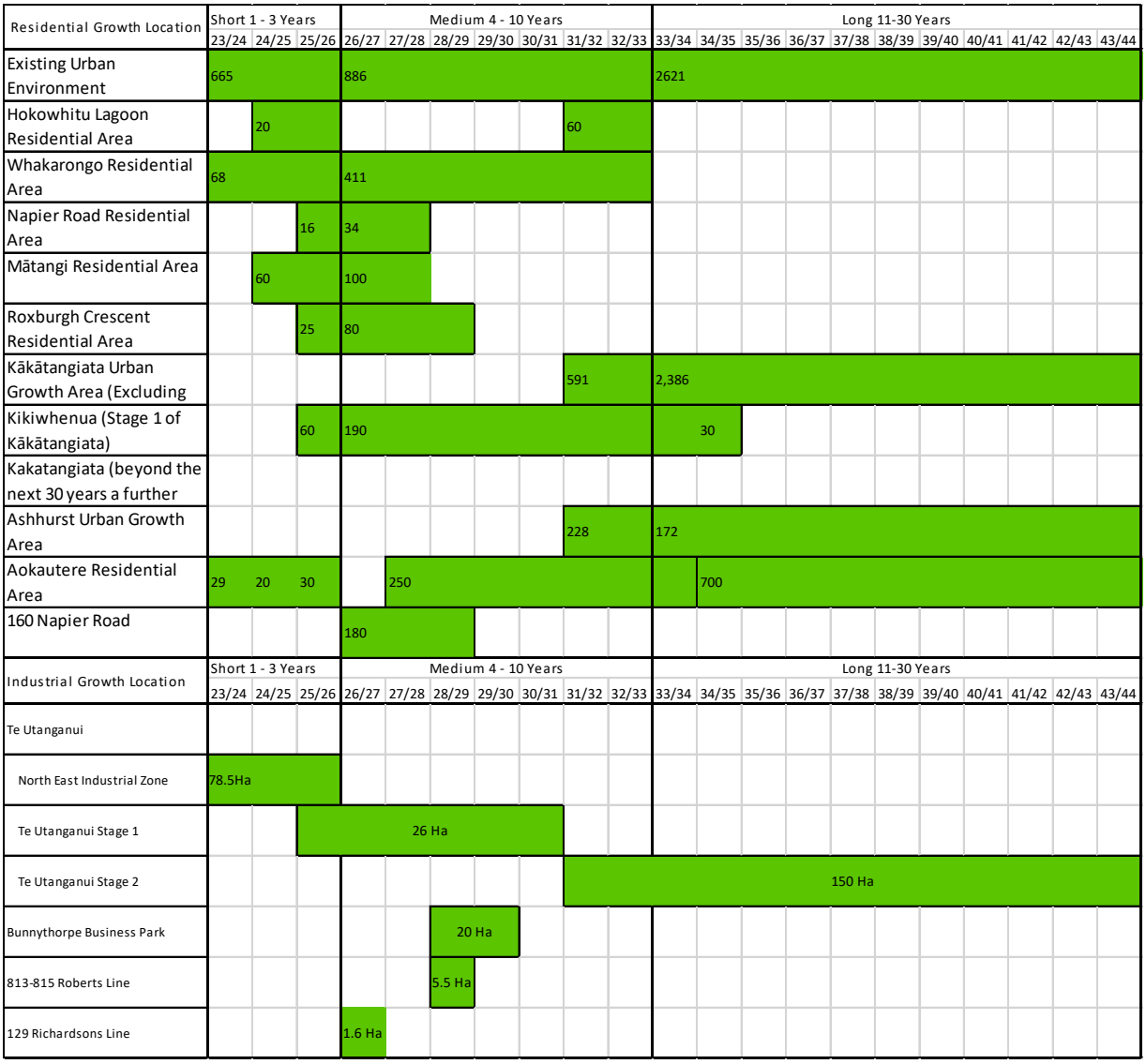


Figure 2-3: Future Residential Development Timing Summary

2.4.1 Economic Growth

We will have strong economic growth for the next fifteen years. A major increase in public and private sector capital investment is providing a significant boost to our economic activity and population growth. The development and construction projects planned for Palmerston North and the Manawatū region amount to $3.5-$4.5 billion of construction activity to 2041.

Construction of the Te Ahu a Turanga – Manawatū Tararua Highway, the replacement for the State Highway through the Manawatu Gorge began in January 2021 and due for completion by mid-2025.

Te Utanganui Central New Zealand Distribution Hub and Palmerston North Integrated Transport Initiative (PNITI) - Regional Freight Ring Road are also progressing.

Population and Household Growth

The number of households in Palmerston North and associated population is predicted to grow at a moderate rate over the 30 years 2024-2054. The average household size in Palmerston North is 2.6 and we expect it to remain unchanged over the next 30 years. The average household size has increased since 2021 due to an increase in multi-generational families living in one household and overcrowding.

In May 2023 a revised growth projection was developed by the Strategic Planning Unit. The projection is based on both the April 2023 Statistics New Zealand population projections and the Infometrics medium growth scenario for the period 2023-2054. We have used the Statistics NZ high population projection as a starting point for 2024-2034. We then applied the Infometrics annual percentage growth for their medium growth scenario over the balance of the 30-year planning period.

We took this approach because of the conservative view applied by Infometrics on net international migration and labour force growth. In addition, the outcomes for 2022 indicating a much higher growth scenario than that envisaged by Infometrics.

Our population is growth is due to increases in international net migration with more people from overseas arriving than departing. Some of the city's population growth is due to refugee resettlement, as Manawatu was in 2006 designated as a refugee resettlement location and committed to take up to 180 refugees per annum. Our population growth is also partially due to natural increases.

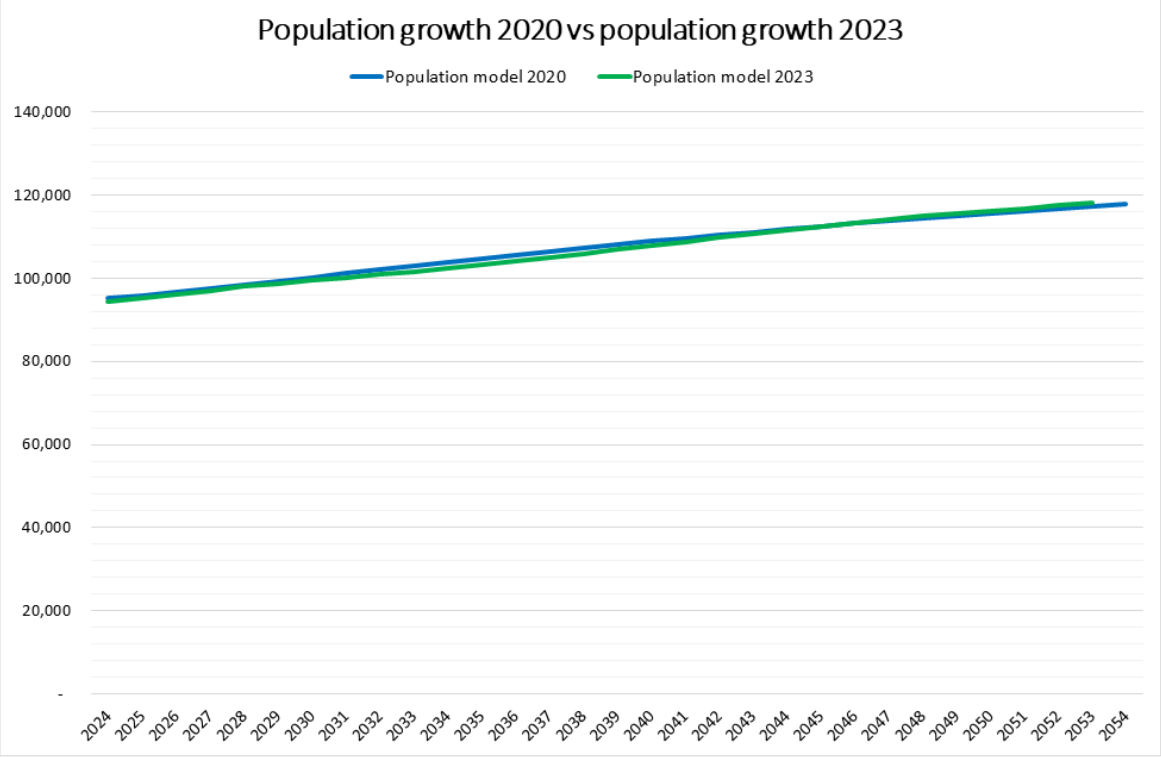


Figure 2-4: Current versus previous population projections

Over the same period the number of households will increase from 35,057 in 2024 to 44,941 by 2054. This represents a total increase of 9,884 houses or an average of 282

new houses per annum. However, the NPS UD requires us to include an additional margin in our household projections to accommodate additional housing capacity. Our margins are 20% for 2024-34 and 15% for 2034-54. This means we will need an additional 9,884 homes over the next 30 years including these margins.

This demand may be even higher due to factors such as overcrowding and steady economic investment and growth in Palmerston North. We expect the investment in the region to continue for at least the next 15 years bring a sizable increase to the region's construction workforce.

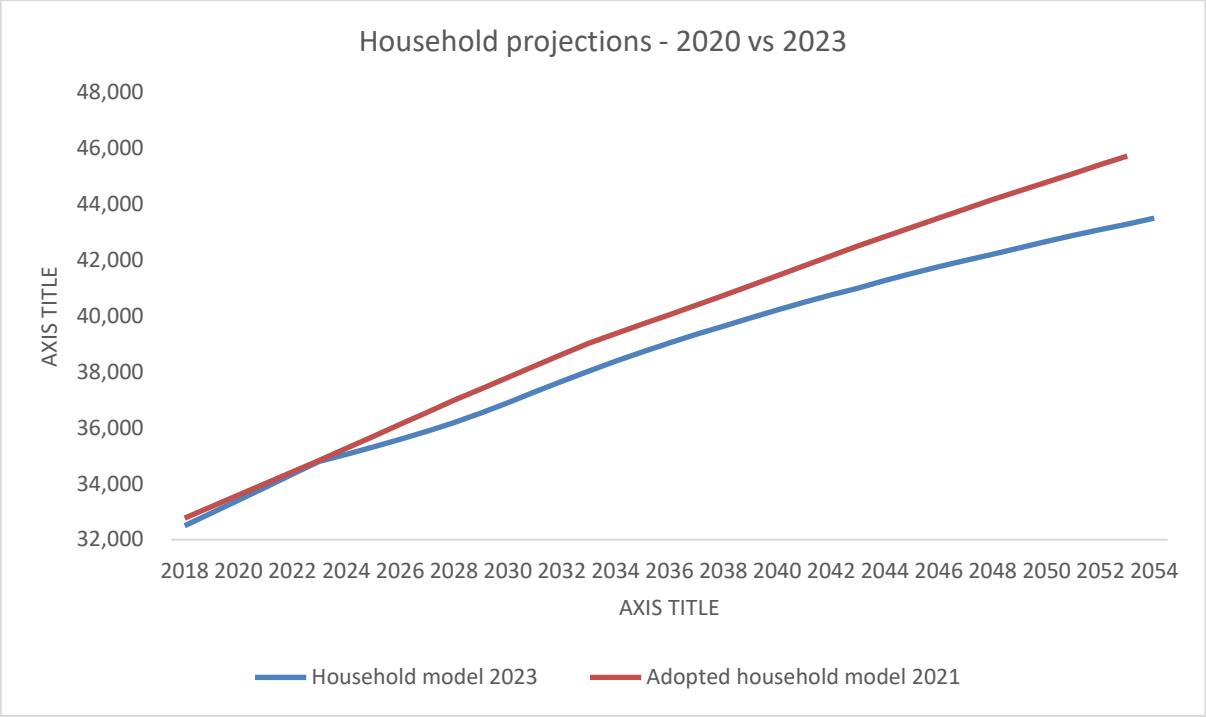


Figure 2-5: Current versus previous household projections

What other scenarios have we considered?

We have based the growth projections on a medium growth scenario; but have considered other scenarios that include population projections with an additional +20% margin, which are used to model capacity to service household growth.

2.4.2 Residential Growth

The City's footprint is growing with the greenfield development in the North, East, and West. Housing density will also increase with new infill housing development occurring throughout the city. The proposed Medium Density Residential Zone Plan Change will provide further opportunity for infill in the future.

Increases in population and household growth are the main reasons driving demand for new residential development. The NPS UD requires councils to plan well for growth and ensure a well-functioning urban environment for all people, communities, and future generations. Furthermore, the NPS UD requires councils at any one-time to ensure there is sufficient housing and business land development capacity as shown in Table 4 below.

Table 4: Development Sufficiency Requirements

Term	Definition
Short (0-3 years)	Development capacity must be feasible, zoned and serviced with development infrastructure.
Medium (3-10 years)	Development capacity must be feasible, zoned, and either: • serviced with development infrastructure, or • funding for the development infrastructure required to service that development capacity must be identified in a Long-Term Plan required under the Local Government Act 2002.
Long (10-30 years)	Development capacity must be feasible, identified in relevant plans and strategies, and the development infrastructure required to service it must be identified in the relevant Infrastructure Strategy required under the Local Government Act 2002.

Plan Changes for Residential Growth

We need more housing and have a responsibility under the requirements of the NPS UD to provide sufficient housing and business land development capacity to meet the demand for housing and residential sections. To meet these standards, and provide places to live in our growing city, we've proposed a District Plan change called Plan Change I: Medium Density Residential Zone, which aims to enable more homes to be built close to our existing infrastructure and amenities. Council is also proposing to rezone Roxburgh Crescent from industrial to residential to provide 105 homes and aid in additional short-term housing within the city.

To support demand for greenfield growth and housing demand, we are proposing opportunities at Aokautere, Kākātangiata and Ashhurst. (See also Figure 2-2 and Figure 2-3.)

- Kākātangiata, formerly known as 'City West' was identified as a future growth area in 2009. The area of 842 hectares is expected to provide greenfield housing options for 7,200 additional houses over the long-term.
- Ashhurst was identified as a residential growth area in 2017, with four areas proposed to be rezoned from rural to residential to provide for 400 additional homes.
- The Aokautere Urban Growth Area rezones a new greenfield growth area in Aokautere for residential development. Council made an application, which was granted, to the Environment Court to make rules in Proposed Plan Change G take immediate legal effect, pursuant to section 86D of the Act. The plan change will enable approximately 1,000 new houses in the area.

2.4.3 Industrial and Business Growth

The North-East Industrial Zone and Extension Area provide competitive development options for a wide range of large industrial businesses to establish themselves here. Options for small to medium industrial development exist in Tremaine Avenue and Longburn. Projected growth in the economy will lead to more industrial, commercial, and residential development, all of which will require additional infrastructural capacity. Key industry employment sectors include logistics, health care and social assistance, public administration and safety, retail, tourism, and research.

