

Produced by **Palmerston North City Council** 

### **OVERVIEW**

### **STRATEGIC** ASSET MANAGEMENT PLAN 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 should contribute 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.

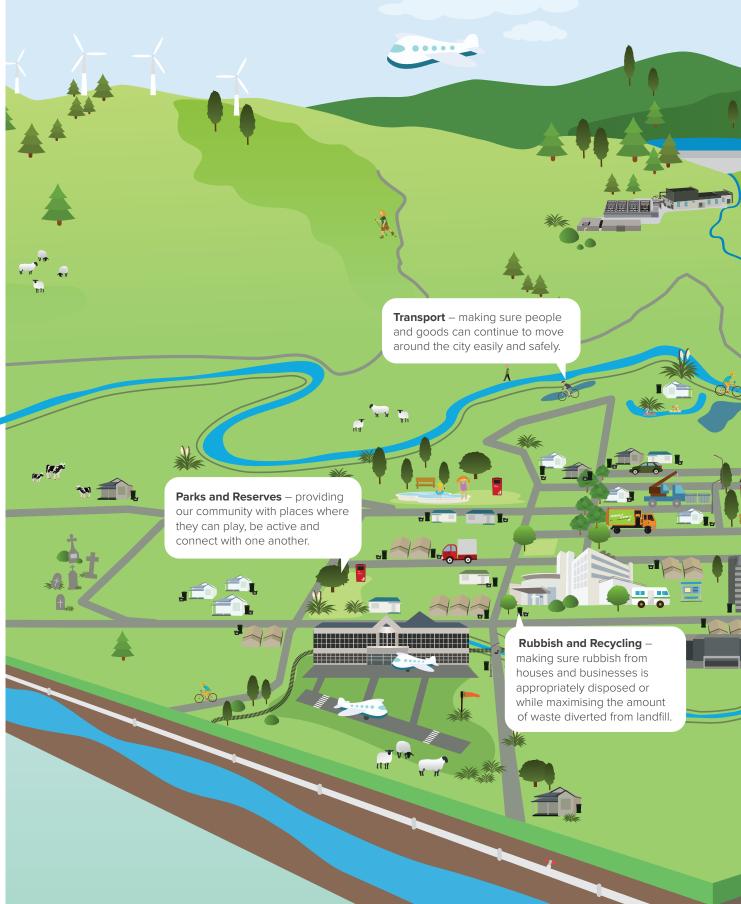
### **Goals:**

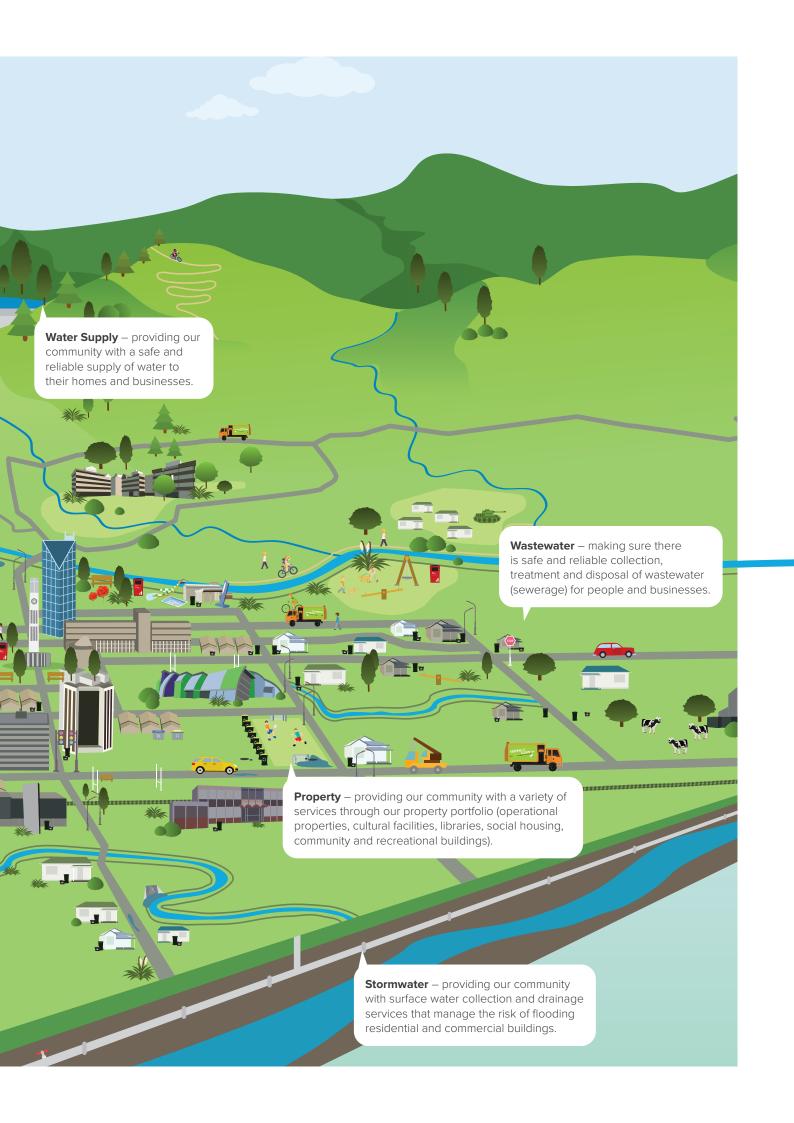
- ➢ An innovative and growing city
- A creative and exciting city
- > A connected and safe community
- An eco-city
- A driven and enabling Council

### Strategies:

- City Development Strategy
- Creative and Liveable Strategy
- Connected Communities Strategy
- Eco City Strategy
- Driven and Enabling Strategy







## **WE HAVE SOME CHALLENGES + RISKS**

### The maturity of our asset management approach

An independent review of the maturity of our AM approach was undertaken in 2019.

Given the size of our organisation, the complexity of our assets and the level of risk we manage our overall AM maturity level should be at the high end of the "Intermediate", a score of 80. The asset management maturity assessment placed us at "Core" level of asset management, with a score of 51. While we have made significant progress since our 2019 review, we still have significant improvements to make in the way we manage our assets. Some of our challenges and risks include:

### **Audit and improvement**

It is important that we audit and plan to improve our approach to AM. In the past we have developed an AM Improvement Plan, but it was not budgeted for or actioned. For this reason, we have not been progressing our AM Improvement Plan and improving AM practice across the organisation.

#### **Managing risk**

Risk management is our weakest area of AM practice. We do not have a whole of organisation approach to managing risk and tend to manage our risks as they arise – dealing with issues and developing short-term responses to risk. We don't currently understand where we face the greatest risk to service delivery if a particular asset fails (asset criticality). For example, what is the criticality of our wastewater treatment plant assets and how does this influence how we maintain and renew these assets

### Service delivery models (procurement)

Our procurement processes are generally informal and inconsistently applied across our asset areas. We have a contract register which focuses mainly on recording key dates, but we have no procurement or contract management system in place. We carry risk when we don't have robust processes in place to manage conflicts of interest, use purchase order systems incorrectly, or don't have formal contracts in place where appropriate.

### Life cycle decision methods (decision making)

We do not have a formalised decision-making process in place when making decisions about prioritising the maintenance and renewal of existing assets or investment in new assets. For this reason, we have found it difficult to assess relative priority of investment across our asset areas. The increased frequency of break downs at our wastewater treatment plant and the associated increase in our renewals programme are symptoms of not having robust decision-making processes in place in the past.

### **Operational planning**

Our current approach to operational planning deals with individual issues as they arise rather than a planned approach guided by policies, processes and procedures. While our Parks and Reserves team have well documented operational procedures for their work practices not all asset areas do. In many cases we do not have maintenance plans in place which means our approach to maintenance is often reactive and unbudgeted costs occur. The recent \$400k of unbudgeted maintence at Arena is an example of this reactive approach to the maintenance of our assets.

#### **Asset performance and condition**

We have significant gaps across our asset areas in terms of condition and performance data. We don't understand where we face the greatest risk to service delivery because we are not collecting condition data on our critical assets. Although some work has been done in the past to assess asset criticality, we are not using it well. For example, our wastewater pipes have good CCTV data, but is not always reliably loaded into our asset data base.

### **AM** systems

If we follow formalised processes we can improve effectiveness and efficiency, increase community 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.

### **Policy and strategy**

We need to manage our assets in a way that contributes towards achieving our strategic direction. Our long-term strategic direction is clear and settled. However, in the past our AMPs and AM Policy have not had a good understanding of our strategic direction and for this reason our AM decisions have not always given effect to the strategic direction our Councillors have set for the city.

### **Asset management plans (AMPs)**

AMPs provide transparency about how we plan to manage and invest in our assets. Our 2017 AMPs were comprehensive but long documents that struggled to provide operational value. They were prepared with limited interaction with other parts of Council and in trying to be comprehensive were too long to be usable. In the past, our AMPs have struggled to align with our strategic direction and to effectively support our 10 Year Plan and Infrastructure Strategy.

### Forecasting future demand

Forecasting future demand is important because it considers how future changes may impact on the demand for an asset and the service(s) it provides. The projected increase in investment in the region over the next 10-15 years means there is a need for robust demand forecasting. If we don't understand future demand and its impact on our asset based services, we run the risk of not having enough system capacity available at the right time to meet future growth.



## WHAT'S **OUR PLAN?**

### **Audit and Improvement**

We will be developing an organisation wide AM Improvement Plan based on the recommendations of our AM Maturity Assessment and the AM improvement tasks contained in our 2020 AMPs. We are developing an interactive dashboard that shows our prioritised improvement plan tasks so that we can monitor and report on our progress. We plan to form an Asset Management Steering Group that will provide governance and oversight to our AM practice and monitor how we progress our improvement plan tasks.

### **Managing Risk**

We currently have a review of risk management underway. We have set up a Risk and Resilience team, adopted a Risk Policy and are in the process of developing a Risk Management Framework. Subject to resourcing, we plan to have in place AM Improvement Plan tasks that focus on assessing the resilience of our assets. Improvement tasks will also focus on process documentation to address the risks posed by the loss of experienced staff. The creation of our Project Management Office (PMO) in 2020 will support our Asset Managers to better manage project risk.

### **Service Delivery Models (Procurement)**

Our newly established Procurement Team are in the process of developing better contract management capabilities across the Council. This includes work developing pre-approved procurement panels and formalising contracts which more clearly define expected contractor performance measurement and monitoring. Our Procurement Team are also working with our PMO to implement new tendering thresholds and new procurement processes. We expect to have an improved contract management system in place in 2021.

### Life Cycle Decision Methods (Decision Making)

We will have in place AM improvement tasks that look to create formal decision-making processes to better prioritise the maintenance, renewal and creation of new assets. It is important this approach is supported by reliable asset condition data. We will also work to bed-in improved business case development to better justify our projects and ensure we are aligning with our strategic direction.

### **Operational Planning**

We need to better prepare and plan for how we keep our critical assets delivering services to our community. To do this we need to review our approach to operational planning. We will take a structured approach to our lifecycle planning outputs (particularly renewals and maintenance budgets), and continually collect and update data to better understand the performance of our assets and our approach to operational planning. We want to develop strategies that better balance renewals and / or other proactive maintenance and the potential impacts on operational costs and LoS. We need to develop clear renewal and maintenance plans and communicate these with key staff and broader stakeholders (e.g. Rangitāne and Waka Kotahi / NZTA).

### **Asset Performance and Condition**

We will be reviewing our policy governing our asset condition and performance assessment in terms of content and frequency. Once we have defined and identified our critical assets, we will need to complete condition surveys and schedule regular inspections with the frequency based on asset criticality. While unexpected failure of our water assets in the past has prompted a programme to increase the collection of condition data through physical surveys, we will need to develop a comprehensive condition assessment programme across all our assets. In our Property and Transport areas we have started working towards developing processes for contractors and in-house staff to collect condition information using real time mobile data applications to increase efficiency in this area.

#### **AM Systems**

We plan to undertake a review of our AM Systems and develop policies, processes, and procedures. We have developed a draft AM Policy and SAMP which form the first steps towards building our formal AM System. We have invested in webbased software to map business process change and will focus on a more comprehensive approach to mapping all our AM processes.

### **Policy and Strategy**

We have confirmed with Councillors and other stakeholders the Vision, Goals, Strategies and Plans that will inform our 10 Year Plan decision-making. We have completed our SAMP and draft AM Policy, which both align with the strategic direction set to guide the city forward. Our AMPs have been informed by the SAMP which sets out the overall strategic approach to managing council assets and overarching issues, practices, and systems.

### **Asset Management Plans (AMPs)**

We have developed our 2020 Asset Management Plans in two parts. Part A is our SAMP. This document sets out the overall strategic approach to managing our assets. Part B includes our AMPs for each asset group, detailing optimal management requirements and how the practices in Part A are applied.

We have set up an Asset Planning Division with one of its functions to develop AMP documents in a way that draws on the collaborative input of staff across the whole organisation. We have completed a review of our AMP templates and formatted our approach to better align with our needs and the operational areas of the organisation.

We need to better prepare and plan for how we keep our critical assets delivering services to our community.

### **Forecasting Demand**

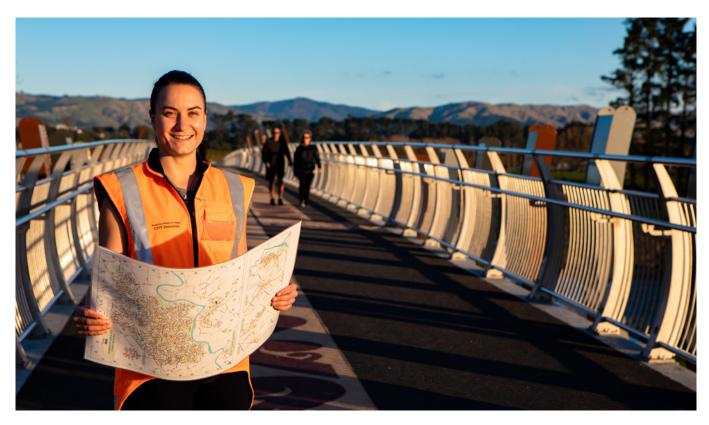
In preparing for the 10 Year Plan we have reviewed both our growth projections for the city and our Growth Infrastructure Plan. Our AMPs explain how each of our asset areas (transport, water, wastewater, stormwater, parks and reserves and rubbish and recycling) contribute towards achieving our Growth Plan. However, as part of our AM Improvement Plan, we need to carry out a more detailed review of how infrastructure capacity will be planned and rolled out to support the city's growth needs over the next 30 years. This work will feed into more fully fleshed out lifecycle plans in our AMPs that focus on how each asset area needs to respond to growth and ensure ongoing asset operation over the lifecycle of these assets.



## **OUR BIG PICTURE DEMANDS AND DRIVERS**

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 change we can better plan for the future, develop assets to cater for growth, and consider levels of service that meet our community's needs. Some of the big picture demands and drivers that may impact on how we plan for our assets and deliver LoS to our community are:



### **Big Picture Issues**



### **Council Strategy**

To provide the ideal conditions to support growth and development.



### **Population Growth**

The city's population is growing. By 2051 we will have 25,908 more people living here.



#### **Household Growth**

The number of households in the city is increasing. By 2051 there will be an additional 12,865 houses here.



### City Growth (Houses)

In the future there will be more greenfield development in the North, East and West of the City. Housing density may increase with new infill housing developing throughout the city.



### **City Growth (Industrial)**

The city is poised for industrial growth. The North East Industrial Zone provides the City with development options for large industrial businesses.



### **Economic 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, defense, government administration, agribusiness and logistics.



### **Customer Expectations**

We aim to deliver a customer centric experience. Key to delivering the levels of service is having good quality infrastructure assets, with the capacity to deliver services.



Rangitāne o Manawatū are acknowledged as having a significant and special relationship with the Council by



virtue of them being Tangata Whenua.



### **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 chawnges to infrastructure assets.

### Impact on **Asset Management Planning**

#### What we will do

New infrastructure will be in place to support housing development in greenfield areas.

Our existing infrastructure will have enough capacity to support infill development.

#### What we will do

New infrastructure will be in place to support industrial growth in new areas, providing businesses with "spade ready land" and essential services when needed.

### What we will do

Our infrastructure will position the City as a competitive option for business and enables economic growth opportunities.

### What we will do

Our assets will enable us to provide customers with the levels of service we promised to deliver.

#### What we will do

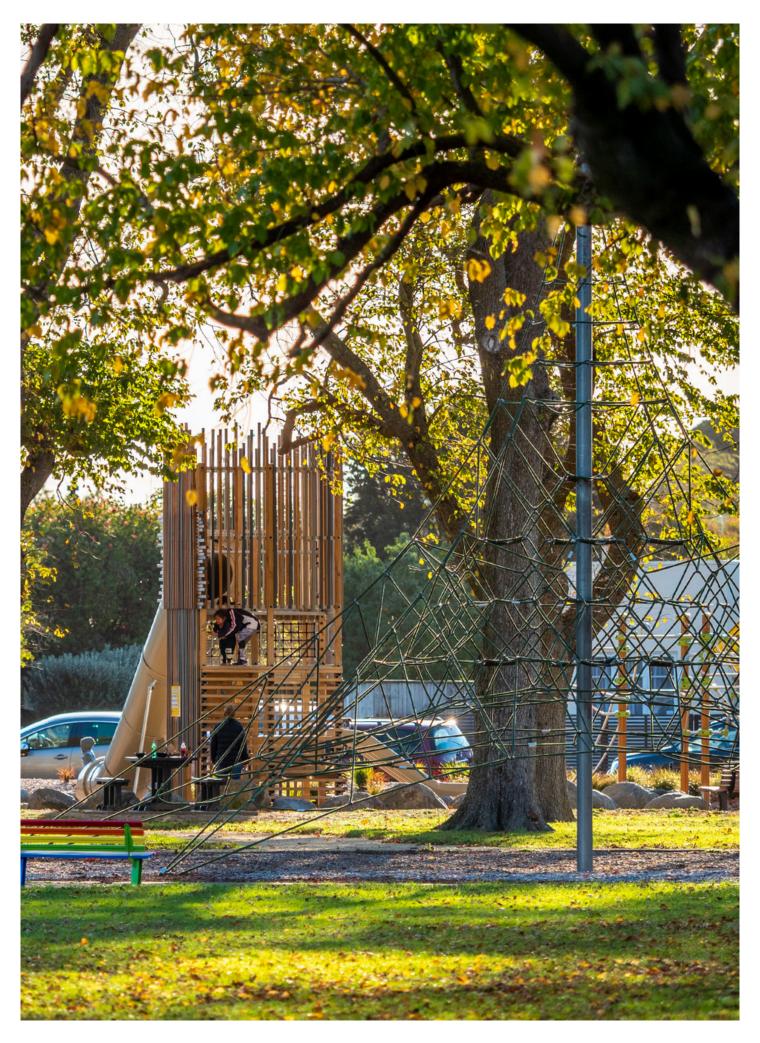
Our infrastructure will enable us to provide levels of service that are considerate of iwi aspirations.

#### What we will do

Our infrastructure will be sustainable and provide for the changes likely to be experienced by present and future generations.







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### **OVERVIEW**

### ASSET MANAGEMENT PLAN **EXECUTIVE SUMMARY PARKS AND RESERVES**

Manaaki whenua, manaaki tangata, haere whakamua.

Tihei mauri ora!

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Tēnā koutou, tēnā koutou, tēnā tātou katoa.

As our community continues to grow and our lives get busier, parks and reserves become increasingly important as places where people can play, be active and connect with one another.

Climate change will bring warmer temperatures and more frequent and intense rainfall events to our city and our management of open green spaces will need to adapt. Our trees and gardens are the lungs of our city, and managed well, they will provide places for people and wildlife to escape an increasingly harsh environment.

### Parks and Reserves are quite diverse

Parks and Reserves is a collection of facilities, managed by a single division of council. They range from high profile parks such Victoria Esplanade and Ashhurst Domain to remnant stands of bush such as Tutukiwi reserve. They include a vast network of walkways that enable people to move around the city easily and connect with our awa. Our sportsfields support a wide range of sports, by providing places for teams and individuals to train and play. We provide swimming pools for people to grow their water confidence, play and exercise. Our cemeteries are places to visit and celebrate the lives of our past citizens

Our parks and reserves also play a role in the management of stormwater. They provide large areas within the city where rainfall can naturally soak into the ground and trees and other plants can absorb moisture from the soil. We undertake riparian planting to improve water quality, biodiversity and secure wetland reserves.

This Asset Management Plan outlines how we currently manage parks and reserves, what our challenges are, changing expectations, and how we're going to prepare our city for the next 30 years to ensure that our parks and reserves support our community to be more active and connected, and support biodiversity.

### **Our partners**

Rangitāne o Manawatū and Council work in a collaborative partnership. Since the 2016 Rangitāne o Manawatū Treaty settlement, Rangitāne have become highly involved in the development of parks and reserves of cultural significance. Rangitane sites of significance are identified, protected, and enhanced. Current Parks and Reserves projects being developed in partnership with Rangitāne include Te Motu o Poutoa (Anzac Park) and the Manawatū River Park.

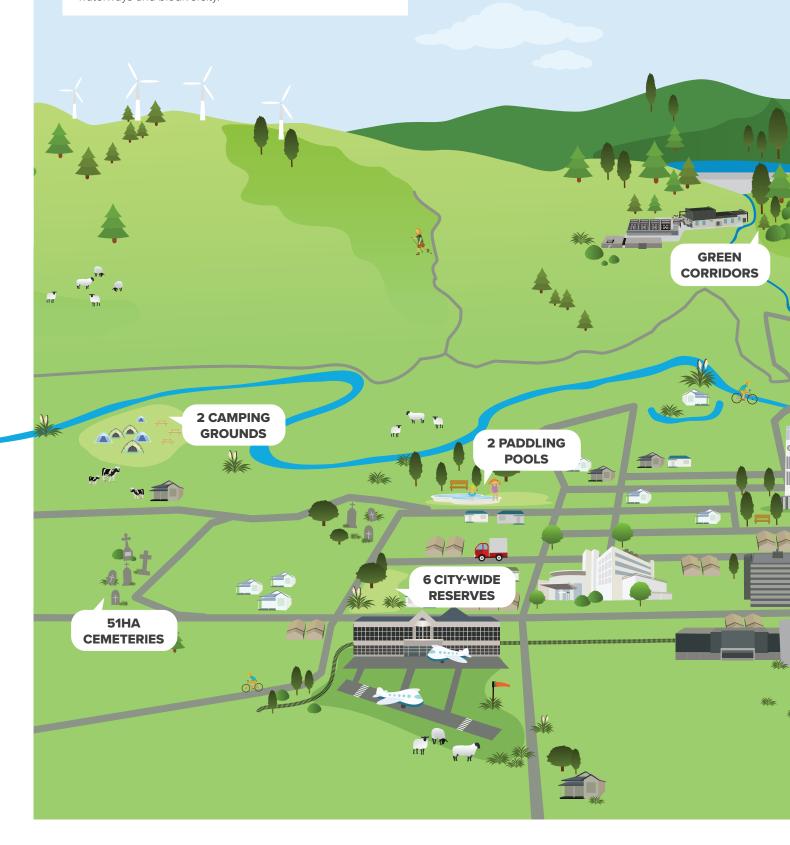
The Department of Conservation (DoC) has statutory responsibility for administering the Reserves Act. The DoC manages the Manawatū Gorge, a major ecological and recreation area, in partnership with Councils and other agencies, as part of the Te Apiti Manawatū Gorge Biodiversity Project.

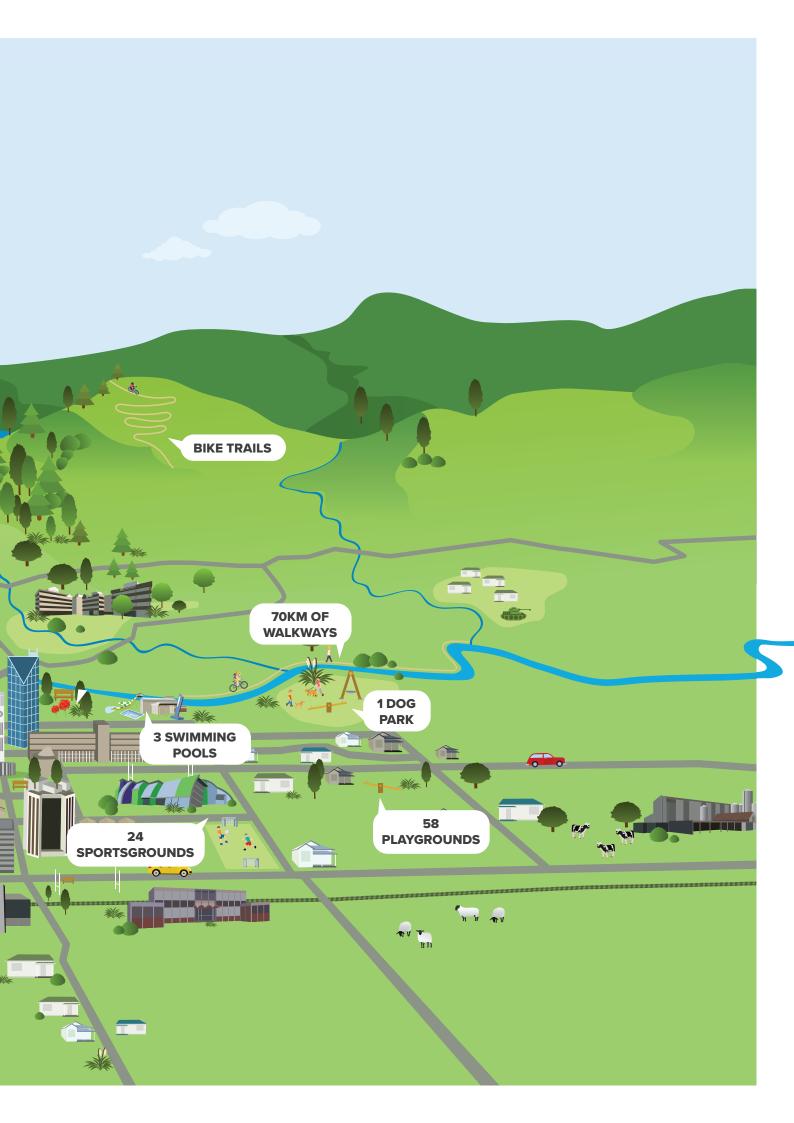
# WHAT WE PROVIDE



Around 6 in 10 residents visit/use parks, reserves and walkways at least once or twice a month.