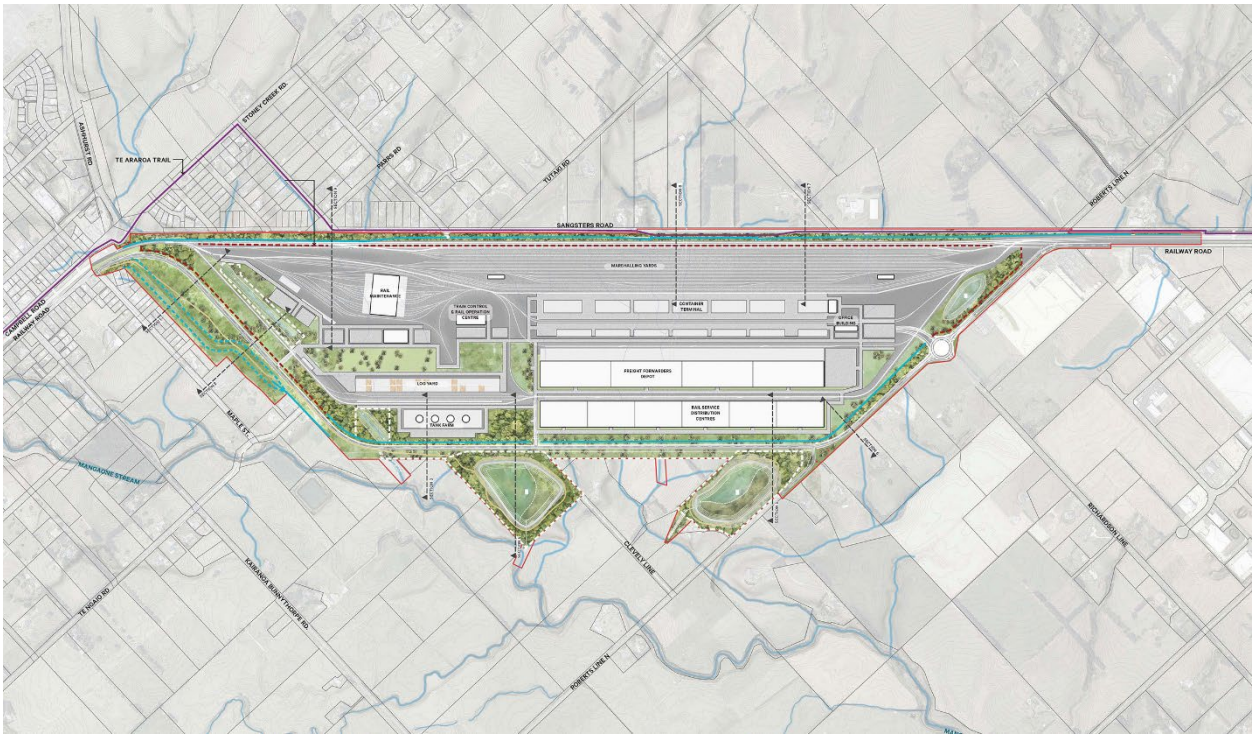


Figure 2-6: Te Utanganui – The Central New Zealand Distribution Hub

Plans for the development of Te Utanganui – The Central New Zealand Distribution Hub (more than 170 ha) in the NEIZ Extension Area and Bunnythorpe are also underway with KiwiRail announcing the preferred site for the distribution hub on 2 July 2020 and a rail designation for the land. This was notified for public submissions in 2021. Now appeals have been resolved and the land has been designated in the District Plan. The Te Utanganui masterplan will support this growth.

The City Centre Framework coordinates public and private investment and identifies strategic development sites within the city centre. Council's vision for the city centre is to make it a place where people want to visit and live, meet up with their friends and family, be entertained, stay longer and support local retailers.

2.5 Legislative Changes

Legislation, policy, and guidelines can significantly influence the provision of infrastructure and the levels of service we provide.

Central Government has an extensive work programme that impacts on how infrastructure is delivered, including the following:

- Construction Sector Transformation Plan. This Transformation Plan is a three-year (2022-2025) action plan for change focused on tackling the sector's systemic challenges whilst building resilience across the industry. Construction Contract Form 3910 is also being updated which will change procurement practices for the Council.
- Digital Strategy for Aotearoa. The Digital Strategy for Aotearoa and its Action Plan enable Aotearoa New Zealand to flourish and prosper in the digital era. These are likely to increase the diffusion of existing technologies to increase productivity in the infrastructure sector and accelerate the digitalisation of infrastructure.
- Emergency Management Regulatory Reform. This will result in a new Bill being enacted to clarify roles and responsibilities, enabling an approved provider to issue warnings, establish the New Zealand Emergency Management Assistance Team, protect volunteers and enable a nationwide Controller or Recovery Manager. It also includes incorporating lessons learnt from recent emergencies and has been extended to include lessons from Cyclone Gabrielle. This reform will increase the resilience of critical infrastructure and improve risk management.
- Emissions Reduction Plan. This lays out targets and actions we'll take to meet those targets. These will be across every part of government and every sector of the economy from transport, energy, building and construction, waste, agriculture and forestry. Note that we are involved in every sector directly or as a partner.

- Future for Local Government Review. The Review into the Future for Local Government is an opportunity to create a new system of local governance and democracy that will effectively respond to a changing New Zealand and create conditions for communities to thrive.
- Future of the Transport Revenue System. The way we pay for the transport system has functioned well for decades, but it is time to reconsider how it works in the longer-term, because the way New Zealanders travel is changing.
- Immigration Rebalance. The Rebalance has been designed to make it easier to attract and hire high-skilled migrants and aims to support a higher-productivity, higher-wage economy.
- Minerals and Petroleum Resource Strategy for Aotearoa New Zealand. The 2019-2029 strategy articulates the Government's long-term vision for the minerals and petroleum sector in New Zealand and supports the transition to a low emissions future and a productive, sustainable and inclusive economy.
- National Adaptation Plan. Aotearoa New Zealand's first national adaptation plan contains strategies, policies and actions that will help New Zealanders adapt to the changing climate and its effects – so we can reduce the potential harm of climate change, as well as seize the opportunities that arise. The long-term goals are to reduce vulnerability, enhance our ability to adapt and strengthen resilience. Actions include establishing better risk-informed decisions, climate-resilient development in the right location, and guidance on adaptation options including managed retreat.
- National Freight and Supply Chain Strategy. The strategy will inform investment decisions by central and local government and the private sector. Given the challenges we are facing with climate change and Covid-19, the supply chain needs new approaches to cooperation, regulation, and investment over the coming decades to deliver 20% more freight while reducing emissions by 25%.
- Resource Management System Reform: The Government plans to repeal the Resource Management Act and enact three new pieces of legislation this parliamentary term. The new laws are the:
  - Spatial Planning Act (SPA) which requires the development of long-term regional spatial strategies to help coordinate and integrate decisions made under relevant legislation.
  - Natural and Built Environment Act (NBA), the main replacement for the RMA, to protect and restore the environment while better enabling development.
  - Climate Adaptation Act (CAA) to address complex issues associated with managed retreat, and funding and financing climate adaptation.

- Water Reform. The previous Government progressed reforms so that three waters services will be provided by ten publicly-owned water service entities by July 2026.
  - Water Services Act 2021. The Water Services Act 2021 came into effect in late 2021. The Ministry of Health was to maintain a role in managing drinking water policy.
  - Water Services Entities 2022 Established water services entities, including legal form, ownership structure, objectives, functions, operating principles and service area. In October 2023 their was a change of Government as a result of the 2023 General Election. A a result the leigislation was repealed by the Water Services Repeals Act 2024. The Government further announced that it would be bringing legislation to the house under its Local Water Done Well proposal in mid-2024. This intends to enable territorial local authorities to set up stand-alone water entities and has removed requirements around mandated iwi involvement within an entity.
  - Taumata Arowai was established as a Crown entity in March 2021 and became New Zealand's dedicated regulator of drinking water. In 2024, it will assume responsibility for wastewater and stormwater networks, becoming the three waters regulator for Aotearoa.
  - National Policy Statement for Freshwater Management 2020. gives effect to the hierarchy of obligations and six principles of Te Mana o te Wai. The health and well-being of water; the health needs of people (such as drinking water); the ability of people and communities to provide for their social, economic and cultural well-being.
  - The Commerce Commission will become the economic regulator for the water sector. The Commission is tasked with promoting fair competition, consumer protection, and efficiency in water-related industries. It will monitor pricing and quality standards to ensure reasonable prices for water services.
- Urban Growth Agenda. The Urban Growth Agenda (UGA) is a government-wide programme to improve housing affordability by removing barriers to the supply of land and infrastructure and making room for cities to grow up as well as out. Focus areas include creating a more responsive supply of infrastructure and appropriate cost allocation and investing in transport and land use to create low-carbon and well-connected public and other transport.

- Aotearoa New Zealand Waste Strategy. This strategy provides a roadmap to 2050 and sets 2030 phase 1 targets to reduce the amount of material entering the waste management system, reduce the amount of material that needs final disposal, and reduce the biogenic methane emissions from waste.

New Zealand Standards and industry guidance is often developed in response to addressing specific issues and trends across a sector and reflects the best current technology, national standards, and expectations. Service Managers are expected to stay abreast and contribute to the formation of new guidance and standards.

2.6 Sustainability and the Effects of Climate Change

A changing climate significantly impacts infrastructure, with many assets having a lifecycle of over a hundred years. In addition, Council has committed to a 30% reduction by 2030 and net zero by 2050.

National Institute of Water and Atmospheric Research (NIWA) have produced for the Ministry of the Environment (MfE) a range of climate change predictions for the regions out to 2090. This predicts that projected impacts are likely to become more noticeable towards the end of this period, particularly for water, stormwater, and wastewater assets. NIWA projections indicate that our region will become warmer and subject to more extreme weather events such as heavy rainfall and high winds. By 2050 it is estimated there will be an approximate 15% decrease in summer rainfall and an approximate 15% increase in winter rainfall. By 2090, we could have an average temperature up to 2.8 °C warmer with 2% more rainfall than recorded in 1995 and be subject to significant seasonal variability. The Resource Management Act 1991 and the Local Government Act 2002 require us to adapt to the effects of climate change. Incorporating climate change is also required into existing frameworks, plans, projects, and standard decision-making procedures. A climate change perspective is now integrated into activities.

New Zealand became a signatory to the Paris Agreement with The Climate Change Response (Zero Carbon) Amendment Act 2019 New Zealand's response, which introduced a new framework to assist the move to a low emissions and climate resilient society, putting new requirements on local authorities to set emission reduction targets and mitigation policies and provide reports on progress. In line with the government commitment and national target, our council committed to a 30% reduction in CO_2E emissions by 2030 and net zero by 2050. This commitment is reflected in the strategic direction of the 2024-2034 Long Term Plan.

It is important, therefore, that infrastructure provision in Palmerston North occurs in a way that enables a low carbon, climate resilient future.

2.6.1 Council sustainability initiatives - Energy management

We intend to use energy wisely to reduce operating costs by conserving energy and reduce future costs by implementing technology. These initiatives assist us reduce the demand for energy whilst still delivering the agreed levels of service to the community. Basic energy management techniques are:

- Use of building products and solutions that reduce energy transfer between the external and internal environments.
- Use of new technology that delivers the same output and/or levels of service with lower energy use.
- Use of sustainable energy sources such as wind and solar to efficiently reduce greenhouse gas emissions.
- Siting buildings to maximise solar energy gain.
- Insulating individual assets to reduce heat loss (e.g., hot water pipes)

Energy management initiatives for each activity are listed in the activity area AMPs.

2.6.2 Council sustainability initiatives - Environmental management

We have implemented new environmental initiatives in response to several factors:

- Increased public environmental awareness and need to preserve and restore
- International and national responses to climate change and its impacts
- Increased environmental standards with respect to resource consents
- Withdrawal of products considered to be harmful to the environment

The environmental initiatives for this include:

- Recycling paper, plastics, and other office products.
- Disposing of hazardous goods such as chemicals and asbestos following industry approved practices
- Utilising products which have a lower carbon footprint and/or are recyclable
- Compliance with resource consent conditions to take and/or discharge from/to the environment

Horizons Regional Council has established a Climate Action Joint Committee, of which we are one of eight member Councils. The Climate Action Joint Committee adopted the Joint Climate Action Plan in early 2023. This plan is about understanding how we will respond to climate change in the Manawatū-Whanganui region and working together to reduce potential harm.

The Climate Action Joint Committee recommends that councils in the region commit to the following actions:

- Prioritise nature-based solutions in response to flooding, storm water, and erosion.
- Review planning provisions to encourage on-site storm-water management.
- Limit exposure to hazards by preventing development in areas at heightened risk of flooding or erosion because of climate change.
- Reduce the need for short car trips by developing compact, well-designed urban centres and prioritising active transport infrastructure.
- Assess and manage climate related risks to local services and critical infrastructure.
- Redouble efforts to address existing issues that will be exacerbated by climate change such as freshwater health, biodiversity loss, flooding and erosion.
- Work with at-risk communities to develop local adaptation plans (including community-led initiatives).
- Measure and reduce emissions from council activities.
- Incorporate carbon emissions and a preference for nature-based solutions into council procurement policies.
- Work with Joint Committee members to engage with youth, community, and tangata whenua groups in support of local climate action.
- Allocate resource to drive action forward, build relationships with tangata whenua, and engage with communities.
- Respond proactively to Government direction that enables further local action on climate change.
- Embed this joint response into each council's own plans at a local level.

2.7 Technology Advances

Advances in technology provide us with the capability to operate in a different way, managing assets and providing levels of service in more efficient, better, easier, or more cost-effective way. Breakthrough technologies are rapidly changing the way infrastructure is built and operated, reshaping the way the infrastructure industry operates, bringing major implications for us and our customers.

The Government encourages the use of new technology commissioning the development of a Digital Government Strategy to "set the direction and create the conditions to transform the way government operates in an increasingly complex and fast-changing digital world".

Our Strategic Direction in the 2021-31 Long-Term Plan focusses on using digital transformation and smart new technology to bring about greater organisational proficiency. We aim to replace obsolete technology, along with staff training, redesigning, and updating business processes and organisational structures.

2.8 Liveability

Infrastructure can contribute to the liveability of a place by being planned with people's wellbeing in mind. While infrastructure allows our city to be a city, its contribution can be much wider if more than just function is considered across the asset management lifecycle.

Our Urban Design Strategy guides us in how we implement urban design principles into infrastructure to enhance the outcomes that the infrastructure provides. This includes considering the public realm, diversity, connectivity, character and the environment. This includes a well-planned transport network that supports the right transport mode for the right road.