Collectively parks and reserves support our community to be playful, active and connected, and help us to protect our waterways and biodiversity.





# EVERYONE IS A CUSTOMER



WALKERS



**BIKERS** 



**FAMILIES** 



**RUNNERS** 



**SWIMMERS** 



**SPORTS TEAMS** 



ENVIRONMENTAL GROUPS



**CAMPERS** 



**EDUCATION** 

#### Our level of service

A diverse range of people enjoy our parks and reserves to undertake all kinds of activity. Most users expect our parks to provide a pleasant visitor experience, to be well maintained, safe to use, spread throughout the City and easy to access.

Parks, reserves and green spaces, and walkways and shared pathways are the most frequently used/visited Council facilities.

We get great feedback from our community about the facilities we provide! Overall satisfaction with parks, reserves and public spaces is high when compared to other Council services and has been consistently high for many years. Our assets are spread throughout the city and are generally in average to good condition.

There are very few areas where the community inform us we are not delivering the level of service they expect. The levels of service gaps relate to specific sites, rather the parks and reserves collectively. These sites are usually where demand is high and people want to use them at the same time, e.g. lane swimmers, sports training, or where high usage leads to the asset condition deteriorating quickly.

### **WE HAVE SOME CHALLENGES & RISKS**

### Climate change means we need to start to do things differently

Changes to rainfall patterns will lead to issues for our sportsfields and walkways, because there will be more heavy downpours. Flooded surfaces may result in cancellation of sports events and walkways closed due to slips. In addition to more intense rainfall it is likely long dry periods, or drought events, will also occur more frequently. This will put a strain on trees and plants, restricting their growth or even causing them to die. If new parks and reserves infrastructure is not designed to cope with weather extremes, then the contribution our green assets make to our city will diminish and biodiversity will be lost.

### Meeting the needs of every sport is challenging

At present some sports are well catered for, whilst others must compete with the general public, particularly for winter sports training grounds, swimming pools and indoor courts. As new sports emerge and our community grows, demand at key times of the day and week will continue to increase. It is impractical and unaffordable to provide new sports facilities, when we know they will only be used for a small proportion of the week.

### Our community expectations are high, and our resources limited

As new families move into the city, and our community becomes more diverse, there is an increased expectation that Council will upgrade facilities at local parks. This is particularly true of playgrounds, where everyone wants something they have seen at another park. Unchecked, this has led an increase in level of service in some areas of the city and a decline in others. Overall the cost to maintain our parks is increasing as a result.

#### We have some other risks too

As our population is becoming more diverse, their preferences and needs are changing. Our existing network assets and services will struggle to support the needs of all members of the community in the future.

As sections get smaller, and housing more intensive, there will be increasing pressure to provide more public reserve land in the city.

Sports are changing and there is an increased need for indoor spaces and specialised sports surfaces. Our traditional sports facilities may become less desirable.

Our city is spreading in many directions – considerable investment will be needed, and new assets will place further pressure on our existing maintenance budget.

Continued pressure to further reduce chemical usage in our parks and reserves, with alternative weed and pest control measures likely to be less effective, may lead to a decline in quality and a loss of biodiversity in some areas.

Increasing conflict between the need to use parks and reserves for stormwater detention following heavy rainfall events, and the community desire to access parks.

Unstable banks throughout the gullies in Aokautere, means we may have to modify or relocate existing walkway tracks in the future

### WHAT'S OUR PLAN?

### We need to make the best use of our existing assets

We have provision standards with clear levels of service for each category of park. We will use these to manage our reserves as a network, providing a range of play experiences within each suburb. City reserves will continue to be our destination parks and we will implement signature projects at these reserves to ensure they provide unique high-quality visitor experiences.

We will continue our annual assessment of the condition and performance of assets and prioritise our resources to replace assets that have reached end of life or become unsafe. We will take the opportunity when replacing assets to address any identified levels of service gaps and improve accessibility and safety as part of the project.

In the longer term, we will increase the use of our existing assets through initiatives such as draining sports fields, installing floodlights and upgrading existing fields to artificial surfaces.

### We will help build the resilience of our city

We'll continue to work with our stakeholders and users to manage park assets in a manner that supports sustainable levels of service and environmental outcomes.

All new parks will include design features which will help make them more resilient to climate change. We will actively reduce our carbon footprint by choosing more sustainable materials and energy options.

We will continue to improve the resilience of our communities and the environment by planting edible trees, managing plant and animal pests and supporting community initiatives to restore our waterways and increase biodiversity.

### We will only invest in new assets if there is a proven need

Where demand for new assets exists, we will explore partnerships with others to provide community access to their existing assets. The regional sports facilities investment framework will be used to ensure that needs are proven, and that a new facility is financially viable in the long-term before we commit to funding a new facility, either by ourselves, or in conjunction with others.

We'll work closely with landowners and our city planners to ensure new growth areas of the city make adequate provision for parks and other recreation facilities. These should meet the needs of the local neighbourhood, and support the park and walkway needs of the surrounding suburbs. The cost to buy and develop these parks in line with our provision standards needs to be fairly shared between ratepayers and owners of the new properties. There needs to be adequate funding provision in the long-term plan to maintain these parks to the agreed standard well into the future.



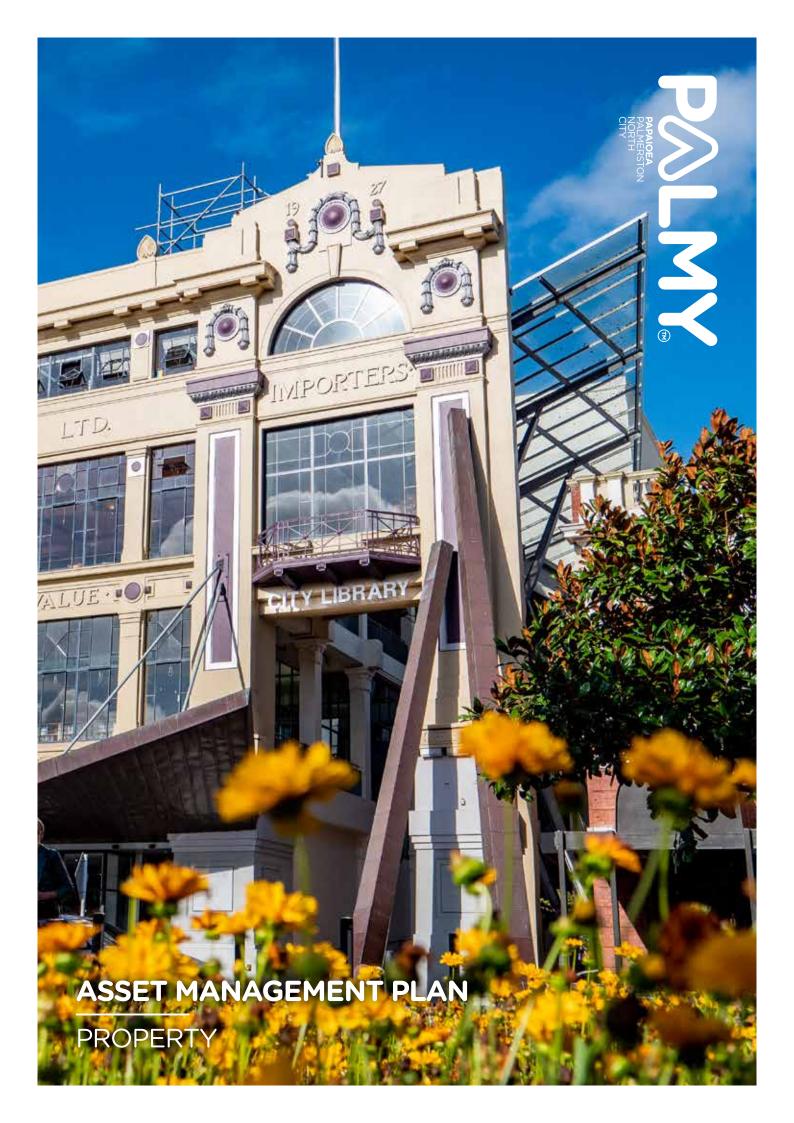
# HOW MUCH WILL IT COST?

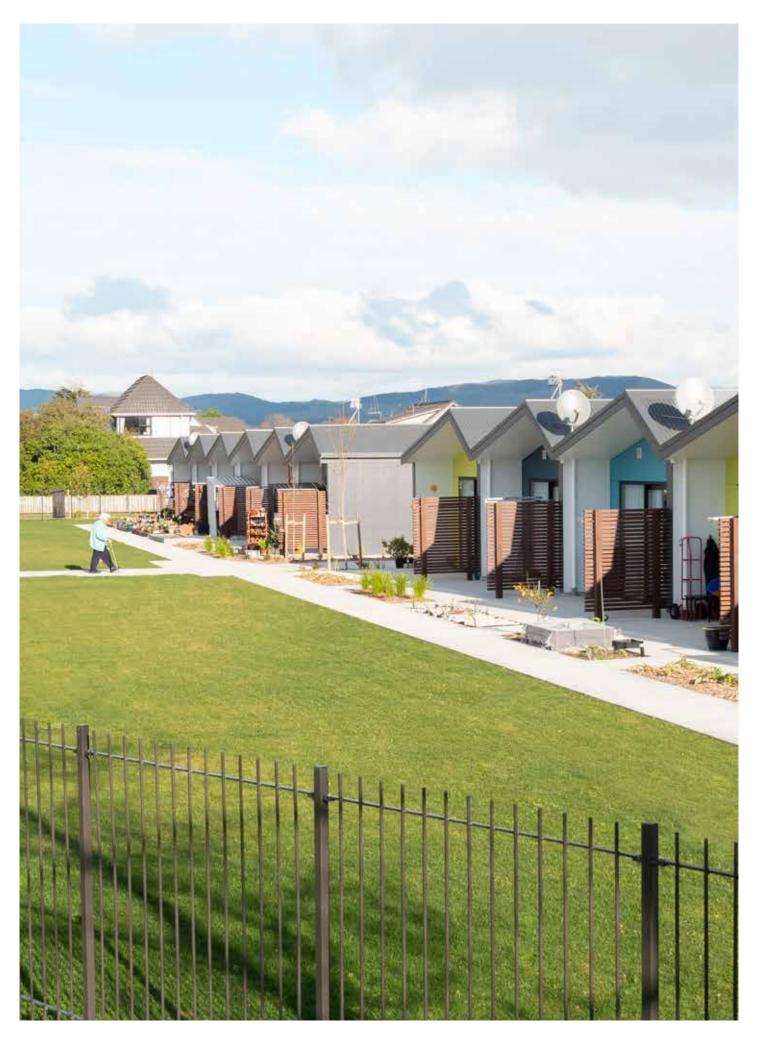
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### **OVERVIEW**

### ASSET MANAGEMENT PLAN EXECUTIVE SUMMARY **PROPERTY**

Manaaki whenua, manaaki tangata, haere whakamua. Tihei mauri ora!

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Tēnā koutou, tēnā koutou, tēnā tātou katoa.

With a growing population, one of the most diverse communities in the country, and ever-changing building standards - our buildings portfolio is undergoing some major changes and will continue to do so for some time yet.

Our buildings portfolio is quite diverse. The Property Division supports other Council divisions to deliver various services from our buildings.

The Property Division is responsible for tenancy and contract management, building facilities maintenance, property compliance. The capital projects teamwork with various Council divisions to ensure we deliver our building capital projects on time and in the right locations.

The purpose of the Property Asset Management Plan (AMP) is to support the goals of the various activities by ensuring that building assets are operated and maintained so that they provide the required level of service for present and future customers sustainably and cost-effectively.

### Scope of this plan

The Asset Management Plan highlights:

- how we ensure that our asset management decisions are aligned to strategic goals and plans
- > how we want to improve asset knowledge, facilities maintenance and monitor performance
- > key upgrade, renewal and maintenance work programmes
- > how we can minimise risk

This Plan informs our 10 Year Plan, Financial Strategy and 30 Year Infrastructure Strategy.

### Our buildings portfolio supports council goals

The buildings we own, each support services being provided from them to contribute to our vision of 'He iti rā, he iti pounamu'- 'Small city benefits, big city ambition'! We have five strategic goals that support the direction of our vision - which are to have a:

GOAL 1 an innovative and growing city	GOAL 2 a creative and exciting city	GOAL 3 a connected and safe community	GOAL 4 an eco-city	GOAL 4 a driven and enabling council
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The five goals support the well-being of our communities to thrive economically, socially, environmentally, and culturally for now and into the future.

Our investment and strategic buildings at George Street, Main Street, Rangitikei Street, and Broadway Avenue support 23 local businesses to grow, be innovative, and contribute to our local economy – which supports goal 1.

The Central Energy Trust Arena and our cultural facilities - Globe Theatre, Creative Sounds, Square Edge, Te Manawa, and Regent Theatre provide spaces for our communities to be creative and host exciting shows and events – which supports goal 2.

We provide spaces for our communities to be connected and active through providing spaces in our community centres, community agency facilities, and sportsfield buildings, supporting us to achieve goal 3.

Our warm, dry and safe 407 housing units are a home for families and senior residents that are on a low income and experience barriers to renting in the private market – which supports us to achieve goal 3 for our communities.

Operational buildings, such as the water treatment plant, enable us to treat and deliver quality water to our residents. Our Awapuni Materials Recovery Centre ensures that we are contributing to recycling and minimising waste within our city, supporting us to achieve goal 4.



The Property Division supports other Council divisions to deliver various services from our facilities.

- Our 8 Community Centres on average are used for 1870 hours during the year - going above our target of 1400 hours of use
- Our Te Manawa Museum, Art Gallery and Science Centre had over 100,000 visitors over the last year
- > The Globe Theatre hosted 190 performances
- CET Arena hosted 2,500 individual bookings
- Central Energy Trust Wildbase Recovery Centre has had 100,000 visitors since 1 July 2019
- 23 local businesses are located in our investment and strategic properties

CACCIA BIRCH HOUSE

**WATER AND** 

**WASTEWATER** 

TREATMENT BUILDINGS

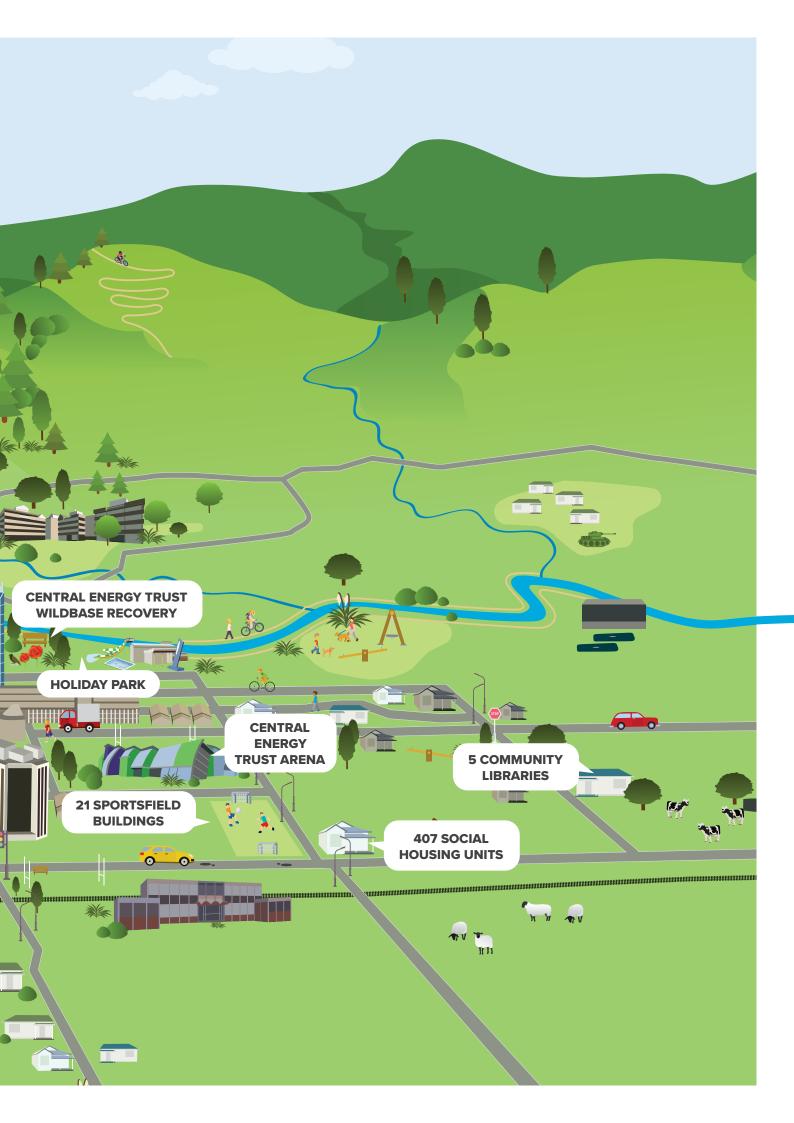
I-SITE

CREMATORIUM

PUBLIC TOILETS

TE MANAWA MUSEUM SCIENCE CENTRE & ART GALLERY

KEITH STREET POWER STATION







RESIDENTS



TOURISTS



**FAMILIES** 



COMMUNITY GROUPS



**EDUCATION** 



SENIOR CITIZENS



COUNCIL DEPARTMENTS



EVENT/SPORT ORGANISERS



SMALL BUSINESS
OWNERS

Our buildings cater to a wide variety of people, including our residents, small business owners, community groups, families and senior citizens, schools, council departments, event and sports organisers, as well as tourists passing through our city.

We engage with our partner Rangitāne o Manawatū – early in our projects for planning and development for new and changing community facilities.

We work alongside our partners within our Council Controlled Organisations (CCOs) board committees, to ensure that our facilities are fit for purpose. We continue working with community trusts and organisations, and other key stakeholders such as Central Energy Trust, Department of Conservation and Massey University.

#### Our levels of service

Although all our buildings portfolio is varied, our customers usually expect that all our buildings to be well maintained, clean, accessible, safe, warm and dry.

We have found it challenging to have consistent levels of service across all our varied property portfolio. In the past, we have acted reactively regarding building maintenance. We are now working to improve our planned maintenance so we can provide better levels of service to our communities.

## WE HAVE SOME CHALLENGES + RISKS

### We have earthquake-prone buildings

Our earthquake-prone buildings are the most vulnerable. If the buildings are not seismically strengthened, they will continue to pose a risk to people's safety. Major seismic strengthening work will need to be completed at Civic Administration Building (CAB), Square Edge, the Kelvin Grove Crematorium, Wastewater Treatment Plant, Regent Theatre, Keith Street Power Station. The affordability of this work is a challenge for us, as we try to strengthen our buildings to the required National Building Standards (NBS) while ensuring we spend in a financially sustainable way. The change in building standards means there is a chance that there may be more earthquake-prone buildings identified in the future.

### Unknown future costs of asbestos management

Asbestos is commonly found in building products in properties that were built, altered, or refurbished between the 1940s and 1990s. Most asbestos in our buildings is non – hazardous while it is intact and undisturbed. However, it poses a risk when building work needs to be carried out that makes asbestos friable. Friable asbestos is a high risk to human health. Asbestos remediation is high-cost work, as it needs specialist removal. However, due to the variation in the property portfolio, it presents a challenge in determining the true future cost of any remedial work that could be needed to remove the asbestos.

### We are learning more about our buildings

We are learning more about our buildings just through the way we have been managing them. We are still investigating the true condition of some of our building asset components – such as our roofs. We don't fully understand the condition of our underground pipes (water, wastewater, and stormwater) of our facilities. In the past, stormwater pipes have been overloaded or blocked due to severe storm weather events. An example of this was at Arena 2 were stormwater pipes were blocked. This caused significant water damage to Arena 2 and consequent disruption, which affected community use of the building and created an unexpected cost to our budgets.

### Deferred maintenance work needs to be addressed

We are still catching up to deferred maintenance and renewals due to historical underfunding of maintenance and renewals work. We now have a dedicated facilities and maintenance team and capital projects team that ensures we are on the right track with investing at adequate levels for our renewals and maintenance work programmes. However, it will take many years to achieve the right balance with funding as we are still maturing in our asset management practices.

### Our new buildings need operational budgets

We are building new assets and have not had operational maintenance budgets set aside – due to new builds requiring minimal maintenance in the first few years. However, this has meant that as these assets, age and start to require maintenance or renewal, we don't have sufficient budgets to maintain them. This will mean that some of our buildings could deteriorate faster than they are supposed to. In the past, this has led to historical underfunding for some of our buildings. In some areas, this has led to surprise budget increases during the year for our renewals and upgrade work programmes. This may end up costing us more in the long run to do any remedial work and have an impact on agreed levels of service.

### Our approach to maintenance has been too reactive

In the past, our facilities maintenance has had a run to failure maintenance strategy. With this strategy, we let some of our buildings keep running until they were about to fail – at which point we responded with reactive maintenance. A lot of maintenance was planned, but it was planned to respond to the anticipated failure of assets. This was due to the lack of condition data-driven decision making. In the past, our budgets have been roughly 30% planned maintenance and 70% reactive maintenance. We now have a dedicated facilities maintenance team that is trying to change this. It will take some time to get the right budget balance for reactive and planned maintenance.



### Unaffordability of housing for local residents is an issue

Housing demand is an ever-growing issue due to the undersupply of suitable and affordable housing locally in Palmerston North. Housing unaffordability of rent and homeownership has increased in the last four years. There is an increased demand for one to two-bedroom homes within the city. Private and public agencies provide the majority of social housing to residents. Council's strategic direction is to increase social housing supply to ensure that we can provide homes for people with the greatest needs. Council supplies 407 social housing homes.

### We are rescoping our direction for cultural facilities and community centres

The Civic Cultural Precinct Masterplan aims to create better connectivity between the four key civic areas in the central business district - the CAB, Central Library, Te Manawa Museum and the Art Gallery. The masterplan work actions are on hold, due to seismic strengthening work programmes to be completed at the Central Library and the Te Manawa Complex. A feasibility study is being undertaken to understand the potential future use of the facilities to ensure that the buildings are fit for purpose to meet the future needs of the wider community.

If we are to build any new community centres, we need to understand what a community centre needs to entail -i.e., a library, a gym, a community centre all into one. We won't be able to invest in creating new community centres until there is clear strategic direction. In the meantime, we need to continue to maintain our buildings to the agreed levels of service.

### Climate change will have an impact on how we invest in our property

We aim to adapt our building designs to account for higher temperatures and more frequent, extreme weather events, and changes in rainfall patterns. This will mean there will be greater demand for ventilation and cooling systems. Lowering our carbon footprint has been one of Council's main priorities, and energy use was an area we have been trying to tackle through implementing a lighting upgrade programme. Each time a building needs new lighting, we opt-in for the more sustainable LED lighting. While this requires a greater up-front cost, the use of longer-lasting and more efficient fixtures will minimise the whole of life costs and be more energy-efficient.

### Levels of service not always clear

The levels of service that we are supposed to deliver throughout the building portfolio has not always been clear. This is due to a combination of old service agreements and overlooked performance targets. We need to understand the levels of service for each facility. Not all assets and components can or need to be maintained at the same level. More work is still yet to be completed in this area. Clear levels of service and performance targets, will enable us to ensure we maintain, renew, and even refurbish our buildings to the required level. Our revised approach is to maintain facilities at the asset component level. This approach reflects that some areas within a facility may need to be kept at a higher standard than others. An example of this could be maintaining the carpet in a reception or public-fronting area in good condition, whereas carpet in a back office of a building may not be replaced until it is in poor condition.

### WHAT'S OUR PLAN?

### We have prioritised our seismic strengthening

We have undertaken detailed seismic investigations. This will help us to understand what the future cost is to complete seismic strengthening for our buildings. We now have an Earthquake Prone Buildings Policy. Our 'Seismic Strengthening Roadmap for Council Owned Earthquake Prone Buildings' has helped us to identify the priority order for seismic strengthening.

A majority of the seismic strengthening budget is going towards the Central Library and Te Manawa. Seismic strengthening designs will be developed on a building by building basis. As we progressively seismically strengthen our key buildings — it is likely that more work programmes could be triggered, such as roof replacements, fire upgrades, or asbestos remediation.

Our approach to this is that any of our buildings that are due to be refurbished or demolished must be first surveyed to determine the presence of asbestos. No demolition or refurbishment can start until a survey is complete.