2.9 Resilience

Our infrastructure is vulnerable, whether these be from

- Asset failure risks;
- Natural hazard risks;
- Biological hazard risks;
- Technological risks;
- Security risks; or
- Economic risks

2.9.1 Asset Failure Risks

Asset failure risks a primary reason and driver for proactive asset management planning. Planned long term maintenance, renewal and inspection programmes for all activity classes are in place at Council. Critical assets have greater levels of scheduled management to minimise the risk of asset failure. Council's Long Term Plan and associated forward works programmes detail the level of investment in asset management across all asset classes to avoid asset failure risk.

2.9.2 Natural Hazards and Adverse Weather Events

Natural hazards can pose a significant risk to infrastructure assets. Resilience of critical assets is particularly important for reliable service delivery. Other risks such as biological hazards, security, technological, security, and economic risks are important considerations when planning for reliable service delivery.

The Long-Term Plan rationalises the achievement of goals according to our priority and budgetary restraints, providing the authoritative forward plan for the management of our infrastructure assets. It also notes that given the 30-year timeframes of the Asset Management Plans there is a high likelihood that one or more weather events will occur during this period, which could result in the reprioritisation of works programmes and budgets.

Earthquakes. Our region encompasses some of the most seismically active parts of New Zealand; we are in a high-risk seismic area with earthquakes being geologically diverse with numerous potential earthquake sources. Earthquakes have the potential to cause damage to infrastructure assets from surface fault rupture, land movement, ground shaking, differential ground settlement, lateral spreading, and liquefaction. A key part of increasing the city's infrastructure resilience is to require all new infrastructure to be built to a standard that will better withstand the effects of seismic events such as liquefaction. The review of the District Plan and our Engineering Standards for Land Development to incorporate requirements for increased resilience will assist to address these matters.

Volcanoes. Mount Ruapehu, Tongariro, and Ngauruhoe are three active volcanoes located approximately 150 km due north of the city, comprising the volcanic plateau of the central North Island. During a significant volcanic eruption of one or more of these volcanoes, the potential exists for an ash cloud to deposit fine sediment across the entire city. Ashfall associated with a moderate eruption could cause ongoing electricity outages caused by flashovers, for the duration of the eruption, particularly in wet conditions, potential ash entry causing clogging of water networks and damage to other critical infrastructure.

Floods. The Manawatū–Whanganui region is a flood risk zone due to its low-lying physical landscape and proximity to the Manawatū and Whanganui Rivers. Even with the river being contained within stop banks, a major river flow event would result in surface flooding of areas of the city, along with increased rainfall associated with a flooding event. Infrastructure assets including roads, bridges, energy supply, water, and sewage services will be substantially disrupted in a flooding event like the 2004 flood event which exceeded the 1 in 100-year level.

Landslides. Landslides are the displacement and downslope movements of parts of a slope, may be triggered by earthquake, rainfall, or a combination of both. They can affect all lifelines that are sited on or below steep slopes. Significant slips can damage, destroy, or prevent access to assets.

Severe storms. A widespread severe storm could impact infrastructure power supply, water supply, wastewater treatment, and telecommunications. The road and electricity network can be affected by flooding, scouring, washouts, slips and debris from high winds and the potential for isolation of communities and disruption to major routes as evident in the 2004 floods. Climate change is expected to intensify adverse weather events.

Increased rainfall. River flooding and ponding may result following a sustained period of high intensity rainfall across the Manawatu River catchment as the city is located along the Mangaone Stream and the Manawatū River. Stormwater drainage to the river relies on gravity discharge for most urban catchments. Increased high intensity rainfall within the city can also cause local inundation and flooding of properties in low lying areas or within overland flow paths.

Other Natural Hazards. The other natural hazards that may affect our assets include lightning and wildfires.

2.9.3 Biological Hazards / Pandemics Risks

Business continuity plans have been revised in response to the Covid 19 pandemic, including revising the definitions of our essential and critical services.

2.9.4 Cyber Security Risks

While still relatively uncommon, there has been the odd occasion overseas where treatment plants have been hacked and chemical dosing systems tampered with. Within New Zealand, a cyber-attack by an unknown entity on the Waikato District Health Board in 2021 brought down all IT systems and phone lines. In 2022 a Palmerston North High School was also attacked. With the increasing reliance on digitised infrastructure and associated risk comes an increased need to invest in cyber security systems and educate and train staff.

2.9.5 Security Risks

Protective Security is about keeping our facilities, people and assets safe from both internal and external threats. It includes physical deterrence, detection of threats, delaying potential threats, responding to and recovering from security incidents.

Our Protective Security Policy provides clarity and direction on procedures for protective security and enables a security culture change within our organisation.

As we implement the policy, we expect it will reduce the likelihood of unauthorised people accessing our premises, information, or assets. It will maintain the trust and confidence of the people and organisations we serve or work with, deliver services without disruption in the event of a heightened threat level or disaster and meet our obligations under the Health and Safety at Work Act 2015 and the Privacy Act 2020.

2.9.6 Economic Risks

Economic risks can constrain our financial envelop and result in delays in lower priority infrastructure projects or can have an impact on supply chains and the cost of services due to inflation. The current affordability challenges are anticipated to have impacts for the next few years.

3 Scope of Asset Management

3.1 Scope of Services and Assets Covered by this Plan

The Infrastructure Unit delivers some $100 million of Activities (services) to our communities and manages some **$2.1 billion** of infrastructure assets. The Activities within the scope of our Strategic Asset Management Plan include:

- Arts [3]
- Parks and Reserves
- Property
- Resource Recovery (Recycling services, Rubbish bag collection and disposal)
- Transport (Active Transport, Roading)
- Waters (Drinking Water, Stormwater, Wastewater)

The following may be referenced in Activity Management Plans where there are dependencies but are out of scope of our Asset Management practice:

- Council owned furniture,
- Information and communication technology,
- Mobile plant and equipment,
- Library collections,
- Leases and assets owned by third parties.

[3] New in 2022/23

Figure 3-1 shows the replacement value of assets for each of the Activities.

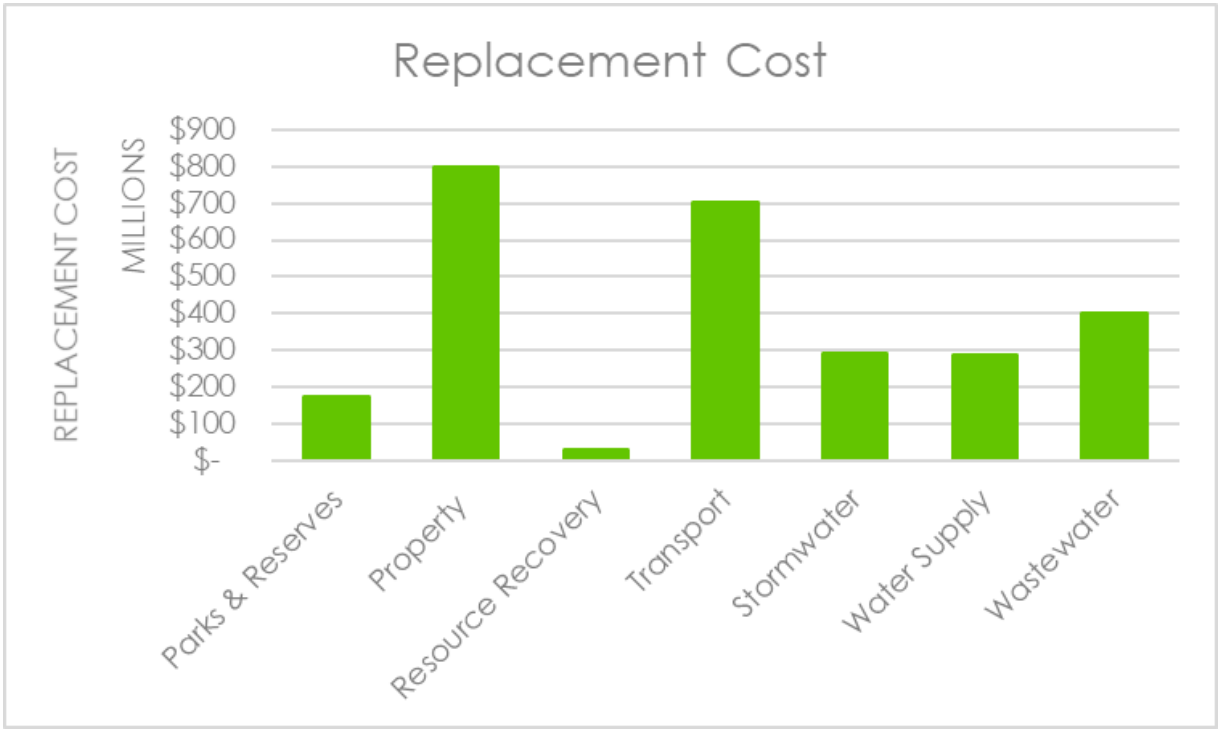


Figure 3-1: Replacement Value of Assets Covered by the SAMP

3.2 Overview of the Asset Management System

3.2.1 Asset Management Framework

An Asset Management System is defined as "the encompassing set of people, processes, tools, plans and other resources involved in the delivery of Asset Management."

We have adopted the Asset Management framework contained within the International Infrastructure Management Manual (IIMM) 2020 to define the scope of our Asset Management System since it:

- Describes elements of the system that **Enable Asset Management** (discussed further in Section 3.3 below);
- Establishes a process for **Understanding our Requirements** to inform our asset **Lifecycle Planning** (see Section 5 Asset Management Processes for further details); and
- Provides a consistent framework for assessing Asset Management maturity for performance accountability (see Section 6.3 Asset Management Maturity Assessments for further details).

Figure 3-2 shows the 16 elements of the IIMM Asset Management framework that we have adopted (noting that we have incorporated Lifecycle Decision Techniques into the Strategic Asset Management Planning.

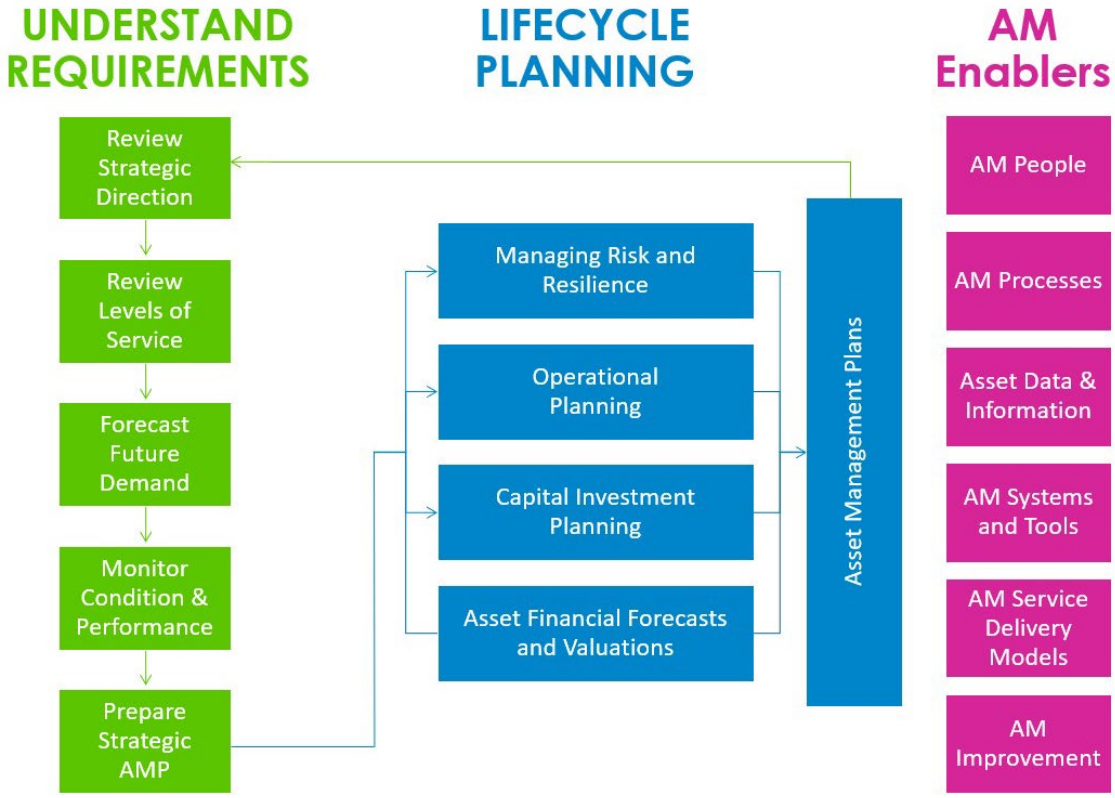


Figure 3-2: IIMM Asset Management Framework

3.3 Enabling Asset Management

Each of the Asset Management Enablers are discussed below, including an overview of how advanced our practice is (sourced from the 2022 Asset Management Maturity Assessment), and improvement opportunities.

3.3.1 Asset Management Leadership

One of the most important components of the AM system is the 'people' that bring all the other components together and integrate the system into our business. Our Asset Management leadership is a strength that we can leverage to continue to focus on asset management, staff training and experience.

The following groups demonstrate leadership and commitment by taking an active role in engaging, promoting, directing, and supporting, communicating, and monitoring, and improving elements in the Asset Management System.

Elected Members

- Represent the interests of the community, both current and future, to the rest of the organisation. For Asset Management, this has a focus on levels of service and affordability.
- Sets our Strategic Direction which includes the vision, goals, strategies, and plans.
- Provides governance so that assets are carefully and responsibly managed on behalf of the community.
- Provides direction, review and accountability through the Finance and Audit Committee (6 monthly reporting).

Executive Leadership Team

- Demonstrates commitment to Asset Management functions and creates a work culture that is successful and motivated.
- Provides appropriate direction for Asset Management ensuring alignment to organisational outcomes and whole of Council commitment resourcing.
- Mandates and supports the Asset Management Steering Group.
- Sets the organisational structure and oversight of the Asset Management roles and responsibilities.

Asset Management Collaboration Group (To Be Established)

- Oversees development of asset management documentation (Asset Management Policy, Strategies, and Plans).
- Advocates for improvements to the adequacy of the Asset Management System.
- Drives continual improvement.
- Provides governance and oversight of the asset management function.

Asset Planning Division

- Coordinates asset management planning across the organisation.
- Ensures alignment between our Strategic Direction and Asset Management Planning.
- Responsible for development of the Strategic Asset Management Plan, Asset Management Plans, and the Asset Management Improvement Plan.
- Assists with the development of the Infrastructure Strategy.

Council Staff

- All staff support a whole of organisation approach to asset management.
- Service Managers are responsible for the day-to-day lifecycle management of assets including the implementation of SAMP, AMP and AMIP levels of service and improvements.
- Service Delivery teams and Project teams regularly interface with Service Managers and Asset Planning staff.

Our improvement focus is on:

- Complete the recruitment process to fill vacancies; and
- Continue to build asset management competencies through industry training, conference participation, mentoring and job-related experience.

3.3.2 Asset Management Processes

These are the set of procedures and interactions within an organisation that are needed to achieve its objectives. Organisations that follow formalised processes can improve effectiveness and efficiency, increase customer satisfaction, and better manage risk. A documented set of procedures provides an organisation-wide "road map" to follow to deliver quality, consistent services, and achieve organisational objectives. Standardised processes can also be used to aid business continuity in the event of emergencies or staff absence. Management processes should be subject to continual improvement to ensure that organisational benefits are maximised.

Our processes are generally not well documented, which makes us more reliant on experienced staff. While Process Manager (formerly Promapp) is our tool for business process documentation, some activities have not progressed documentation of core processes. There has been progress in the Parks activity process mapping, and there has also been progress in mapping overall asset data processes, such as valuation, values for insurance and as-builts.

Our improvement focus is on:

- Complete mapping of AM processes in Process Manager (formerly Promapp)

3.3.3 Asset Management Data and Information

Information is key to understanding and managing the assets. Key information such as asset value, age and condition are basic information requirements that enable us to undertake AM planning. Information requirements for each asset activity vary depending on the asset components and the level of management required. Elements for consideration include the hierarchy, structure, and universal numbering systems required for tracking. Data confidence and completeness levels are also basic information requirements enabling Asset Managers to understand the accuracy of outcomes that can be achieved when using data.

Our approach to collecting and managing asset data developed over many years and has been relatively consistent for some time. The way things are done currently reflects the experience of the staff who maintain the data and the operational needs of the staff who rely on the data.

Basic data. Generally, the basic attribute information for our assets (type, location, quantity, size, age) is of good quality. The assets that live outside of buildings (roads, pipes, playgrounds, etc) are defined spatially and can be mapped. Buildings and the assets inside them, including treatment assets, are not defined spatially. The Roading Team have completed an improvement programme increasing the quality of spatial information.

Maintenance Data. We collect maintenance data against assets where this is available. The Three Waters, Transport activities have mobile apps as part of asset data management systems IPS and RAMM, respectively. The other activities generally use paper-based systems to capture work in the field and communicate it back to the Council office. The Property activity record maintenance data using a separate database (Work Track) from the asset register (SPM).

As Built Information. The requirements for as-built information for new assets is generally understood across the relevant parts of Council (development engineers, project delivery, operations) but information supply is variable in all respects (format, quality, timeliness).

Criticality. Criticality relates to the importance of the asset or asset component in relation to the delivery of the service. Some work has been done to define asset criticality for various activities, but this has yet to be applied. Other than this, we have not yet developed an approach for defining and recording asset criticality information. For roading, Waka Kotahi's One Network Road Classification can be used as a proxy for criticality.

Metadata. Currently, we are awaiting on decisions regarding national metadata standards for infrastructure asset data. We anticipate being a slow follower, adopting the standards as they become common practice.

There has been improvement in the asset data for Property and Stormwater. Resource Recovery asset data has not yet improved however initiatives are in place to improve the MRF asset data.

There are still some gaps especially in underground asset data in Property and Parks in particular. Asset criticality is being assessed and will need to be captured into systems. Criticality is not currently driving the activity focus, asset management planning, or decision making.

Our improvement focus is on:

- Review asset information needs for each activity, conducting a gap analysis, and implementing a data improvement project; and
- Now that the criticality framework has been competed, populate the asset criticality field for each asset in the asset information systems. This will need to be regularly updated.
- Improve our As-built management process to ensure that all designs are contained within the correct system. Provide a Vault management service to internal and external design management.
- Adopt the ONF classification and DLOS to create consistent data sets for measurement.

3.3.4 Asset Management Systems, Tools, and Interfaces with Other Systems

An asset management system is the collection of processes, data, software and hardware and people that help us manage our assets. Figure 3-3 shows how the Asset Management System interacts with other management systems.

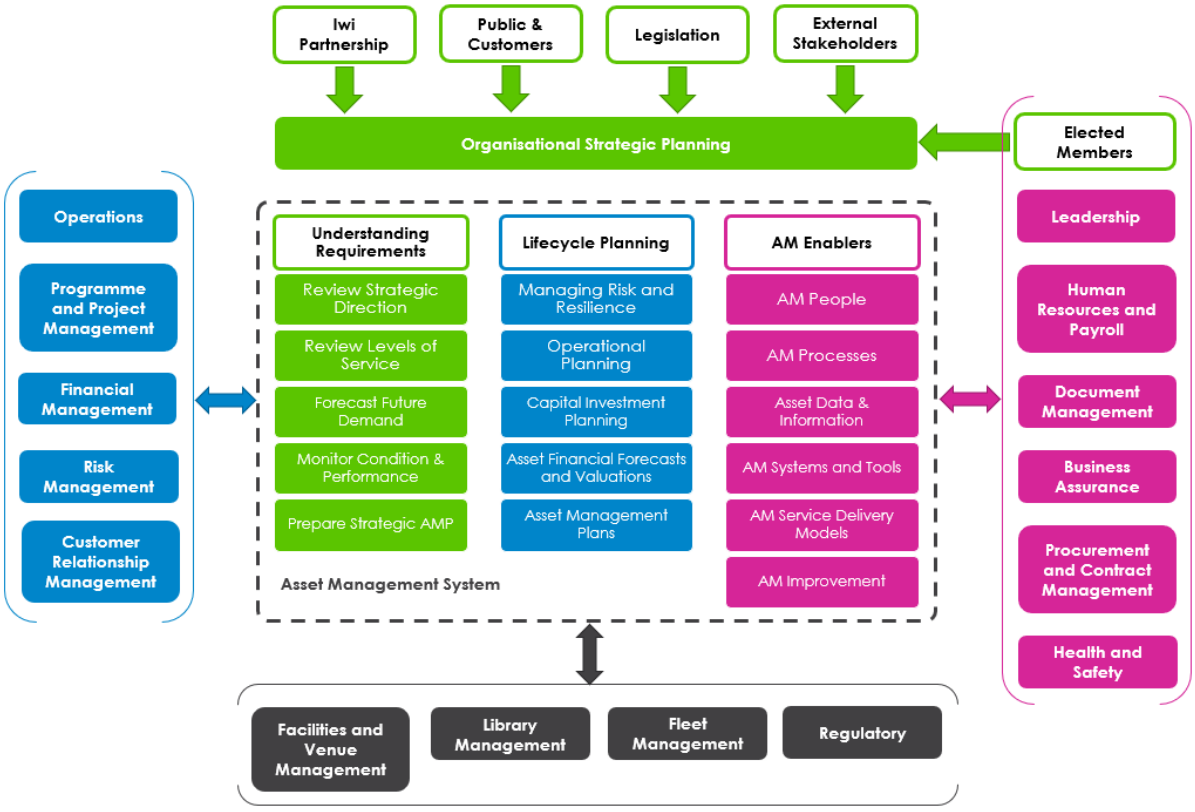


Figure 3-3: Management Systems and Asset Management

Asset information systems are critical to effective asset management and an organisation achieving its asset management objectives. Information Systems provide asset and service managers with tools that enable them to conduct the degree of asset analysis required for the size and complexity of the assets, and to advance the maturity of asset management practices.

Our improvement focus is on specific recommendations for each Activity. For further details on these planned improvements, refer to the relevant Asset Management Plan.

3.3.5 Asset Management Service Delivery Models

We have a range of options available to deliver services associated with assets and asset management. Service delivery options range from full in-house delivery of all asset activities by our staff, to outsourcing part, or all asset services and functions. Determining which service delivery model is appropriate requires the Asset Manager to consider the cost, benefits and risks associated with the various service delivery options.

In 2021 a Contract Management centre of excellence was created to improve the management of contracts and is being progressively resourced. Since that time arrangements with many suppliers have become more formal. In 2022 an external design panel was established which provides us delivery of infrastructure design management.

Our improvement focus is on:

- Continuing to formalise supplier arrangements.
- Further developing inhouse contract management system capabilities.
- Further refining and standardising project management processes, including the design process.

3.3.6 Asset Management Improvements

Auditing and improvement planning are important asset management practices that assist Asset Managers to develop and implement continuous improvement programmes. Being responsive to change and improvement enables Local Authorities to effectively deliver their asset management objectives. Required improvements to asset management practices can occur for several reasons including, innovation and new technology, changes in governance and regulation, and meeting customer expectations.

Asset management maturity is often used as an assessment tool to determine an organisation's asset management practices are appropriate for the level of risk it faces. Organisations set appropriate maturity target scores and then assess current maturity practice. A range of improvement projects aim to reduce the gap between the current maturity score and the target score over time.

Our improvement focus is on:

- Continual improvement through establishing a process to capture and prioritise new improvement items from various audits and sources; and
- Estimating the impact of an improvement item in raising our maturity level.

4 Our Approach to Asset Management

4.1 Our Strategic Asset Management Approach

We are in the process of formalising our strategic Asset Management approach by developing an Asset Management Policy and Objectives that:

- Considers how we are progressing towards achieving our organisational Strategic Direction (as reported in section 2.2);
- Guides our response to external drivers (see section 1);
- Incorporates our understanding of customer's needs and expectations (see section 6.1); and
- Ensures our assets remain fit for purpose over the long-term (see section 6.2)

4.2 Draft Asset Management Policy

An Asset Management Policy has been drafted in order to provide best practice Asset Management guidance to staff so that asset-based services provide ongoing support to the social, economic, environmental, and cultural wellbeing of our community. The policy will outline expectations relating to Asset Management being an organisational wide practice requiring resourcing and commitment to delivery and will contribute to all our goals as our assets are tools to achieve the positive outcomes being sought by sound Asset Management practice.

It is expected that the AM policy will formalise the following AM principles:

- Asset management planning aligns with Council's Strategic Direction
- Asset management is an organisation wide practice
- Asset management maturity levels are appropriate to the assets, services and risks we manage
- Asset management informs decisions at all stages of the asset life cycle

4.3 Our Asset Management Aspirations and Objectives

Our aspiration is to provide infrastructure that meets the needs and demands of our community now and in the future.

Table 5 contains our Objectives as they relate to our Asset Management Principles. It is anticipated that these objectives will be revised as our Asset Management Maturity improves and our focus shifts.

Table 5: Asset Management Principles and Objectives

Principles	Objectives
Asset management planning aligns with Council's Strategic Direction	We understand the link between asset management and Council's Strategic Direction
	We manage our asset-based services to achieve Council's Strategic Direction
	The foundational inputs into the Infrastructure Strategy and Long Term Plan are based on asset management planning
	Investment is prioritised to align with Council's Strategic Direction
Asset management is an organisation wide practice	Our Asset Planning Division and Asset Management Collaboration Group provide leadership and coordination of asset management practice across the Council
	There is a culture of good asset management practices and processes being used consistently across Council
	Our staff know how their roles relate to asset management practices and objectives
	We prepare asset management plans that are accessible and useful in operational decision making
Asset management maturity levels are appropriate to the assets, services and risks we manage	We ensure that our asset management maturity levels are clearly defined, and regularly reviewed to maintain currency
	We develop and implement an Asset Management Improvement Plan to close identified asset management maturity gaps over time
	We ensure that the asset management capability of our people is developed to match the needs of the organization
Asset management informs decisions at all stages of the asset life cycle	We make decisions based on evaluation of all available options.
	When we evaluate options, we consider the trade-off between risk, cost, and service levels
	We have the right information available at the right time to make the right decisions.

5 Asset Management Processes

Asset Management processes describe the range of processes and techniques that an organisation undertakes to manage its assets. Depending on the size and scale of assets involved asset management can involve a range of complex and integrated tasks.

Our core Asset Management processes are centred around our Asset Management Framework (see Figure 3-2, Section 3.2.1 above) and are outlined in the following sections.

Links to documented processes in Process Manager (formerly Promapp) are provided where available.

5.1 Align Asset Management to the Our Strategic Direction

Asset management operationalises our aspirations for the future, strategic business objectives and desired community outcomes. In AM planning this is particularly about how assets can be developed and managed to link directly to our Strategic Direction. This high-level analysis involves:

- Reviewing our strategic goals, priorities, and actions (see section 2.2);
- Identifying external drivers that effect our activities (see sections 2.1);
- Understanding our customer needs and expectations (see section 6.1);
- Analysing the asset portfolio (see section 6.2); and
- Determining our response to these by way of developing a formal Asset Management Policy with objectives.

Our improvement focus is on:

- Ensuring our AM Policy, including AM objectives, is aligned to our Strategic Objectives.

5.2 Review Levels of Service

Our Levels of Service framework is fundamental to our asset management practice as it is crucial to achieving our organizational objectives where we rely on infrastructure to deliver services.

Our Levels of Service are driven by our strategic direction, external drivers and customer expectations. However, outside of the LTP consultation process there has not been a coordinated cross-activity levels of service engagement with the community, since 2005. We monitor the appropriateness of current levels of service through customer enquiries and the Residents' Survey. These have shown general satisfaction with the levels of service. In order to determine the appropriate level of service for our customers we need to develop and assess service options to balance the trade-off between risks, costs and benefits.

Our Asset Management Plans explain the levels of service, how each activity is performing against these, and the intended actions to close the gaps. However, as the current customer performance measures require further refinement, some preliminary work has been carried out by staff to draft performance measures for a wider range of service attributes.

Our improvement focus is on:

- Review the levels of service and strategic objectives for each activity through customer engagement prior to the next LTP.
- Conduct informed Level of Service workshops with Elected Members. Present options aligned with organisational strategies and include discussion of costs and risks against different service levels.

5.3 Forecast Future Demand

Forecasting future demand considers how future changes may impact on the demand for our assets and services. Once the implications of future changes are understood a plan about how best to meet the level of demand, or not, can be made. Understanding the key drivers of demand is the first step in forecasting future demand.

The Strategy and Planning Unit prepares forecast information and has established quarterly infrastructure planning meetings with the Infrastructure Unit to better inform policy development, growth management planning, and asset creation, augmentation, or disposal.

The **City Growth Plan** provides strategic direction to addressing growth and is intended to provide infrastructure to enable growth and a transport system that links people and opportunities. The Plan reflects our goal to provide smart infrastructure to support growth in a timely way and assist with the goal of an innovative and growing city. We also have an **Industrial Growth Strategy** and **Commercial Land Use Strategy** that informs the market's investment decisions regarding where growth and supporting infrastructure will occur.

Our improvement focus is on:

- Supporting individual activities to improve their future demand forecasting practices.
- Assess and plan for the impact of growth on our networks and services, particularly transport, stormwater and resource recovery

5.4 Monitor Asset Condition and Performance

We have an overarching Asset Condition Assessment and Performance Monitoring policy statement that outlines our approach to assessing the physical condition and monitoring the performance of all assets. Monitoring the performance of assets provide asset managers with several benefits:

- Enables us to determine actual delivery of service against agreed LOS.
- Identifies areas for improvement.
- Provides evidence to support management decisions.
- Used to predict future maintenance, renewal, and capital requirements.
- Enables corrective and timely intervention in a planned manner.