#### **Increased staff resource**

For work to be completed well and change to occur, we also need a good team of people to coordinate all facilities maintenance, renewals, and compliance work. The Property Division has had a recent expansion in people resource in the last 12 months. There is now a dedicated Facilities Maintenance team, capital projects team, and a compliance officer. They ensure that our buildings are well maintained, renewed, building projects meet regulatory requirements within legislated timeframes. The expansion of the Property Division has set a foundation for better planned facilities management and forward work programmes planning for all our buildings. This will also enable:

- Better contractor engagement, robust KPIs, and expectations
- ➤ Condition reporting
- > Health and safety accountability
- ➢ Better risk mitigation

### We are investing in more asset condition assessments

We will be developing a Condition Assessment Strategy that defines what condition assessments should be conducted, by whom, their frequency, and why. Our facilities maintenance team will be an integral part of this – they have already completed condition assessments for most of our property portfolio at a component level. However, we also plan on being able to understand the structural condition of our assets; for example, our roofs need structural assessments. We have also created programmes to understand the condition of our underground pipes (water, wastewater and stormwater.

### Using better data to inform decision making

We are aiming to use accurate data to drive better long-term investment decision making across our property portfolio. We are working on finding ways to integrate our asset data system, SPM, and our facilities maintenance system. This will create ease in identifying repeat faults and repairs. It will help us to understand our historical maintenance and ensure that maintenance work is completed on time.

### We are increasing our maintenance budgets

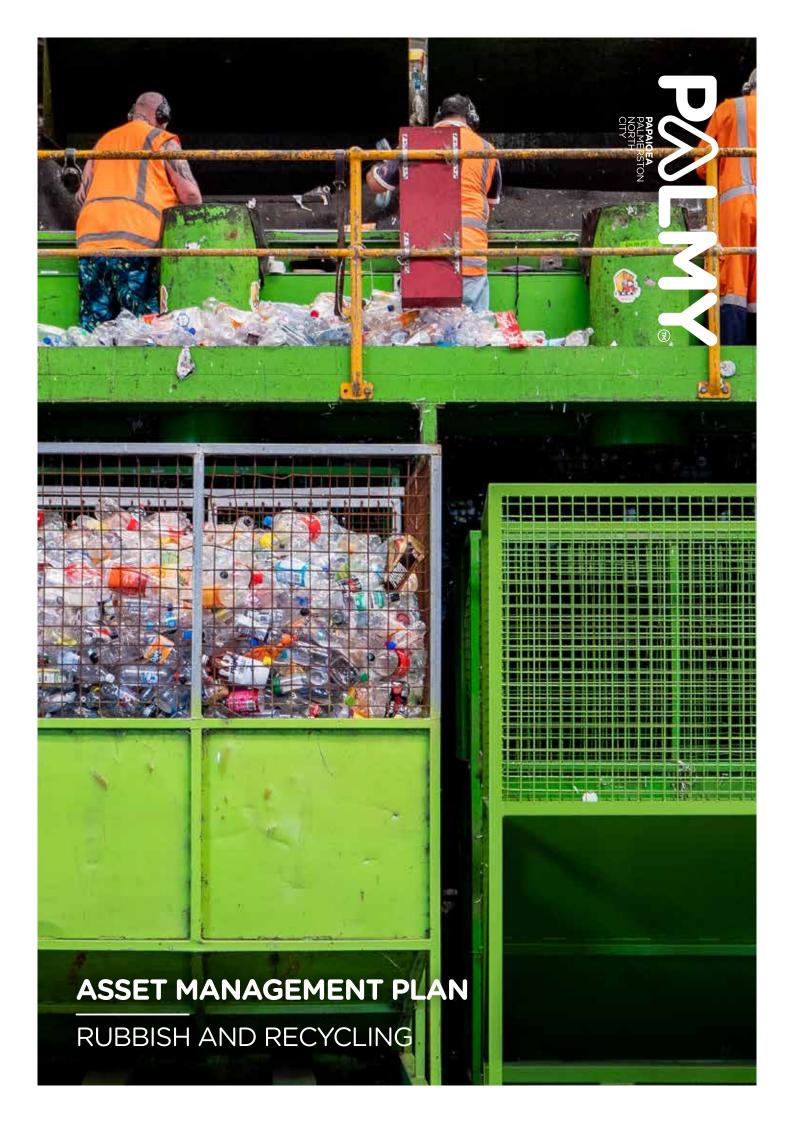
We are increasing our maintenance budgets across the portfolio to ensure we can provide better levels of maintenance. Increasing our maintenance budgets will help us to catch-up to deferred maintenance. In the long run, having a planned maintenance approach will mean that we can push out renewing our assets until later in their lifecycle, potentially minimising whole of life costs. In response to building new assets, we recognise that we need to have robust operational maintenance plans and budgets in place

# HOW MUCH WILL IT COST?

(This will be added at a later date and likely be a couple of pages)









Produced by **Palmerston North City Council** 

## **OVERVIEW**

## ASSET MANAGEMENT PLAN EXECUTIVE SUMMARY RUBBISH AND RECYCLING

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.

Most of the things we do, buy, and consume generates some form of waste. This not only costs money when we throw things away but, if we do not manage the waste properly, it can cause problems with the environment and with people's health.

We provide rubbish collection and recycling services for the City in order to:

- Ensure the city's solid waste is adequately and affordably managed;
- Maximise the amount of waste diverted from landfill (such as through recycling and composting); and
- Manage hazardous waste in an environmentally responsible manner.

### Our waste management and minimisation plan guides our work

We are required by the Waste Minimisation Act 2008 to adopt a Waste Management and Minimisation Plan (WMMP) that sets out our objectives, policies and methods for achieving effective and efficient waste management and minimisation, and how the plan is to be funded. We reviewed and updated the WMMP in December 2019 and identified four priority actions, three of which are likely to require infrastructure.

We also receive funds from the national waste disposal levy to spend on promoting or achieving the waste minimisation activities set out in our WMMP.

We are also guided by the Resource Recovery Plan which is our tactical response to the Goal 4: An Eco City and the Eco City Strategy.

This Asset Management Plan outlines how we manage our rubbish and recycling activity, what our challenges are and our investement plan for the next 30 years.

#### We can be a leader in waste diversion

In 2017, Palmerston North sent just over 45,000 tonnes of waste to landfill. Nearly half of this was potentially divertible. While we cannot be directly responsible for all the City's waste, we can promote effective and efficient waste management and minimisation.

There are opportunities for us to invest in new services to increase the proportion of waste diverted from landfill from 38 percent to 48 percent by 2025 as identified in our WMMP .

We could save nearly 20,000 tonnes of material from going into the landfill each year.

#### Scope of this plan

This Plan informs our 10 Year Plan, Financial Strategy and 30 Year Infrastructure Strategy. It supports us in the management of our rubbish and recycling activity to:

- Achieve our strategic outcomes as set by Goal 4: An Eco City and the Eco City Strategy
- Meet the levels of service we have committed to:
- Plan for growth and adjust to other drivers such as climate change and new legislation;
- Improve asset knowledge and monitor performance;
- ➢ Minimise risk; and
- Plan operations.

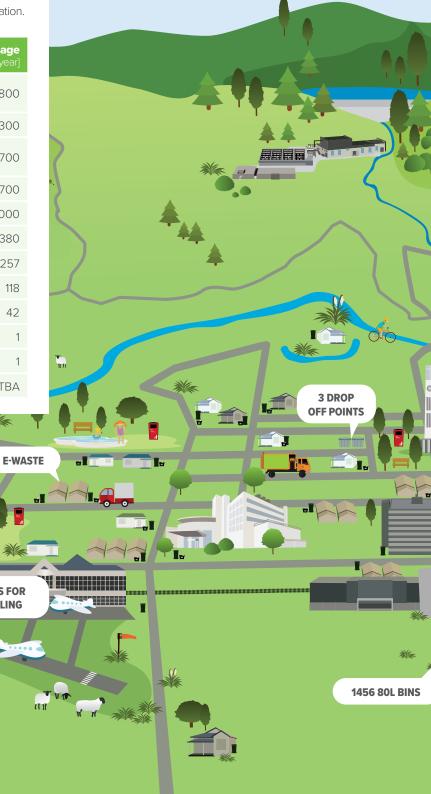
# WHAT WE PROVIDE

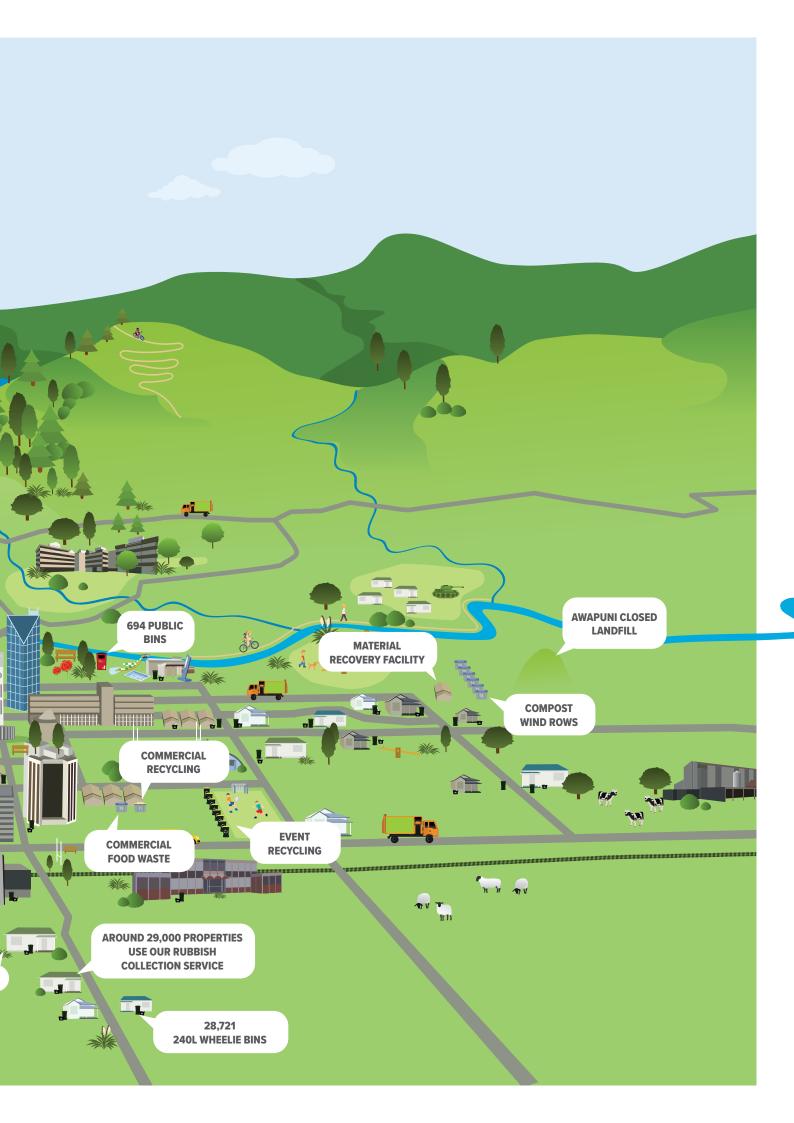
We provide waste minimisation (recycling), waste management (rubbish) and closed landfill management services.

In addition to the services listed below we promote waste diversion through behaviour change campaigns and education.

Service	<b>Typical Usage</b> [Tonnes per year]
Kerbside Comingled Recycling Collections	3800
Kerbside Rubbish Bag Collection	3300
Organic and Green Waste Drop Off Points	2700
Kerbside Glass Recycling Collections	1700
Three Recycling Drop-off Points	1000
Food Waste Collection	380
Public Space Bins	257
Rubbish Transfer Station	118
Illegal Dumping Response	42
Events Recycling	1
Household Chemical Drop Off	1
E Waste	TBA

30,621 CRATES FOR GLASS RECYCLING







# WE HAVE SOME CHALLENGES + RISKS

#### We can do better in sorting our waste

The 2017 Waste Assessment provided data on nearly all waste streams for Palmy. This data was analysed and identified the main areas where we could improve our effectiveness in waste diversion.

The WMMP was updated to include three priority issues that require new services and infrastructure:

- A significant proportion of waste going to landfill is organic waste, with food waste present across all kerbside rubbish collection systems.
- Lack of facilities to recycle or otherwise divert construction and demolition waste, in particular with a predicted increase in construction activity.
- More recyclables could be diverted from commercial properties.

#### Waste minimisation mitigates climate change

The government has further incentivised waste reduction by including landfills in the New Zealand Emissions Trading Scheme so the more we can divert from landfill, the greater part we play in reducing green-house gases.

#### Law changes are imminent but uncertain

Waste management is also a national concern and hence, a key driver of change is new legislation and standards.

Central Government has a New Zealand Waste Strategy and is consulting on phasing out some types of unrecyclable (including some polystyrene packaging) and single use plastics.

Other changes are more advanced, such as a Container Return Scheme (CRS), increased waste disposal levy and kerbside collection standards (due 2021).

#### A bevarage container return scheme is on the cards

A major benefit of having our own Material Recovery Centre (MRF) is the ability to separate out high-value commodities. Our MRF also has processing capacity to accommodate growth.

Government has funded the design of a CRS for New Zealand and is now considering next steps. A CRS would not be implemented until 2023 at the earliest. As a result of the CRS, high value plastics and glass could be removed from kerbside collections. Therefore, it is in our interest to investigate how we can be involved in running a CRS locally.

#### Rubbish disposal will cost us more

It is expected that from July 2021 to 2024, the Waste Disposal Levy will increase from \$10 a tonne to \$50-\$60 a tonne for Class 1 landfills. We will have to pay more for disposing of rubbish in the Bony Glen landfill. Assuming we will continue with the kerbside rubbish collection as a ring-fenced, costneutral, user pays service this may result in an increase in the cost of rubbish bags.

#### Kerbside collections may become standardized

A national review is currently underway into how collections differ around country. The most likely change to impact our services would be the standardisation of products that can be collected in the mixed recycling service. We already collect glass separately which is the other major change expected.

#### Covid-19 changed behaviour

In 2020 Covid-19 became a significant issue for contamination of waste in our mixed recycling residential wheelie bin service.

In recent years we have worked hard to reduce contamination, but this work was undermined when people started to use the recycling service for disposing waste during Level 4 when we were unable to process the material and had to send it to landfill it for health reasons.

Since our normal service has resumed, recycling contamination levels have not returned to previous levels, costing us more to dispose of this waste.

Public education and awareness programmes are vital, and will continue to play a key factor in all of our work.

#### **Limited markets for commodities**

Another major driver is the change in commodity markets impacting on our ability to divert materials. Since China's "National Sword" policy in 2018 that banned importing of "waste" there has been a dramatic decline in markets willing to pay for recovered materials. We are now paying to supply some commodities instead of selling them. This is increasing our operating costs.

#### Our closed landfill will continue to play a role

From 1950 to 2007, 2.5 million tonnes of rubbish were deposited at the Awapuni Landfill. Now closed, we have the ongoing responsibility to maintain its integrity. The current consent expires in 2029 and will need to start the process of reconsenting it a couple of years ahead of this.

#### Our assets are aging

Recent unexpected maintenance costs at our Material Recovery Facility have highlighted a need to better classify the criticality of assets and assess their condition.



## WHAT'S OUR PLAN?

### We plan to provide new services to divert more waste from landfill

Our target is to increase the proportion of waste diverted from landfill from 38 percent to 48 percent by 2025. This will mean a reduction in waste being sent to the landfill and an increase in material being diverted.

#### Kerbside food waste service (+ 4 percent diversion rate)

Subject to investigation and detailed financial analysis, Council would provide a city-wide, rates-funded, weekly kerbside food waste collection service to households. This service would be offered to non-residential customers on a user-pays basis. A tailored service could be offered to those that have larger quantities such as restaurants, hostels, and cafeterias.

Note that we are recommending running a trial to confirm assumptions and feasibility and to introduce the new service a year later than previously indicated in the WMMP.

### Citywide Recycling Services to Non-Residential Properties (+ 2 percent Diversion Rate)

Provide additional recycling collection services to non-residential customers to accommodate their needs; such as variety in containers, types of materials, frequency of collection and location of collection. These would be provided on a user-pays basis.

## Diversion of New Materials from Landfill (+ 2.7 percent Diversion Rate)

This would include investigating the establishment of a construction and demolition waste processing service (with associated collections), aiming to divert at least one third of this waste currently going to landfill. Implementation would be subject to investigation and detailed financial analysis.

#### Our response to growth

The city has grown further away from our existing recycling drop-off points. We need to investigate establishing a new drop off site for recycling and green waste in the north east of the city to better service this growth.

#### We will continue to investigate and pilot new services

We will continually adapt to the changing markets and legislative environment and to do this we plan to be:

- Investigating the possibility of recycling difficult materials like polystyrene.
- Continuing education to change behaviour and promote awareness
- Continuing to take enforcement action against those that dump rubbish illegally, and work in partnership with community group to identify and address problem spots.
- Continuing to support a community led Zero Waste Action Group; and
- Applying our new Bylaw to influence and reduce the amount of materials going to landfill that could have been diverted.

#### Maintain existing levels of services

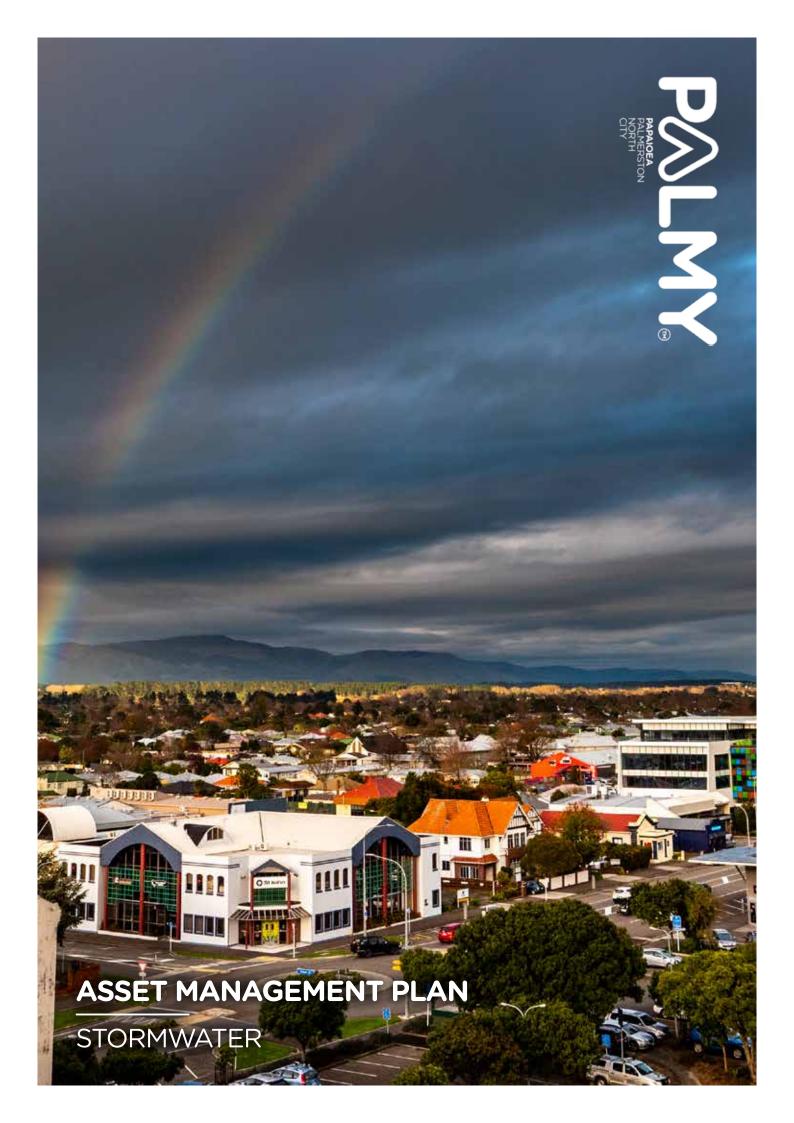
We plan to keep operating the existing services at the same level  $% \left\{ 1,2,\ldots ,n\right\}$ 

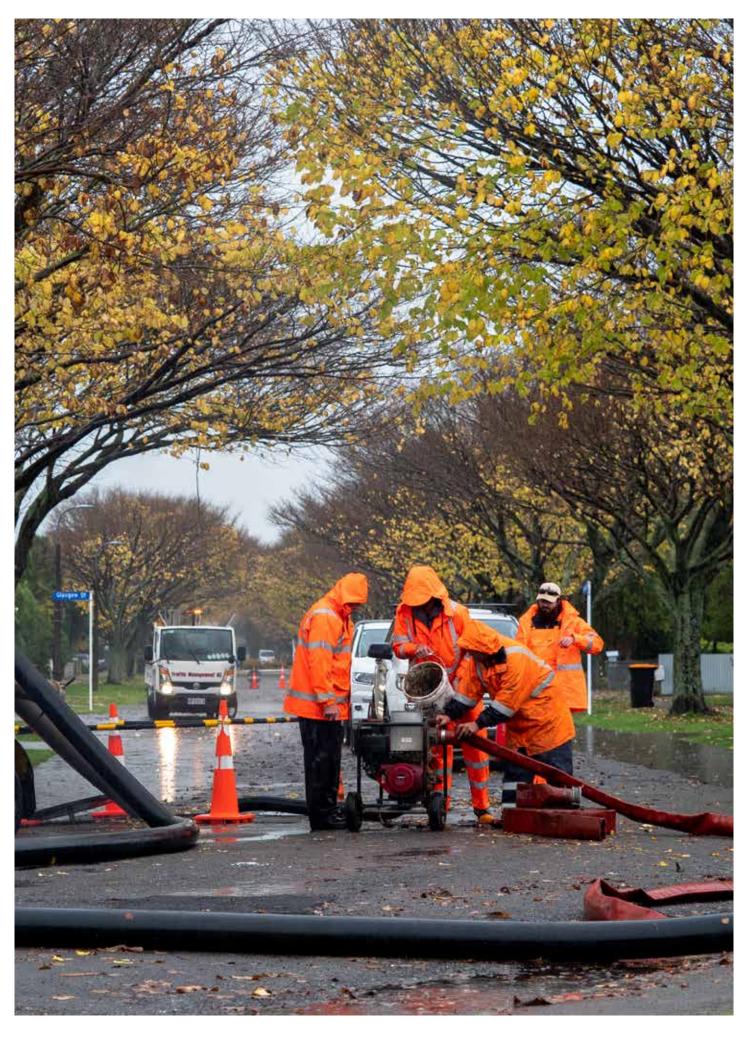
# HOW MUCH WILL IT COST?

(This will be added at a later date and likely be a couple of pages)









Produced by **Palmerston North City Council** 

## **OVERVIEW**

## ASSET MANAGEMENT PLAN EXECUTIVE SUMMARY **STORMWATER**

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.

With the effects of climate change becoming more apparent over the next 30 years, our stormwater network has never been so important.

More frequent and intense rainfall means our network will need to be adapted to cope with these new risks.

The purpose of the stormwater system is to protect the environment and public health by controlling the level of pollutants and sediment in stormwater runoff that goes into streams and rivers, and to protect buildings from internal flooding by water that ponds or flows during heavy rain events.

As a member of the Manawatū River Leaders' Accord, we recognise we have a role in improving the mauri and health of the Manawatū River. Council's strategic focus is to raise the profile and quality of city urban streams, acknowledging their cultural significance as tributaries of the Manawatū River.

#### **Taumata Arowai**

In 2019, the Taumata Arowai-Water Services Regulator Bill was introduced to Parliament with the purpose to establish a new regulatory body by the same name. Initially, Taumata Arowai will be responsible for administering and enforcing a new drinking water regulatory system and a small number of complementary functions relating to improving the environmental performance of wastewater and stormwater networks.

A freshwater policy review is also underway. It is likely this will mean stronger regulations and more inter-regional coordination. We expect this would mainly have implications lead to discharge of wastewater and a stronger emphasis on protecting waterways from uncontrolled overflows.