Condition information provides insight into where an asset is in its overall lifecycle. Understanding where an asset is in its lifecycle enables assets managers to identify the interventions required to optimise the lifecycle performance of an asset.

With the completion of our Condition Assessment and Performance Monitoring Policy and Criticality Framework our improvement focus is now on:

- Align processes for inspection frequency, response time and interventions to the criticality of assets, and embed into work practices.
- Develop processes for contractors and inhouse staff to collect and update static condition information in conjunction with operational and maintenance activities.

5.5 Strategic Asset Management Planning / Decision Making Processes

Different decision-making techniques will be applied throughout the lifecycle of an asset. The lifecycle of an asset starts when a need is identified. Options to address the need are identified and evaluated, considering all the costs and benefits associated with each option. Costs and benefits are incurred by an asset from the time planning to meet the need begins, through the design, creation, operation, and maintenance of the asset until its eventual disposal. It is important that asset managers make appropriate decisions at each stage of an asset's lifecycle, using the most appropriate decision making technique, to ensure the asset is well managed, and that organisational benefits can be realised throughout its lifecycle.

PNCC has a range of regulations and democratic processes that guide formal decision-making at the governance level. These processes are standardised and applicable to all proposals requiring a governance level decision.

Obtaining approval to include capital projects in the Long-Term Plan is of key importance to Asset Managers. The process to consider capital projects includes Elected Members using a prioritisation framework to determine the relative importance of all projects. This helps to ensure an affordable, strategic, and achievable list of projects in the Plan. On completion of the ranking process there is an opportunity for staff to provide advice to Elected Members on the impacts and risks of unfunded programmes before the Long Term Plan is finalised.

Council does not have a standard decision-making process for significant projects or complex problems. Rather than a set of prescribed processes staff use professional judgement and accepted industry best practice to define the general methodology that will be used to understand the problem and define the preferred way forward. Any selected methodology must; however, meet our Significance and Engagement Policy requirements and Consultation Guidelines.

Staff are delegated to make operational level decisions on a frequent basis.

Our improvement focus is on:

- Developing a standard business case for each programme, which will identify strategic alignment, demonstrate asset lifecycle planning, highlight risks and risk management, and clearly articulate programme benefits and benefit realisation measures. This should be structured to allow Elected Members to make informed decisions when prioritising LTP programmes.

5.6 Managing Risk and Resilience

5.6.1 Activity Risk Management

Risk Management has improved with the first round of a well formulated risk register for the key processes undertaken by our Activities. Although the process can be undertaken by more than one person, it is currently driven by the Activity Managers and the Risk Management Advisor and is not yet embedded in Activity level business processes.

5.6.2 Asset Criticality and Risk Information

During 2022/2023 the Asset Planning Division delivered an improvement project to apply the new Risk Management Framework consistently across the different asset types. Through engagement with key staff, guidance and business rules were produced in order to classify the criticality rating of assets. The process of embedding this into operations has begun but needs to be extended to all Activities.

Following completion of the asset criticality framework, the next improvement steps are to:

- Ensure the criticality rating of each asset is captured in our AM Information Systems; and
- Assess the risk rating for each asset using performance and risk attribute data.
- Integrate portfolio risks into SAP.
- A risk management platform to be considered as our organisational approach matures, the implementation of a platform will contribute to our maturity.

5.6.3 Incorporation of Risk into Programme Prioritisation

The 2022 AMMA found that our Elected Members are more aware of the risk narrative and have been presented with more information to support decision making during the LTP planning process. This work is incorporated into the Strategy Plans for each activity area. Establishment of a formalised data driven programme prioritisation process that factors in risk is an improvement item. Optioneering risk in investment options through the business case process is also an improvement item.

5.6.4 Organisational Corporate Risk Management Policy and Framework

Our Risk Policy and Risk Management Framework (internal links) set out the basis for managing corporate risk across the organisation to achieve our strategic goals and objectives. In 2021 our Risk Management Framework was refreshed using guidance laid down in ISO 31000:2018 and is undergoing its first triennial review in 2023 to incorporate recent findings by the Business Assurance Division in consultation with staff. Table 6 contains a description of the risk types contained in the Framework.

Table 6: Corporate Risk Management Categories

Risk Type	Description
Financial	Generally related to risks to money and assets.
Legal/Compliance	The risk that the Organisation is deemed to have violated a law or regulation or risk or loss because of regulatory or legal actions.
Environmental	Adverse effects on living organisms and/or the environment.
Health, Safety & Wellbeing	The potential for harm to come to people. Includes physical security.
Reputational	Potential for a major adverse event that threatens the Organisation's reputation. It is typically related to financial mismanagement, governance, information security, violation of laws or environmental practices.
Service Delivery	Failure of a process, such as a human error, can give rise to the non-delivery of service, activity, or project.

Risk Type	Description
Performance and Capability	Lack of people, capital, or inappropriately trained people. It also refers to higher than normal staff turnover.
Strategic	Risks that arise from the fundamental decisions concerning the Organisation's objectives and goals. Essentially, strategic risks are the risks of failing to achieve these objectives and goals.
Cultural (Including spiritual matters)	The risks that arise because of monocultural local government systems not responding to the diverse communities they serve. The failure to uphold obligations relating to the Treaty of Waitangi partnership and relationship with tangata whenua.

5.6.5 Mitigating Risk and Creating Resilience

Resilience is "the ability to anticipate and resist the effects of a disruptive event, minimise adverse impacts, respond effectively post-event, maintain or recover functionality, and adapt in a way that allows for learning and thriving" (National Disaster Resilience Strategy).

Our infrastructure is vulnerable, from a number of risks, our approaches to create resilience are summarised in Table 7 below.

Table 7: Our responses to risks that create resilience

Risk Type	Our Approach
Asset failure risks	Proactive and planned long term maintenance, renewal and inspection programmes for all activity classes are in place. Critical assets have greater levels of scheduled management to minimise the risk of asset failure. Examining the resilience of our networks is an area for improvement.
Natural hazard/Adverse Weather risks	Evaluation of Critical Assets when planning for reliable service delivery. Planning for resilience improvements for high likelihood of natural weather events within Long Term Plan e.g. resilience in roads, bridges, energy supply, water, stormwater and sewage services. Increasing District Plan and Engineering Standards requirements for new infrastructure to be built to standard which will better withstand the effects of seismic and weather events. We are part of the Manawatū-Whanganui Civil Defence Emergency Management (MWCDEM) Group. The Civil Defence Emergency Management Act requires the Group, in partnership with emergency services, lifeline utilities, and others to prepare an Emergency Response Plan.

Risk Type	Our Approach
Biological hazard risks	Business continuity plans have been revised in response to the Covid 19 pandemic, including revising the definitions of our essential and critical services.
Technological risks	Increased investment in cyber security systems at Council across digitised infrastructure systems, and education and training of staff.
Security risks	The Protective Security Policy details how we keep facilities, people and assets safe from both internal and external threats. It includes physical deterrence, detection of threats, delaying potential threats, responding to and recovering from security incidents.
Economic risks	Prudent financial planning to reduce impacts of external economic conditions. Preparation of financial forward works and capital programmes which consider economic sensitivity analysis and scenario testing.

Alongside this Council takes a managed approach to risk mitigation through various insurance options for assets in the Council. This approach assesses several attributes to the risk profiles of asset classes, which includes economic and community value, future needs and intention of use of the asset as well as the affordability of insurance cover.

Insurance strategies include self-insurance (i.e. no insurance) premised on the basis of cost of insurance premiums exceed enterprise value, ability/capacity to borrow/funds available to meet replacement, and potential central Government provider of last resort. Cover will be categorised for limited indemnity value as well as full replacement value along with differing amounts for deductibles in balance with the cost of insurance cover. Insurance markets capacity will also dictate the degree of cover available/taken. Cover is also taken with the Local Authority Protection Programme Disaster Fund.

5.7 Operational Planning

Operational planning involves the preparation undertaken to keep existing assets performing at optimal service levels. Good planning will ensure that assets can deliver the appropriate level of service to the community and meet our strategic objectives. There are two broad categories of operational planning:

- Asset operation – work or expenditure having no effect on asset condition, but which is necessary to keep the service functioning such as the provision of energy, staff and consumable materials.
- Asset maintenance –work that is undertaken on an asset to ensure that it remains at optimal service level throughout its useful life. This can be planned and programmed maintenance e.g. regular servicing of pumps or unplanned/reactive maintenance e.g., remedying blockages or repairing third-party damage.

The high-level elements that make up comprehensive operational planning include:

- Translating strategic objectives into operational interventions.
- Developing programmes to deliver operational interventions.
- Documenting operating procedures and processes.
- Planning for disruption, including incident and emergency management.
- Workflow mapping confirming organisational roles and requirements to support the above operations.
- Incorporating operational learnings into improvement plans.

Since the merger of operations, planning and delivery into a single Infrastructure Unit there has been no consolidation of operational plans. While internal service level agreements have been disestablished, these documents provide useful information to feed into new operational plans. However, these plans have not yet been aligned with Levels of Service.

Operational budgets are typically developed by extrapolating past budgets and are overdue for a bottom up approach that identifies the tasks and resources required to deliver stated Levels of Service and strategic outcomes.

Significant effort has been put into revising Business Continuity Plans (BCP). The purpose of a BCP is to ensure we can reduce the impact of any disruption on our core services. Our priorities in any disruption are to:

- Ensure the health, safety and wellbeing of staff, contractors and community;
- Reduce the impact (and costs) of any event; and
- Resume core functions effectively and efficiently.

A BCP has been developed for each Division and grouped by Unit. These are rolled up into a consolidated BCP for the Controller that clearly prioritises the sequence of business functions that need to be stood up based on the criticality of the service and maximum tolerable downtime.

The 2022 Asset Management Maturity Assessment Report identified the following improvement for Operational Planning:

- Each of the activities needs to develop processes to track proactive maintenance schedules.
- Each of the activities needs to document or develop Operational Plans (bottom up) which enable assets to meet required Levels of Service and deliver on Council Strategies

5.8 Capital Investment Planning

Planning for capital investment involves considering growth and demand impacts, changing levels of service (due to legislation or other performance requirements), asset deterioration or a reduction in service delivery or potential that may require changes to the asset portfolio.

Typically, most activities will need budgets for capital investment to respond to each of the drivers identified in this SAMP.

Renewal planning is largely based on the anticipated remaining useful life of assets. Wastewater is the exception, they have begun using risk profiles derived from the new criticality ratings to prioritise asset condition assessments and renewal planning.

Improved risk-based interventions arising from the development of comprehensive Operational Plans will enable PNCC to optimise renewal planning.

The 2022 Asset Management Maturity Assessment Report identified the following potential improvements for Capital Investment Planning:

- Define the policy thresholds and management processes for capital projects during the process from inception to delivery.
- Establish a formalised decision-making process to prioritise projects and programmes across Council, which aligns with strategies and is supported by reliable data.
- Develop a business case process to ensure cases become more detailed as they progress through the project investigation, feasibility, and detailed design stages.

5.9 Financial Forecasts and Valuations

Financial planning for assets involves the development of plans that identify the funding requirements of assets and services throughout their lifecycle. Asset managers and financial managers work closely together to ensure that budgets are set aside for asset acquisition, installation, operation, maintenance, refurbishment, and disposal. Organisation wide financial plans include actions to generate, spend and invest future income, raise, and repay borrowing, and ensure overall financially stability. Following Accounting Standards, it supports auditing processes.

Asset portfolio valuations provide us with important information to assist with financial planning. Valuations provide an understanding of the worth of the asset portfolio at a certain point in time, and how the assets have depreciated over their useful life. Asset managers use valuation data to fairly allocate costs over the life of the assets and to plan for asset renewal. The valuation process considers the following for each asset:

- The useful remaining life (URL).
- The replacement cost.
- The current value (also referred to as the depreciated value).
- The rate of depreciation.
- The valuation may also provide optimised values, for example, for assets that are oversized and will be replaced with smaller assets.

Different asset portfolios are valued differently as set out in below.

Table 8: Valuation Methodologies for each Activity

Activity	Valuation Methodologies
Roading	The assets are valued using the current contract rates. This means that changes in the roading contract impact the valuation directly. The Fitzherbert Ave Bridge and the new Manawatu River Cycleway bridge are the only large site-based assets.
Property	The valuation is undertaken by an external provider. Unlike most other council assets, which do not have a ready resale market, property assets are typically valued based on fair market value for the whole site.
Parks	The valuation is undertaken by an external provider. Land assets, which are much of what the Parks and Reserves team manage, are not part of the fixed asset register. However, improvements, such as drainage and playgrounds, are.
Three Waters	Where applicable, construction contract information from the last three years is used. In cases where this information is not available the first principles approach is used to determine the rates. These historical rates are compared with industry rates (from suppliers and QV cost builder) and sanity checked against inflation indexes before a final rate is chosen. A consultant is used in a peer review capacity but brought in early to agree the methodology/processes at the start. Unit rates allow for diameter, depth (inferred from invert depths), and cover.
Resource Recovery	Similar approach to the Three Waters valuation. Other than the MRF site, the bulk of the assets are mobile plant.

As-Built capture processes need improving in order to reduce the risk of undervaluing our assets. Correctly capturing and recording asset information is important for accuracy and efficiency of the valuation process. Currently a significant amount of staff time is used to capture and update asset information rather than being able to rely upon the completion as-built information captured at the time of construction completion.

The 2022 Asset Management Maturity Assessment Report identified the following improvement for Financial Forecast and Valuations:

- Review the validity of the financial policy of rating for three year rolling renewals versus rating for long term depreciation, to ensure adequate reserves are built up over time.
- Review and improve the process of loading consequential opex budgets into the financial system.
- Review the asset capitalisation process to ensure that values align between the Financial and Asset Information databases.

5.10 Asset Management Plans

Our Asset Management Plans demonstrate how our infrastructure assets are being developed and managed to deliver services to the community in a sustainable and cost-effective way. They include information about our activities, assets, levels of service, and the cost of providing the service. They are key inputs into the 2024-34 Long-Term Plan.

The key objective of the Asset Management Plans is to ensure that assets are managed to support our Strategic Direction. That is, to ensure that assets are in place to provide the right level of service at the right time. Good understanding of our assets enables the correct decision-making techniques to be applied to identify the most cost effective and efficient options for responding to changes in performance or demand. Options could include additional capital investment, demand management, or changes to the level of service.