#### Te Mana o te Wai

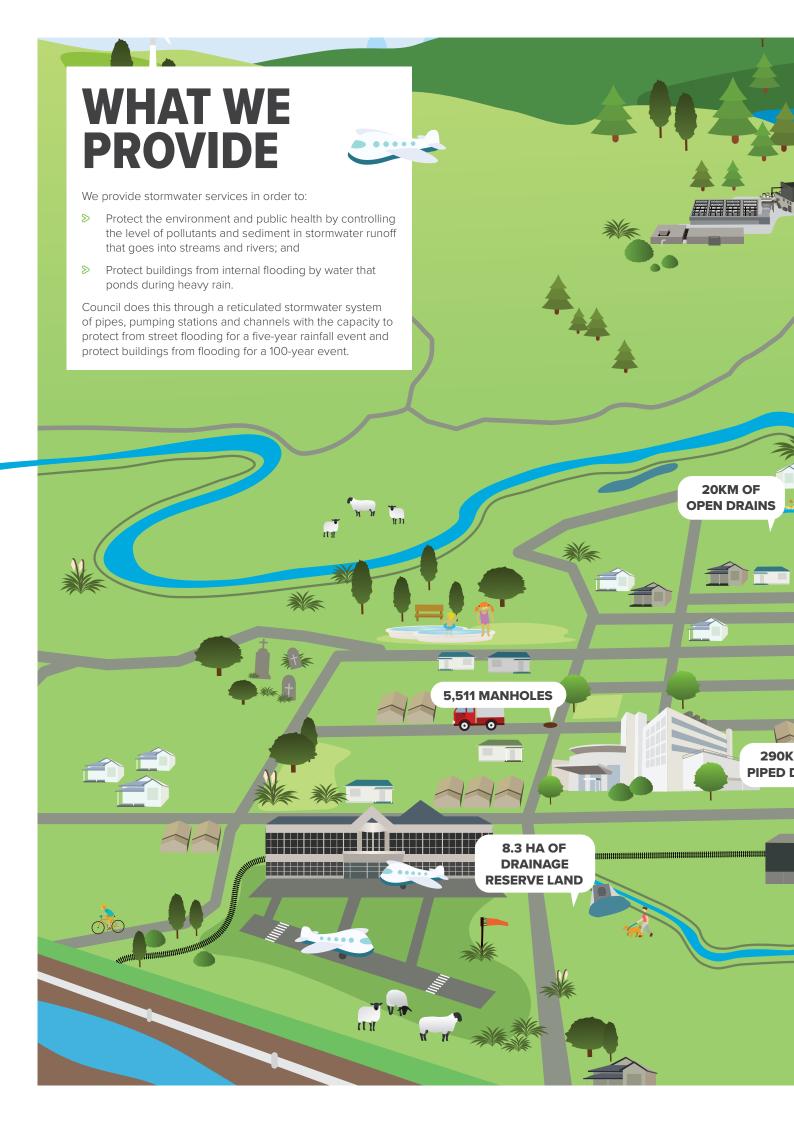
This section will be added in 2021

### This Asset Management Plan outlines how we plan to manage and invest in our stormwater assets for the next 30 years

#### Scope of this plan

This Plan informs our 10 Year Plan, Financial Strategy and 30 Year Infrastructure Strategy. It supports us in the management of our stormwater assets to:

- Achieve our strategic outcomes as set by Goal 4: An Eco City and the Eco City Strategy
- Meet the levels of service we have committed to
- Plan for growth and adjust to other drivers such as climate change and new legislation
- Improve asset knowledge and monitor performance
- ➢ Minimise risk
- Plan operations









RESIDENTIAL



**VISITORS** 



**INDUSTRIAL** 



RURAL



**EDUCATION** 



FIRE AND EMERGENCY NEW ZEALAND



**HEALTHCARE** 



COUNCIL



**DEVELOPERS** 



COMMERCIAL

Our strategic focus is to raise the profile and quality of city urban streams, acknowledging their cultural significance to Rangitāne as tributaries of the Manawatū River. Stormwater quality is an issue across the city due to contamination from wastewater during heavy rain and land use. We are working with Horizons Regional Council as we have overlapping responsibilities. Complaints about the urban waterways have increased since maintenance budgets and activities were reduced.

People expect their properties to be safe from flooding. We ensure that at the very least, habitable floors are protected

by requiring minimum floor levels to be set on new houses where appropriate. Some properties have been flooded in recent years and we are in the process of upgrading the network to address these capacity issues. Complaints about nuisance ponding of water on roads has increased but no action is justified as this is part of the stormwater system design.

Even though certain complaints have increased, the overall satisfaction of residents has improved for the Stormwater Activity

# **WE HAVE SOME CHALLENGES + RISKS**

#### Our city is growing

In most areas where the City is growing there are existing sensitive receiving environments such as degraded urban streams and wetlands. As these areas are urbanised there is an opportunity to improve water quality and ecology by applying water sensitive design.

#### Water quality is poor in our urban streams

Cultural health monitoring of the urban streams carried out by Rangitāne o Manawatū under our joint programme Hei Manga Ora, and previous water quality monitoring indicates that the urban streams are contaminated by sewage from urban environment and our waste water networks.

Inspections in 2019 identified significant areas of poorly managed vegetation in our open drains and streams and other issues causing hydraulic capacity problems . More appropriate species are needed to improve both capacity, water quality and amenity.

#### Infill / intensification

While the urban area expands we're seeing more subdivisions of existing properties (infill). This is putting the existing level of service at risk due to more hardstand surfaces contributing to direct more rapid rainfall runoff.

#### Climate change will have an impact

Current research suggests that the main impacts of climate change on the stormwater activity will be a significant increase in rainfall in winter, and a higher frequency of extreme rainfall events. This could increase both nuisance surface water ponding and flood events.

#### Overland flow paths have been piped and built over

We now have better modelling and GIS tools to manage overland flow paths but a lack of controls in the past has meant that there are some problematic areas that need rectifying.

Related to this, some urban streams are now accessible only through private property, preventing us from managing them properly.

#### Regional stormwater management

We are working regionally to better manage stormwater, but this work has slowed while water reforms take place as some issues will be addressed nationally. However, progress towards integrated management of our stormwater discharges.

#### Asset condition knowledge is limited

While the risk profile of our stormwater pipes is acceptable as they tend to last a very long time, we have limited knowledge of the actual condition of these assets.

#### **Pump stations are vulnerable**

Our pump stations are vulnerable due to the lack of dedicated backup power supply.



# WHAT'S OUR PLAN?

#### Partnership with rangitane and the community

Applying water sensitive design to renewal work will be a key change as it will help achieve improved outcomes for water quality, hydraulic capacity and amenity.

Our new approach is to fund a "one time" clean up and vegetation removal exercise for all the urban streams over the next five years. As sections are cleared, they will be planted with appropriate species with support from Rangitane and community groups/businesses.

#### Operationalise our new stormwater framework

The framework will set out the performance requirements and challenges for each catchment in the city and other work to renovate our open streams and drains. Once adopted by Council it will empower Council officers to set specific requirements of developers.

#### Respond to growth

Requiring hydraulic neutrality will be a key response to growth but some capacity upgrades of existing infrastructure will be required.

We are expecting increased operational costs to maintain stormwater treatment devices that are vested to us.

As our city grows, we will need to maintain our stormwater model to reflect the changes.

#### Improve resilience and reduce risk

Purchasing additional mobile generators and emergency pumps will provide the much needed resilience in the stormwater system.

Areas where more capacity is needed has been identified for upgrading, and retention of flows at the Linklater Reserve is planned.

Where possible, we intend to purchase land adjacent to urban streams to enable us to better manage them and facilitate access for walking and cycling.

#### **Design for climate change**

We will continue to design new infrastructure with provision for climate change. Where infill is occurring, the impacts of heavier, more frequent rainfall is expected to be mitigated by developers adopting rainwater tanks for retention and minimising the areas of improvement of impervious surfaces.

#### Use data to prioritise repairs

New condition assessment data will confirm our service failure risk profile and provide us with a prioritised backlog of pipe defects. This will help us maintain our level of service and plan and optimise future pipe replacements.

#### **Obtain consents for our discharges**

Our partnership with Rangitāne on Hei Manga Ora has provided us with invaluable information on the cultural health of our waterways. This information combined with the roll out of an improved water quality monitoring programme will inform future discharge consent applications.



# HOW MUCH WILL IT COST?

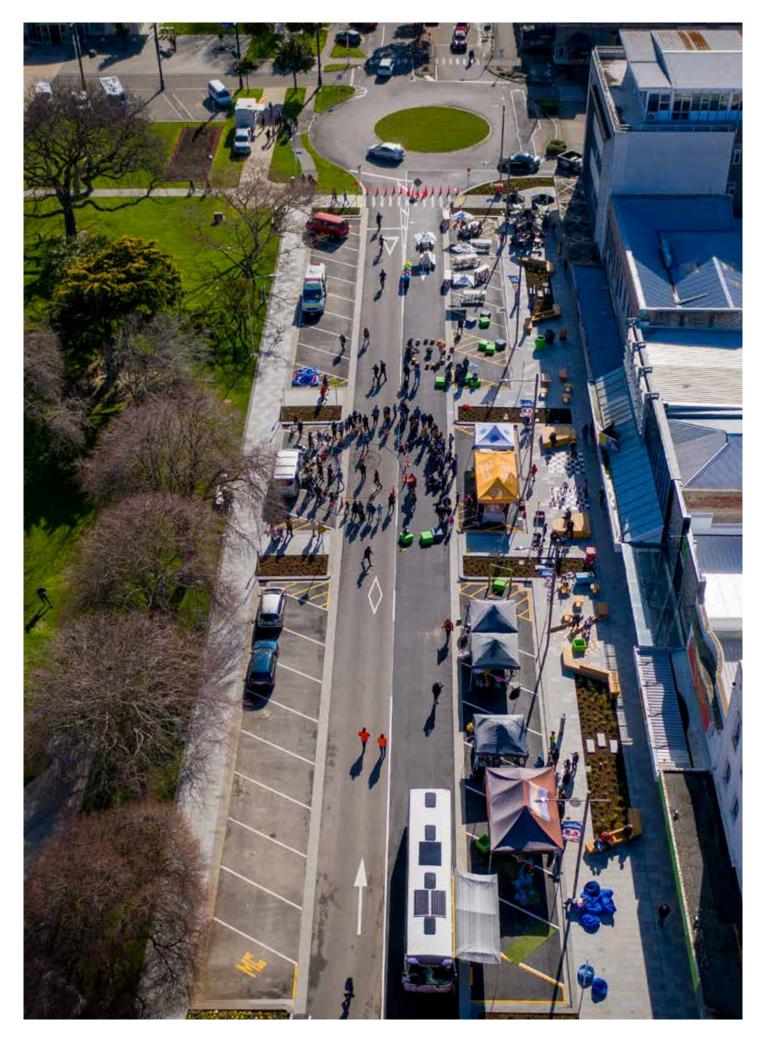
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## **OVERVIEW**

## ASSET MANAGEMENT PLAN EXECUTIVE SUMMARY TRANSPORT

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.

Palmerston North's population and industrial sector is growing, and we need to make sure people and goods can continue to move around the city easily and safely.

With more journeys on our roads, our transport network is becoming busier and more constrained. Palmerston North has emerged as the primary freight hub for the lower north island, resulting in more trucks on our roads. At the same time there is a growing desire to be able to move around the city easily and safely as a pedestrian, cyclist or by bus. This is resulting in decreasing accessibility, liveability, journey reliability while there are increasing conflicts between transport users.

#### It's more than just roads and cars

Our vision for Transport is to provide an integrated multi-modal 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 transport network also supports us in realising other strategic priorities. Well designed roads and streets help create a city that has great places for all people.

Our footpaths, cycle lanes and shared paths provide the facilities to support us to have one of the most active communities in New Zealand. Our streets have a significant portion of our public vegetation cover providing opportunities for biodiversity and infrastructure that serves to protect, enhance and preserve the environment.

This Transport Asset Management Plan focuses on our local transport network and the economic, health and safety, climate and financial challenges that surround it. It highlights why we're spending money on the transport network and the benefits we're going to get from this.

#### We have an investment partner

Waka Kotahi (NZ Transport Agency) are a key partner funding approximately half of the work we do in the transport space. We've worked closely with Waka Kotahi to ensure that our investment supports their strategic priorities of improving road safety, providing better travel options, improving freight connections and developing a low carbon transport system.



Active and public transport modes are continuing to decline;

2 percent regularly catch the bus to work;

4 percent regularly cycle to work;

8 percent regularly walk to work;

More than 1500 heavy vehicles travel on Tremaine Ave each day;

More than 400 million kilometres are travelled in vehicles each year;

There is an increasing number of fatal and serious injury crashes;

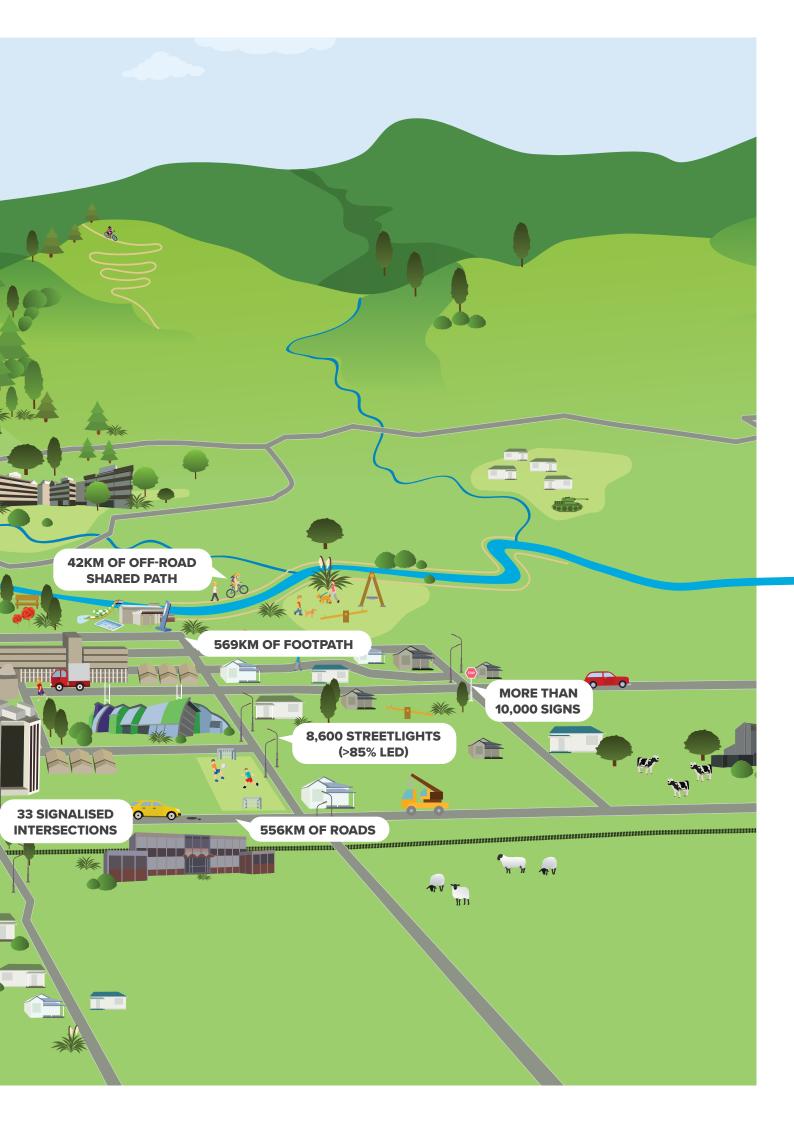
More than 30 people die or are seriously injured on our roads each year;

106 BRIDGES

13,900 STREET TREES

> 88 BUS SHELTERS

NEARLY 5,000 METERED AND TIME RESTRICTED CAR PARKS



# EVERYONE IS A CUSTOMER



#### Our level of service

People use the transport network in a variety of ways. Common expectations among transport users are that our roads and streets provide a safe, reliable, accessible and comfortable journey. We want to create an environment for all transport users, irrespective of their age, ability or mobility.