The Asset Management Plans require a whole of life approach to be taken when making asset management decisions, so future scenarios are considered when making asset decisions today. Giving effect to iwi aspirations for our city and taking a sustainable view, is therefore an underlying principle of asset management, rather than a factor only considered when significant decisions are made. The development and implementation of this Strategic Asset Management Plan demonstrates our commitment to the sustainable management of assets. The asset management plans describe how sustainability is considered at each stage of the asset lifecycle.

Determining demand for different services is critical for Asset Management Planning. Changes in population and household numbers can increase, or decrease, pressure on infrastructure assets and services. For example, it is expected that the demand for stormwater drainage services will increase in line with household growth. When Asset Management Planning, we use household growth projections to estimate the amount of new housing that needs to be built, the amount of infrastructure capacity required to service new and existing housing, and continually evaluate the future demands for services and how these might be met. Three-yearly review of the Asset Management Plans and the Long Term Plan minimises the risk of development and expenditure not matching growth requirements.

Annual processes to update the AMPs have been put in place in order to capture major changes and improvements as they arise. The new format of the Executive summaries is considered a successful improvement as it has proved useful for decision makers at LTP time and as an internal and external education tool. There remain opportunities to improve the usefulness of the AMP's by making them more accessible and engaging in the way that the information in them is communicated. The use of digital story-telling methods should be investigated.

The 2022 Asset Management Maturity Assessment Report identified the following improvement for Asset Management Plans:

- Complete a review of the form and function of asset management plans (AMPs) to enable better engagement and make AMPs more dynamic, interactive, and focused to meet business needs.

6 Current, Forecast, and Desired Performance

Our Performance Framework defines three Performance Measures to track the performance of our assets: Current, Forecast, and Desired.

6.1 Level of Service Performance

6.1.1 Current Agreed Levels of Service

Our Long-Term Plan provides specific agreed level of service statements for each of the activities. The LTP, has additional levels of services aligned to our strategies and goals, which may impact on the delivery of assets and asset related services.

Parks and Reserves

Levels of Service	Measure of Success	Target
Provide a wide range of accessible and well-maintained play, active recreation, and sports facilities to increase levels of physical activity and participation in sport and active recreation and meet a diverse range of local communities. (Note: these facilities are city reserves, suburb reserves, local reserves, sports fields, the Central Energy Trust Arena, walkways and shared paths, and swimming pools).	Increase use of parks, sport fields, and playgrounds.	Narrative measure outlining Parks Check Survey results.
	Increase in use of aquatic facilities.	Usage numbers at Lido, Freyberg and Ashhurst Pools.
	Increase in use of Central Energy Trust Arena for community sport and active recreation.	Narrative measure outlining number of community events and hours.
	Increase in satisfaction of Council's sport and recreation facilities.	Narrative measure outlining trends in user and resident feedback and surveys.
	Council works in partnership with external organisations.	Narrative measure outlining partnership initiatives designed to increase participation and their outcomes.
Work in partnership with external recreation organisations, and facility providers, to help increase levels of participation in play, active recreation and sport.	Council works in partnership with external organisations	Narrative measure outlining partnership initiatives designed to increase participation and their outcomes.

Transport

Levels of Service	Measure of Success	Target
Provide an integrated multimodal transport network that connects people and goods with destinations in a safe, efficient, and sustainable manner and evolves to meet new transport demands with less reliance on private motor-vehicles.	The change in the number of fatal and serious injury crashes from the previous year on the city's local road network.	Fewer than the previous year. Narrative measure outlining long-term accident trends and causes.
	Average quality of ride on the sealed local road network, measured by smooth travel exposure.	Greater than 80%.
	The percentage of the sealed local road network that is resurfaced	More than 3.5%.
	The percentage of footpaths that meet Council standard.	Greater than 93% rated 3 or above
	Percentage of requests for service relating to roads and footpaths responded to (with at least an initial response) within three working days.	Greater than 95% of safety and critical requests.

Property[4]

Levels of Service	Measure of Success	Target
Provide public toilets throughout the city, to a standard that meets public expectations	Accessible and gender-neutral toilets are provided throughout the city, and especially in places where there is the most community activity.	Narrative measure outlining number, type and location of toilets, plus annual satisfaction survey res
Support community centre management groups to provide community centres that are responsive to the needs of their communities.	Community centres are well used.	Narrative measure outlining use of centres and range of use with them).
Provide cemetery services that are responsive to community needs.	Visitors to cemeteries are satisfied with the services provided.	Narrative measure outlining user and residents survey trends.
Provide warm, safe, and accessible social housing for older people, people with disabilities, and other people on low incomes who experience barriers to renting in the private market.	Council's social housing tenants are satisfied with the social housing service they receive	Narrative measure outlining survey results and tenant feedback.
	Council's social housing is warm and safe, as shown by compliance with the Otago Medical School He Kainga Ora Rental Housing Warrant of Fitness Standard. New Council housing is accessible (as shown by Lifemark 4 Star Design Standard accreditation)	Standards met.

[4] The Property Division is responsible for the level of service related to the physical building rather than the service delivered from within the building

Resource Recovery

Levels of Service	Measure of Success	Target
Ensure the city's solid waste is adequately and affordably managed. Maximise the proportion of waste diverted from landfill (e.g., through recycling and composting). Manage hazardous waste in an environmentally responsible manner.	Compliance with resource consents for the Resource Recovery Activity measured by the number of abatement notices, infringement notices, enforcement orders and convictions.	100% compliance.
	Decrease in per capita volume of waste sent to landfill.	Narrative measure outlining our initiatives to reduce waste sent to landfill.

Stormwater

Levels of Service	Measure of Success	Target
Provide stormwater services to protect buildings from inundation from flooding in major events.	The number of flood event per year resulting in stormwater from our stormwater system entering a habitable floor in an urban area.	Less than 5.
	The number of habitable floors per 1,000 properties within urban stormwater service areas affected by a flood event.	Less than 2.
	Median time to attend a flooding event (an event resulting in stormwater entering a habitable building)	Less than 2 hours
	The number of complaints received about the performance of our stormwater system per 1,000 properties connected	Less than 15.
	Compliance with resource consents for discharge from our stormwater system as measured by the number of abatement notices, infringement notices, enforcement notices and convictions we receive in relation to resource consents	100%

Wastewater

Levels of Service	Measure of Success	Target
Provide wastewater services for the safe collection, treatment, and disposal of the city's wastewater.	Number of dry weather wastewater overflows from our wastewater system per 1,000 connections per year	Less than 1.
	Complaints per 1,000 connections about wastewater odour, system faults, system blockages and our response to issues with the system.	Less than 15.
	Median time for attending to overflows resulting from blockages or other faults	Less than 1.5 hours.
	Median time for resolution of overflows resulting from blockages or other faults	Less than 8 hours.
	Compliance with resource consents for discharge from our wastewater system as measured by the number of abatement notices, infringement notices, enforcement notices and convictions we receive in relation to resource consents.	100%

Water Supply

Levels of Service	Measure of Success	Target
Provide water services for the provision of safe and readily available water.	Compliance with Part 4 (bacteria compliance criteria) and Part 5 (protozoal compliance criteria) of the Public Health Act 1956 (as amended by the Health (Drinking Water) Amendment Act 2007	100%
	Number of complaints per 1,000 connections relating to clarity, taste, odour, continuity of supply, drinking water pressure or flow, and our response to any of these.	Less than 40.
	Average consumption of drinking water per day per resident.	Less than 360 litres.
	Median response time for urgent call out attendance.	Less than 2 hours.
	Median response time for resolution of urgent call outs.	Less than 7 hours
	Median response time for non-urgent call out attendance.	Less than 10 hours.
	Median response time for resolution of non-urgent call outs.	Less than 75 hours.
	Percentage of real water loss from the water reticulation network	Less than 20%

6.1.2 Customer Satisfaction Trends (Resident's Survey)

We have an ongoing requirement to measure how satisfied residents are with resources, facilities and services provided by us and to prioritise improvement opportunities that the community will value. A resident's survey was undertaken to:

- Provide a robust measure of satisfaction with our performance in relation to service delivery.
- Determine performance drivers and assist us to identify the best opportunities to improve satisfaction further, including satisfaction among defined groups within the city.
- Establish perceptions regarding organisational reputation, including how competent we are perceived to be, and the affinity residents have developed for us.
- Assess changes in satisfaction over time and measure progress towards our 10 Year Plan (long-term plan) objectives and strategic direction.

As observed for most territorial authorities, a decline and often a significant decline across most of our performance measures is evident. Parks, reserves, and green spaces, as well as public community facilities remain the highest performing areas.

Table 9: Resident Survey Overall results

Overall Measure	% Point Change (2023-2022)	Percentage of Respondents Satisfied or Very Satisfied				
		2023 (Draft)	2022	2021	2020	2019
Overall satisfaction with public facilities	-1%	79%	80%	84%	84%	84%
Overall satisfaction with water-related infrastructure	-4%	68%	72%	77%	72%	76%
Overall satisfaction with rubbish disposal services	1%	70%	69%	76%	76%	76%
Overall satisfaction with the city's parks, reserves, and open spaces	-	78%	78%	86%	86%	83%
Overall satisfaction with regulatory services	-2%	55%	57%	67%	61%	64%
Overall satisfaction with facilities, infrastructure, and services	-	66%	66%	76%	77%	77%

Overall Measure	% Point Change (2023-2022)	Percentage of Respondents Satisfied or Very Satisfied				
		2023 (Draft)	2022	2021	2020	2019
Overall satisfaction with roading related infrastructure	-3%	32%	35%	48%	46%	53%
Overall value for money	-	41%	41%	55%	54%	53%
Overall satisfaction with the Palmerston North City Council	-1%	46%	47%	62%	59%	59%

There have been drops in satisfaction over the past year in nearly all areas of our reputation and services. Of the 54 areas surveyed: 2 have increased in satisfaction but not significantly, 3 are new measures, 3 have not changed, 12 have dropped but not significantly, and 34 have dropped significantly. A likely factor is that the national mood is low after several years of Covid-19, tough economic times, and cost of living increases. This is on top of Covid-19 facility closures or restrictions and staff shortages, all directly affecting some our services. It should be noted that, even if the national mood is a major factor in the decline in residents' satisfaction, the declines are real and do reflect how residents perceive us. For whatever reasons, residents are less satisfied with our reputation, value for money, leadership, and services than they were one year ago.

Despite all the declines in satisfaction, most of our areas still have a majority of residents who are satisfied. In some areas over three quarters of residents are satisfied: public libraries; parks, reserves & green spaces; Regent Theatre; Te Manawa Museum Science Centre & Art Gallery; sewerage system; and kerbside rubbish & recycling collection. If residents are not satisfied with our services, they are mostly Neutral. Levels of dissatisfaction with services are relatively low. Other than roading most services have dissatisfaction levels below 15%.

Although the resident's survey provides a measure of customer Level of Service Performance, it does not address the technical LoS measures, which will impact on our ability to deliver our services and may have potential regulatory and financial impacts on council.

These technical measures can also be considered as "intervention measures" and are highly recommended to be set for activities where the level of risk of service delivery failure justifies their use.

6.2 Asset Performance

Performance monitoring is how we demonstrate we are delivering our agreed level of service, as well as ensuring that a better understanding of our actual performance is developed and managed. Asset performance is measured by specific targets derived from strategic and operational objectives.

Most infrastructure is considered to be in good condition, with much of it in the early to midpoint phase of its life cycle. We have sound condition data for roading, property and parks and reserves assets. We have limited information on Resource Recovery asset performance, therefore for these assets we:

- We are carrying unknown risk relating to asset failure and impacts on levels of service to the community.
- We are carrying a risk of increased operational and reactive maintenance.
- We are not in a position to optimise investment decisions relating to the prioritisation of renewals and mitigation of associated risk.
- Associated financial risk associated with reactive maintenance, renewals, or replacement.

The appropriate Asset Performance measures and targets for each asset are set out in detail and reported against in the applicable activity Asset Management Plan.

6.3 Asset Management Maturity Assessments

Asset Management Maturity describes the level of achieved asset management practice within an organisation. Maturity is assessed against each attribute (component) of an organisation's asset management system. The results of an asset management maturity assessment are usually presented alongside the assessed 'appropriate level' of practice to highlight any maturity gaps. A mature organisation may be one that has well established and evidenced asset management processes.

We use a NZ Treasury endorsed IIMM framework to undertake annual asset management maturity assessments, with every third assessment being undertaken by an external reviewer. Robust process documentation has been developed to demonstrate how identified improvement projects contribute to improving Asset Management Maturity for the Council

6.3.1 Asset Management Maturity Assessment Results

An external review of our asset management practice was undertaken in May 2022 by Infrastructure Associates Ltd using the IIMM framework. Findings are presented at two levels including overall and for each activity.

Overall Results

- The overall maturity target score is 80 – at the high end of "Intermediate" level of asset management maturity.
- We achieved a total overall maturity score of 60, which places it at the high end of "Core" level of asset management maturity. This leads to an overall maturity gap of 20 points, an improvement of 9 points since 2019.
- All scores are at core level of maturity or higher.
- Maturity targets for practice elements vary between 65 and 85. We do not have any practice elements at, or above the target level of maturity.
- The practice elements that have the most opportunities for improvement are Outsourcing and Procurement (maturity gap 30), Level of Service Framework (maturity gap 31), Managing Risk and Resilience (maturity gap 31), and AM Process Management (maturity gap 34).
- Areas of strength are, AM Plans, Operational Planning, AM People and Leaders, The Strategic Asset Management Plan, and Strategic Direction where the gap between the current maturity score and the maturity target are 15 points or less.

In 2019 we were operating Asset Management Information Systems to adequately maintain the data but were unaware that our knowledge of the underlying system was insufficient. The 2019 interview for the AMMA recorded the then current opinion that the systems were working well and were fit for purpose. Since 2019 we have substantially developed capability in this area and have identified that the systems themselves require significant maintenance and can make significant improvements in data quality, data integration, system performance and workflows of the different asset management systems.

A comparison of the results of the 2019 and the 2022 Asset Management Maturity Assessments, including the results for each element, are shown in Figure 6-1.

Figure 6-1: Comparison of 2019 and 2022 Asset Management Maturity Assessment results

Activity Results

- The Resource Recovery activity has the most opportunity for improvement with a gap of 25 points between the current maturity score and the target. Practice elements needing most improvement include decision making, managing risk and service delivery.
- The Parks activity is best performing activity with a total of 13 points between the current maturity score and the target. Strengths include asset information systems, asset management plan and operational planning.
- The remaining activities range between 18 to 22 points difference between the current maturity score and the maturity targets. Areas for improvement across all activities include managing risk, and audit and improvement.

6.3.2 Responding to the Maturity Assessment Findings

We have implemented an Asset Management Improvement Programme to address the gaps between the current maturity scores and the maturity targets (section 7.2). More information about this programme is included in each activity Asset Management Plan.

7 What is our Asset Management Response?

7.1 Our Response to Key Drivers

Refer to Section 2 Strategic Drivers for the key themes that are driving change. Table 1Table 10 details how we are responding to those drivers.

Table 10: Our Response to Drivers

Driver	Description of Our Response
Strategic Direction	Good asset management practice will ensure every asset and service that we deliver to our community will contribute to achieving the Vision, Goals, Strategies, and Plans that form the strategic direction our Elected Members have set for our City.
Iwi Partnerships	Rangitāne O Manawatū have provided clear guidance about their aspiration and we have made commitments to them that are relevant to asset management planning. In order for our infrastructure to enable us to provide levels of service that are considerate of these aspirations and commitments we need to make sure we consider them in all stages of the asset planning cycle.
Growth	Different types of developments and industry can have significantly different demands for service. Pharmaceutical or food processing place a heavy demand on water and wastewater, while freight and distribution can place a heavy demand on roads. Intensification in urban areas will change demand patterns for all activities. We aim to have a good understanding of industry and any development that is likely to occur, and the industry we would like to attract so we can appropriately plan for infrastructure. Oversizing infrastructure is inefficient while under sizing may mean the city could miss development opportunities. Meetings with potential developers and industry groups provide us with opportunities to be proactive about industrial land development. A range of asset management software is used to store asset data and complete forecast modelling, which enables us to have a good understanding of our assets and determine if and how the assets can respond to increasing demand. Key to managing demand is collaboration with the Strategy and Planning Team and aligning growth forecasts, developing spatial plans, and determining future demand on asset-based services.

Driver	Description of Our Response
Legislation, Policy, and Guidelines	One of the most important Asset Management Planning objectives is that asset management practices meet statutory obligations. All our statutory obligations for quantity and quality of service are considered as drivers for demand when asset management planning. We aim to comply with all legislation, policy and guidelines relating to the management of infrastructure and provision of services.
Sustainability and the Effects of Climate Change	Climate Change is a long-term phenomenon but essential to our Asset Planning considerations. Infrastructure planning assumptions regarding climate change are based on the NIWA predictions. We will consider climate change as part of our asset management planning. This includes addressing the unknown causes, adopting its effects, and complying with changing regulations, for example, designing budgets and programs to minimise greenhouse gas emissions and waste as efficiently as possible over the whole life of an asset. Plans should consider options to reduce carbon, analyse their net present cost, their emission impact, and the cost per tonne saved, and allocate resources to projects/changes that deliver emission reductions most efficiently.
Technology Advances	We will assess whether new technology advances our Asset Management Planning practices and/or levels of services. New technology can be cost prohibitive, and we will seek to balance the cost with the ratepayer's ability and willingness to pay. As new technological advances become more developed the cost of purchasing may reduce. We use current technology to maintain an understanding of the city's assets including radio-based telemetry, Internet of Things networks, asset information systems, networks models, and GIS. Other techniques like Structure Plans and Spatial Plans are also used to enhance understanding of development capacity and visually present what future residential and industrial development areas will look like.

Driver	Description of Our Response
Liveability	We will consider our Asset Management Planning processes and how we can integrate urban design principles our practices. This will include how we allow for urban design in the planning for new assets. Opportunities to influence urban design outcomes via water and wastewater infrastructure are limited. The opportunities are greatest for transportation, property, recreational and stormwater assets. Particularly in transport, where the right transport mode for the right road is not just about connectivity, but also a way of driving asset management outcomes.
Resilience	As part of our Asset Management Planning process will review risks. Review of risks may be for new or existing assets as risks will change over the lifecycle of an asset and/or as external situations change. Responses to these risks to create resilient assets will be as detailed in Section 5.6.5 Mitigating Risk and Creating Resilience.

7.2

7.3 Asset Management Improvement Plan

This section describes how the Asset Management Improvement Plan (AMIP) has been developed and is being implemented. This plan captures, contains and tracks progress of all identified improvement items for each Activity Area, including Resource Recovery, as well as for Council and Infrastructure wide improvements.

However, there are also improvements that are logically done next for the organisation in order to strengthen delivery with organisation objectives, and there are several improvements that relate to asset information.

Table 11 contains a high-level overview of the proposed Improvement Plan for the first three years of the 2024/25 LTP cycle.

Table 11: Proposed 3 Year Asset Management Improvement Plan (from 2024/25)

ID	Improvement Programme	2024/25	2025/26	2026/27
Priorities Based on AM Maturity Gaps (AM Processes, Risk, Level of Service)				
PROG-010	Confirmation of Infrastructure Roles			
PROG-021	Risk process and management system implementation			
PROG-022	Risk assessment and management			
PROG-006	Cost to Serve			
PROG-009	Infrastructure staff point of failure risk reduction			
PROG-011	AM Quality System			
PROG-023	Network resilience study			
PROG-056	Promapp of processes			
PROG-017	Internal refining of Levels of Service and measures			
PROG-005	Updating of the SAMP			
PROG-018	Councillor Level of Service review			
PROG-019	Community Level of Service review			
Logical Next Steps for Our Organisation				
PROG-055	O&M processes documented			
PROG-053	Operational plan hierarchy development			

ID	Improvement Programme	2024/25	2025/26	2026/27
Logical Next Steps for Asset Information				
PROG-040	Asset Data Reasoning and Gap Analysis			
PROG-041	Fill Data Gaps			
PROG-048	AMIS process development			

7.4 Key portfolios

Key portfolios are groups or programmes or projects are those that will make major contributions to achieving our vision for Palmerston North and are grouped as shown in Table 12:.

Table 12: Key portfolios

Driver Group	Current Catalyst Projects
Enabling growth and liveability Drivers: • Growth • Liveability	Infrastructure for residential growth at Whakarongo, Kākātangiata, Aokautere, Napier Road, Roxburgh Crescent, Ashhurst and urban intensification. Te Utanganui Central New Zealand Distribution Hub Palmerston North Integrated Transport Initiative (PNITI) - Regional Freight Ring Road City Centre Transformation Manawatū River Framework Arena Masterplan Social Housing Redevelopment Community Hubs and Centres Portfolio
Addressing deterioration of assets Drivers: • Levels of Service	Infrastructure Renewal Programmes

Driver Group	Current Catalyst Projects
Mitigating risks, and ensuring resilience and compliance Drivers: • Legislative Change • Sustainability & Climate Change • Technology Advances • Resilience	Tōtara Road Wastewater Treatment Plant Upgrade Upgrades to comply with Drinking Water Regulations Stormwater Capacity Upgrades Seismic Strengthening of Council Properties

7.5 Design Panel

Our Infrastructure capital programme is multi-disciplinary with a multi-year works timeline for each project or programme. Our capital programme has increased over time requiring more focus on delivery methodology and certainty of programmed delivery. A 70% vacancy in the Council in-house engineering design team led to the recognition that the design of three waters and transport projects could not be achieved at scale in-house. A deliverability review undertaken in the Infrastructure Unit identified an opportunity to streamline the provision of design services and improve the capital programme delivery efficiency by using procurement at scale to secure guaranteed capacity and capability from external infrastructure design service providers. A bundled procurement approach for design of Transport and Three Waters capital new and renewal projects would be helpful in delivering the LTP and provide longer term work certainty to the market. A panel approach was identified as a suitable means of securing resources, particularly by enabling identified suppliers to plan for long term utilisation and resourcing based on Council's forward work programme. Two engineering design providers (GHD Ltd and WSP Ltd) in the market have been appointed to the Council Design Panel for a three-year term with two rights of renewal for a further one year providing 80% of Council's infrastructure design requirements under this panel with 20% specialist design services being procured as and when required for effective programme delivery.

7.6 What Are Our Assumptions?

We have made assumptions about what our future looks like and the demands on our services. These are shown in Table 13.

Table 13: Assumptions for the Strategic Asset Management Plan

Section	Assumption	Risk	Level of uncertainty of assumption	Implications
1. Council Strategy	That our current Strategic Direction will remain largely unchanged.	That our current Strategic Direction will undergo significant change.	Low	Any significant change to our Strategic Direction will require updates to the SAMP, AMP, and Assumptions.
2. Population and Household Growth	We assume that the population and household numbers will increase in line with the projections.	The rate of population growth or household numbers will be substantially different than forecasted.	Medium	If growth is different than predicted, we will revisit the timing of the infrastructure development programme, which could result in expenditure being different than forecast. As with all long-term prediction's uncertainty increases over longer time frames and actual figures can change. To overcome this uncertainty, we monitor actual growth and changes to the population. Any changes to work programmes are reflected in subsequent AMP, Annual Plans, and 10-Year Plans.
3. Economic Growth	Economic trends and employment growth will continue positively and there will be no major long-term economic threats.	There will be a large-scale economic crisis that will be a threat to Palmerston North	Low	We will monitor any impacts and effects and if necessary, modify priorities through the Annual Plan process each year and Long-Term Plan every 3 years.

Section	Assumption	Risk	Level of uncertainty of assumption	Implications
4. City Growth-Residential	We assume that the types of residential development will remain constant for the next 30 years. This means that 38% of all new houses will be infill subdivision, with the balance being 50% greenfield and 12% rural.	Privately initiated development is approved in areas other than those planned for or earlier than anticipated.	Medium	Some of these assumptions rely heavily on final assessments of the appropriateness of the land for affordable development. If the land assessments are not positive, we may be required to invest more in infrastructure than planned, to ensure land provides for affordable housing options.
5. City Growth-Industrial	We expect development to continue at the North-East Industrial Area and development to start in the Extension Area during 2021-23.	Privately initiated development is approved in areas other than those planned for or earlier than anticipated.	Medium	The timing of infrastructure development will be monitored and altered to meet the establishment of industry as far as possible. It requires careful balancing as there is a risk that substantial investment is made for initial businesses, but the overall uptake is slower than expected. We mitigate this risk by creating Developer Agreements (as per the Development Contributions Policy) to help with the timely infrastructure provision.
6. Iwi Partnership	We have a formal commitment to the partnership with RoM and provides levels of service in a manner that support iwi aspirations.	We are unable to provides levels of service in a manner that support iwi aspirations.	Low	We share many of the RoM iwi aspirations, which can be found in individual Asset Management Plans. We remain committed to our partnership with RoM.

Section	Assumption	Risk	Level of uncertainty of assumption	Implications
7. Sustainability and Climate Change	In the longer term, increased frequency, and intensity of storm events as the result of climate change.	Climate change predictions are significantly different than forecasts.	Medium	Provision is being made to adapt infrastructure for climate change based on NIWA predictions for 2090. If the changes are different from what is predicted, this will be assessed as they become evident.
8. Legislation, Policy and Guidelines	We assume there will be no unexpected changes to legislation that will impact asset management, or the services provided by the assets throughout the life of the Long-Term Plan 2021-31 and Asset Management Plans.	There are unexpected changes to legislation that impacts on asset management, or the services provided by the assets.	Low	We recognise that as a result of the Water Services Legislation there is likely to be some change to the three waters activities including changes to national and regional water quality policies that could affect the design and consenting of the new wastewater treatment plant. Legislative changes generally have transition periods for Council as necessary.
9. Technology Advances	We will research the use of new infrastructure technology that enables more effective and efficient delivery of good quality public services.	Advancing technology will be cost prohibitive or have a negative effect on asset management.	Medium	We will assess whether new technology advances our AM Planning practices and/or levels of services. New technology can be cost prohibitive, and Council will seek to balance the cost with the ratepayer's ability and willingness to pay. As new technological advances become more developed the cost of purchasing may reduce.

Section	Assumption	Risk	Level of uncertainty of assumption	Implications
10. Customer Expectations	We will provide the same level of service that is specified in the Asset Management Plans and the Long-Term Plan 2021-31.	There are unexpected changes to legislation that impacts on asset management, or the services provided by the assets throughout the life of the Long-Term Plan 2021-31 and Asset Management Plans.	High	If there are changes to legislation that result in service level adjustments these usually have a transition period that allow us to respond as necessary and will be addressed through future 10 year and annual plans.
11 Natural Hazards and Adverse Weather Events	There will be no significant natural disasters such as storms, floods, earthquakes, and volcanic eruptions and no adverse weather events that significantly damage city infrastructure.	There will be significant natural disasters such as earthquakes, floods, storms, volcanic eruptions, or adverse weather events that damage city infrastructure.	High	Given the 30-year timeframes of the Asset Management Plans there is a high likelihood that one or more significant events occur during this period. If a significant emergency event did occur, we would reprioritise programmes of works and budgets accordingly. We have contributed to Local Authority Protection Programme (LAPP), which was designed to over 40% of the repair costs for certain damaged infrastructure and can also source commercial infrastructure insurance. If required. In other circumstances Central Government may fund the remainder of the costs.

8 Summary of Resources for Asset Management

To deliver our existing levels of service and respond to city growth, we will continue to invest in the maintenance and renewal of existing assets and increase investment in assets and services. Our investment strategy is to deliver existing levels of service for the lowest lifecycle cost by managing costs and risks, and to only increase levels of service or invest in new service levels where there is clear alignment with achievement of the strategic direction of Council, or in response to a changing external environment. Each of the activity asset management plans provides a forecast of the operational budgets and programmes, as well as capital programmes for renewal and new infrastructure. People needs for that activity are also forecast.

To deliver the asset management function we also need resources. These resources are generally people and operating budgets to enable engagement of specialist resources.

8.1 People Requirements

The people we require to deliver the asset management function, including the improvement plan, can be broken into three groups. These are the same groups we have in the division at Council that delivers asset management. These are summaries in Table 14 below. The number of full time equivalent (FTE) people allows for the removal of the 3 Waters function from Council after the end of 2025/26.

Table 14: People required to deliver asset management, including improvement plan

Group/Team	Function	FTE to end 2025/26	FTE 2026/27 onwards
Division Management		1	1
Asset Management	Manage the AM system, produce SAMP, AMPs and Infrastructure Strategy	6	4
Planning & Investigation	Support robust asset management budget development, including strategies, data analysis and business analysis	7	6
Asset Information	Manage and ensure quality data to support asset management	6	5
Total		20	16

8.2 Operating Expenditure Forecast

We have carried out high level resource planning for the Improvement Programmes listed in Section 7.2. We have done this to determine the number of people hours required of staff across Council and from specialist external support. In addition, we have estimated the external resources required to support asset management function. We have used this to forecast operational budgets. These budgets for the three years 2024/25 to 2026/27 as shown in Table 15.

Table 15: Proposed Asset Management Division budgets

	2024/25	2025/26	2026/27
Asset Management	$91,538	$203,814	$161,512
Planning & Investigation	$14,835	$15,164	$15,499
Planning and Information	$77,500	$51,700	$81,5865
Asset Information	$354,304	$204,111	$235,150
Total	**$538,195**	**$474,789**	**$493,747**

Stakeholders

External Stakeholders

External stakeholders are the key groups of people who receive or have a strong interest in the services provided. These can be corporate groups (such as clubs, companies, government departments, trusts) or informal collections of people (for example, rate payers, or customers). These stakeholders may have aligned or conflicting preferences.

Group	Description
Rangitāne o Manawatū	Tangata whenua who have with a partnership with us
Residents	People who live within our boundaries
Ratepayers	People who own properties within our boundaries but may/not reside in the city
Service users	Users of the services on an occasional or regular basis e.g., visitors
Businesses and NGOs	Individuals or organisations who carry out their business in the city, including educational facilities.
Government agencies	For example, Ministry of Health, Waka Kotahi, Ministry for the Environment. Roles include regulation and monitoring, policy direction, infrastructural funding assistance, managing assets that directly affect our infrastructure, handling complaints about us
Horizons Regional Council	The environmental, regulatory, and monitoring body under the Resource Management Act for the natural resources in the Manawatū-Whanganui region.
Third parties operating on Council land/out of Council facilities	Community groups, management trusts, and businesses run their operations out of Council owned facilities or on our land. Includes Council controlled and Council affiliated organisations.
Contractors	Contractors and tradespeople who assist in the delivery of our activities.
Neighbouring local authorities	Manawatū, Horowhenua and Tararua districts adjoin Palmerston North City, and we are within the boundary of Horizons Regional Council. Council has a shared services arrangement with Manawatū District Council for building

Group	Description
	consents. Horizons Regional Council provides public bus services in the city and Council contributes towards that cost. Council maintains relationships with other Councils for the exchange of information and management practices.

Internal stakeholders

Internal stakeholders include parts of Council that either contribute to or oversee the delivery of the service.

Group	Description
Councillors	Elected members who contribute to the development of policies and strategies, including budget approval and consideration of officer recommendations. This is to ensure the services provided meet the needs of local communities and make the best use of resources. Councillors rely on officers and asset management plans for information needed to make informed decision regarding assets and levels of service. To do this effectively they need to have confidence that the information and advice provided is accurate, has a sound basis and is aligned with Council's Strategic Direction.
Executive Leadership Team	The senior managers of Council, including the Chief Executive and the General Managers of the units.
Infrastructure	Provides asset-based services, around which the Asset Management Plans are written.
Finance Unit	Provide financial and corporate services including development of funding policies and financial forecasts.
Strategy and Planning Unit	Provide strategic planning services including policy and strategy development, growth forecasts etc.
Customer Unit	Responsible for council/customer interface, and the delivery of community services such as libraries, community housing and community development.
Marketing and Communications Unit	Responsible for external communication and Council's external image.
Activity Divisions	The collections of Council staff involved with managing, planning (including creating Asset Management Plans),

Group	Description
	operations and delivering a related group of services – for example, Roading and Footpaths, Parks, and Reserves.
Information Management Division	Provide information services to Council, including IT and records management.
Asset and Planning Division	Responsible for asset management practice across the organisation.

Operational Planning Key Positions

Activity	Positions	Operational Planning Responsibility
Parks and Reserves	Group Manager - Parks and Logistics Activities Manager - Parks Parks Operations Manager	Setting operational objectives. Developing operational strategies to deliver objectives. Operational scheduling to deliver strategies. Continuity Planning.
Property	Group Manager – Property Facilities Management Team Leader	
Resource Recovery	Group Manager – Resource Recovery Activities Manager – Resource Recovery and Sustainability Resource Recovery Operations Manager Collections Team Leader Awapuni Site Team Leader Recycling Facilities Team Leader	
Transport	Group Manager – Transport and Development Activities Manager – Transport Service Manager – Active Transport Service Manager – Street Vegetation Service Manager – Roading	
Waters	Group Manager – Three Waters Activities Manager – Three Waters Service Manager – Stormwater Service Manager – Wastewater Service Manager – Water Three Waters Network Operations Manager Supervisors (Treatment Plants)	

Asset Information System Software

Function	Transport	Resource Recovery	Parks and Reserves	Property	Three Waters
Asset Register	RAMM	IPS	SPM, IPS and RAMM	SPM	IPS
Asset Inspections	RAMM, Excel	Excel	SPM, Auditor, Excel (hard copy), IPS	Fulcrum, hard copy	IPS, Lutra ID, hard copy
Valuations	RAMM	IPS	Externally provided	Externally provided	IPS
Mapping	ArcGIS	ArcGIS	ArcGIS	ArcGIS	ArcGIS
Analysis including Spatial	ArcGIS, Power BI, Excel	ArcGIS, Power BI, Excel	ArcGIS, Excel	Excel	ArcGIS, Power BI, Excel
Work Orders	RAMM	IPS	IPS	Work Track	IPS
Processes/ Standard Operating Procedures	Process Manager (formerly Promapp), Word	Process Manager (formerly Promapp), Word	Process Manager (formerly Promapp), Word	Process Manager (formerly Promapp), Word	Process Manager (formerly Promapp), Word
As-Built Drawings	Autodesk Vault	Autodesk Vault	Autodesk Vault	Autodesk Vault	Autodesk Vault
Telemetry/ comms/ remote sensing	Eco-Visio, SCATS, Frog Parking	Elemos		Fibre (Library, CDC)	Abbey, Sensum Networks: Radio, Encrypted Cellular, LoraWan
SCADA					Wonderware
Drinking water standards compliance					Drinking Water Online, Infrastructure Data
Lab data					

Function	Transport	Resource Recovery	Parks and Reserves	Property	Three Waters
Consent monitoring	RC Monitoring	RC Monitoring	RC Monitoring		RC Monitoring
Trade Waste					
Pipe CCTV			IPS		IPS
Purchase orders	Authority Altitude	Authority Altitude	Authority Altitude	Authority Altitude	Authority Altitude
Risk management	Project Status, Yoda, Risk Register	Project Status, Yoda, Risk Register	Project Status, Yoda, Risk Register	Project Status, Yoda, Risk Register	Project Status, Yoda, Risk Register
Project management	Excel	Excel	Excel	Excel	Excel
Customer billing		Authority Altitude, Excel			Authority Altitude
Customer requests	K Base	K Base	K Base	K Base	K Base
Booking systems		Manual	Excel, Process Manager (formerly Promapp), Priava (Arena)		
Modelling	Cube				MIKE Urban WD, MIKE Urban CS, TUFLOW, MIKE FLOOD
Logistics		Smartrak		Smartrak	
Water Meter Reading					Authority Altitude
Lease management				Excel	

Legislation, Policy, and Guidelines

Name	Description
Local Government Act 2002	Provides a framework and powers for local authorities to decide which activities they undertake and the manner in which they will undertake them. Promotes the accountability of local authorities to their communities. Provides for local authorities to play a broad role in promoting the social, economic, environmental, and cultural well-being of their communities, taking a sustainable development approach.
Resource Management Act 1991	The Resource Management Act 1991 promotes the sustainable management of natural and physical resources., and requires Councils to: • Managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being. • Sustain the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations. • Comply with the District and Regional Plan • To avoid, remedy or mitigate any adverse effect on the environment. • Take into account the principles of the Treaty of Waitangi in exercising functions and powers under the Act relating to the use, development, and protection of natural and physical resources. • Safeguard the life-supporting capacity of air, water, soil and ecosystems. Note, the RMA 1991 is currently being repealed and replaced with three new Acts: Natural and Built Environment Act, Strategic Planning Act, and Climate Change Adaption Act.
Burial and Cremations Act 1964	The regulatory framework that requires councils to provide adequate interment facilities for deceased persons.

Name	Description
Reserves Act 1977	The regulatory framework for controlling the use and effects of reserves as follows: • Classification of the different types of reserve and specifies the purpose of each. • Specification of the statutory procedures for managing each reserve. • Requirement of Council to protect, to an extent compatible with the principal or primary purpose of each reserve, the scenic, historical, archaeological, biological, geological or other scientific features and indigenous flora and fauna and wildlife. • Requirement of Council to prepare and submit to the Minister for approval a management plan for most reserves and specifies the consultation that must be carried out. • Governs Council's ability to grant leases or licenses over particular activities or buildings within reserves.
Health Act 1956	Provides the regulatory framework for Councils to improve, promote, and protect public health within its district.
Public Works Act 1981	Enables acquisition of land for Council's activities and disposal of surplus land.
Civil Defence Emergency Management Act 2002	Requires councils to function at the fullest possible extent during and after an emergency and to have plans for such functioning (continuity).
Health and Safety at Work Act 2015	The Act and related regulations require that employees and contractors are given the highest level of protection from workplace health and safety risks, so far as is reasonably practicable.
Building Act 1991	Aims to improve control, encourage better design and construction, and provide greater assurance for consumers. The Building Act and its regulations work alongside other legislation, including the Resource Management Act.

Name	Description
Fire Service Act 2017	Requires approved evacuation schemes. Applies generally to public buildings used by more than 100 people or buildings used for childcare, accommodation for more than 5 people and other users.
Climate Change Response Act 2002	The scheme encourages the reduction of greenhouse gas emissions and is NZ Government's main tool for meeting climate change targets. It puts a price on greenhouse gas emissions, by charging emitters a certain amount for each metric tonne of carbon dioxide or equivalent (units) emitted.
Building (Earthquake-Prone Buildings) Amendment Act 2016	Introduced major changes to the way earthquake-prone buildings are managed under the Building Act 2004 using information from past earthquakes to minimise effects of future earthquakes. We are identified as being in a 'High Seismic Risk' area, requiring all earthquake-prone buildings to be identified within five years and seismic work by building owners to be completed within 15 years.
National Policy Statements	National Policy Statements are ordered by central government to address problems. These include: • National Policy Statement for Freshwater Management 2014, to ensure the effects of land use and development of infrastructure does not have any adverse effects on freshwater bodies. • National Policy Statement for Urban Development Capacity 2020 identifies us as a 'medium growth area' and directs our land use planning and infrastructure to meet the future demands associated with urban growth. • National Policy Statement for Renewable Electricity Generation 2011 guides us on how to deal with renewable electricity generation in District Plans • Government Policy Statement on Land Transport sets the Government's priorities for land transport investment over the next 10-year period

Name	Description
Regional policy	Physical and natural resources in the region are managed collaboratively between Horizons Regional Council, territorial authorities, and the community. We must meet the requirements of applicable Regional Policy including: • Regional Land Transport Plan 2021-2031 • One Plan • State of the Environment Report • Regional Economic Development Action Plan • Climate Action Strategy (November 2020)
National Environmental Standards for Freshwater	Sets out potential regulations that are part of a package of proposed freshwater regulations and includes proposals to stop the degradation of waterways and restore them to a healthy state.
National Environmental Standards for Commercial Forestry	Provides regulations to avoid negative environmental effects related to eight core forestry activities.
.National environmental standard for assessing and managing contaminants in soil to protect human health	Involves assessing and managing contaminants in soil to protect human health and requires that any land with contaminated soils is identified and remedied to ensuring the land is safe for human use
Water Services Bill	This was introduced to Parliament for introduce a new regulatory framework for drinking water, which established Taumata Arowai as a dedicated water regulator to oversee the new regulatory regime including stronger obligations on water suppliers and local authorities to manage risks to sources of drinking water.
PNCC Strategic Plans	We have several frameworks and plans that also help development align with our Strategic Direction including Urban Design Plan, City Streetscape Plan, Development Contributions Policy, Play Policy, and Bylaws that allow for creation of Council assets and subsequent management.
PNCC Strategic Frameworks	Manawatū River Framework. The Manawatū River Framework provides strategic vision for any

Name	Description
	developments near the river and recognises the importance of the river to the city. Ultimately, it aims to ensure that each year there will be more things to do, and more people will spend time at the Manawatū River Park. City Centre Framework. The City Centre Framework coordinates public and private investment and identifies strategic development sites within the city centre. Vegetation Framework. This framework sets out our vision for the city's trees and other public plantings: To create a citywide green network that celebrates our local and imported biodiversity and contributes to a healthy and attractive city, its surrounding villages, the Manawatū River and its green corridors. Parking Framework (In Development) Street Design Manual: Being revised and renamed Roads and Streets Framework Victoria Esplanade Masterplan. The masterplan provides for the ongoing protection, development and management of Victoria Esplanade. City Centre Framework. The City Centre Framework provides a medium-long term co-ordinated approach for managing and developing our city centre.
PNCC Policies	All policies (PNCC website) Dam Safety Policy (2013) Development Contributions Policy 2021 Earthquake-Prone Buildings Policy 2019 Play Policy 2021 Pressure Sewer Systems Policy 2018 Reserve and Walkway Naming Policy 2009 Sun Protection Policy 2010
PNCC Bylaws	All Bylaws and Administration Manuals (PNCC website) Cemeteries and Crematorium Bylaw 2018 Stormwater Bylaw 2022

Name	Description
	Trade Waste Bylaw 2022 Traffic and Parking Bylaw 2018 Waste Management and Minimisation Bylaw 2016 Wastewater Bylaw 2019 Water Supply Bylaw 2015
PNCC Asset Management Policy Statements and Frameworks	Strategic Condition Assessment and Performance Monitoring Policy Statement Criticality Framework

Terms

Term	Definition
Activity	An activity the Council delivers with its assets. Asset based activities include Property; Parks and Reserves; Resource Recovery; Stormwater; Transport and Parking; Wastewater; and Water Supply.
AM	Asset Management - the systematic and coordinated activities and practices of Council to deliver an agreed level of service in the most cost-effective manner through the management of assets for present and future customers.
AMIS	Asset Management Information System – the system used to store asset information. This may also provide advanced analysis functionality, such as renewals forecasting, asset valuation, and operational planning.
AMMA	Asset Management Maturity Assessment
AMP	Asset Management Plan - documented information that specifies the activities, resources and timescales required for an individual asset or grouping of assets, to achieve the Council's AM objectives.
AMSG	Asset Management Steering Group
BPO	The project underway to identify the Best Practical Option (BPO) for the upgrade of the wastewater treatment plant.
IIMM	International Infrastructure Management Manual (2020) – practical guidelines for implementing asset management.
IPS	The asset management information system software used to record asset attributes for resource recovery assets.
ISO 55000	The International Standard providing an overview of AM, its principles and terminology, and the expected benefits from adopting AM practices.
LGA	Local Government Act (2002) – the legislation that mandates council's existence and defines its purpose and primary statutory obligations.
LTP	Long Term Plan
LOS	Level(s) of Service – refers to the standard of service delivered for an attribute of that service.

Term	Definition
RAMM	The asset management information system software used to record asset attributes for transport assets.
SAMP	Strategic Asset Management Plan (this document) and documents information that specifies how organisational objectives are to be converted into the AM objectives, the approach for developing asset management plans and the role of the AM system in supporting achievement of the AM objectives.
SMART	Specific, Measurable, Achievable, Relevant, and Time-bound - used as an adjective to describe the characteristics of a good KPI/performance measure.
SPM	The asset management information system software used to record asset attributes for parks and facilities assets.

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