There are only a few areas that the transport network is delivering the level of service anticipated. These are related to satisfaction with street lighting, overall cost to manage transport assets and road asset condition. However, road asset condition is deteriorating.

Overall satisfaction with the transport network is low compared to other Council services. This is reflected in the transport network failing to deliver on levels of service. Very severe road crashes are increasing, and the overall condition of our footpaths is not to the desired standard. The number of people walking, cycling and catching the bus for work or education is declining. This also impacts our ability to reduce transport carbon emissions in the city.

# WE HAVE SOME CHALLENGES & RISKS

#### Our road safety record is getting worse

The number of recorded road crashes causing injuries on our roads and streets has been generally flat over the ten-year period. However, the amount of harm from transport crashes on roads and streets in Palmerston North has been increasing resulting in more deaths and serious injuries from road crashes.

#### Our roads are deteriorating

The quality of road surfaces in Palmerston North has been steadily decreasing over the past five-years. This has been especially so on our busiest urban roads which have shown a significant drop in the amount of travel on smooth roads. There have been many contributors to this including an increase in the number and size of heavy vehicles on the transport network, poor underlying ground conditions, service and utility trenches and inadequate levels of investment.

#### Transport is an enabler for economic growth

Palmerston North is the primary freight distribution hub in the lower North Island. This provides a significant economic opportunity for the city, while also placing pressures on existing infrastructure. Increases in the number of heavy vehicle movements associated with this growth are creating safety and efficiency issues on the transport network as well as impacting road quality. The strategic response to these issues has been slow and uncertainty remains over when improvements will be delivered and when growth will occur.

#### Fewer people are walking, cycling and catching the bus

Palmerston North is a flat, compact city ideal for cycling or walking. However, the same wide roads which are great for vehicles and parking, create challenges for pedestrians and cyclists. Wide and busy roads can be an impediment for pedestrians with lower mobility, deterring them from walking. There are no parts of the transport network where pedestrians, cyclists or buses receive priority over vehicles, despite the adjacent land use.

#### Our roads and streets don't support our communities

The need to seek a better balance between "movement" and "place" on roads and streets is increasingly being recognised and this will influence the allocation of road space and investment programmes. New initiatives will seek to optimise the transport network based on function, balancing movement and place, "de-tuning" some streets to reduce unnecessary through traffic, reducing speed environments and creating more liveable local streets.

#### The wrong vehicles are travelling on the wrong roads

Our transport network is open and accessible, providing opportunities for almost all types of vehicles and users to travel on most roads. While this provides choice for drivers, as traffic volumes increase it will result in more issues and conflict. Heavy vehicles rumbling past schools, cars rat-running to avoid busy intersections and buses stopped in cycle lanes are all examples of where the wrong vehicles and travelling on the wrong roads.

## Transport is the greatest contributor to carbon emissions in the city

The transport sector produces more than half of our city's greenhouse gas emissions. To address this, we need to encourage or facilitate more sustainable modes of travel, reduce the need to travel and provide opportunities to use alternative fuel sources.

## WHAT'S OUR PLAN?

#### We're changing how we manage our transport network

Our current method for managing the transport network is not sustainable. There are a number of changes we can make through the management of our transport network that will help us achieve our outcomes.

We're beginning to provide greater priority in our investment and the way we manage the network to pedestrians, cyclists and those catching the bus. There are many benefits from these transport modes, including improved health, environment, economic and social outcomes. This shift will enable change to occur over time. Even if it doesn't happen all at once the trajectory for investment in our transport network will change.

Road safety is being improved by reducing speed limits on our roads. We're already doing this around some of our schools and on some of the fringes of our city. Lower vehicle speeds mean a lower likelihood of a death or serious injury if a crash occurs.

We can take the opportunity to create better places whenever we upgrade and renew our roads. We did this on Cuba Street, by combining several planned renewals at the same time, while also providing a better urban design outcome.

By right sizing asset maintenance and renewals, we'll be able to reduce the long-term costs of our transport assets. Too often in the past we've made the work fit the budget we have, rather than doing the job right first time. We've recently been constructing roads that are more expensive up front but are expected to last longer.

#### We need to invest in our transport network

Our renewal and maintenance budgets — especially those relating to our road structure and surface — are increasing to ensure we can continue to deliver the expected level of service. By renewing assets at the right time and for the right cost it will also reduce our long-term maintenance costs.

The strategic transport route around Palmerston North is needed to fully enable the economic growth sought from development in the North East Industrial Zone, KiwiRail and other growth areas. In the short-term we're proposing to make improvements to the transport network – alongside Waka Kotahi – that will activate this route. This will allow heavy vehicles to use this route, placing less strain on urban routes. Upgrades to transport infrastructure is also required to support the city's other growth areas including Whakarongo and Kākātangiata.

The Streets for People programme is changing the way streets in our CBD look and operate. It's providing a vibrant city centre that will make Palmerston North even more attractive for work and play, provide more opportunities for locals and visitors to connect with the city and the people who live here, and bring significant benefits for the local economy.

Changes to our transport infrastructure are needed to deliver the pedestrian, cycling and safety outcomes sought. Long-term programmes are proposed to shift the way people use the transport network and provide a safer journey and better experience for all transport users.



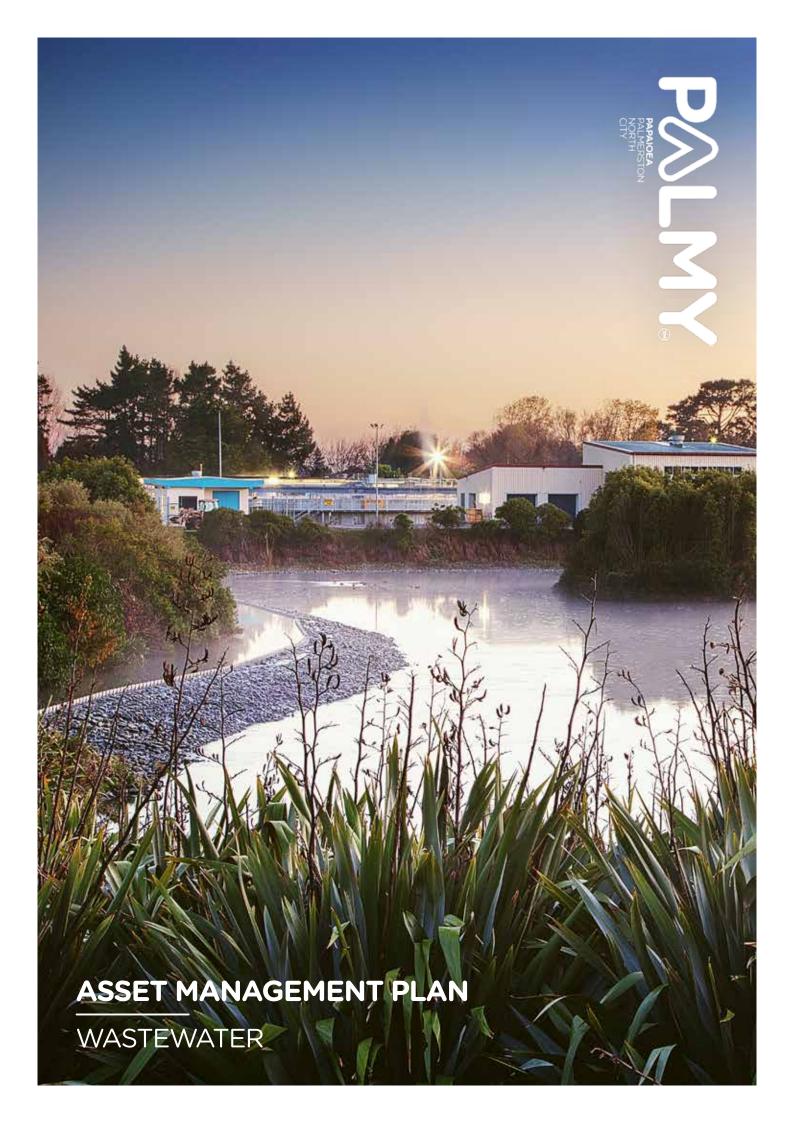
# HOW MUCH WILL IT COST?

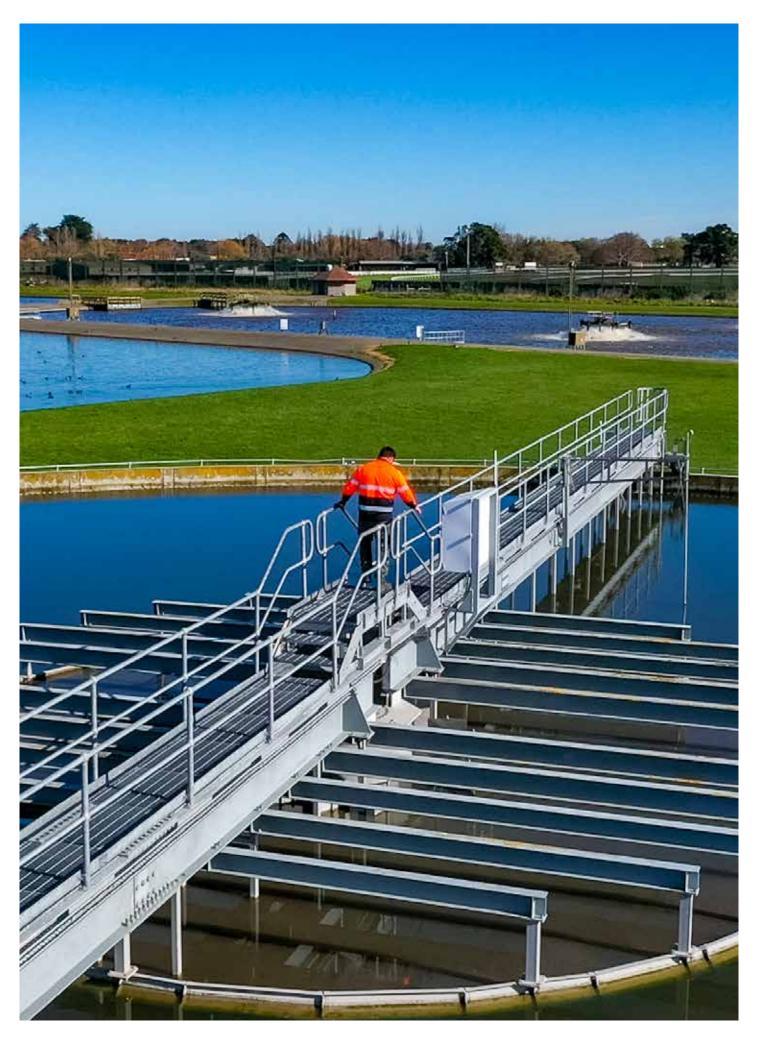
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# **OVERVIEW**

## ASSET MANAGEMENT PLAN EXECUTIVE SUMMARY WASTEWATER

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.

We provide wastewater systems for the safe and reliable collection, treatment and disposal of wastewater (sewage) from residential and commercial properties in Ashhurst, Bunnythorpe, Longburn and Palmerston North.

As a member of the Manawatū River Leaders' Accord, we recognise we have a role in improving the mauri and health of the Manawatū River. Presently, all the wastewater is treated at a single facility at Tōtara Road, Awapuni and discharged to the Manawatū River. As our population grows, environmental legislation is tightened, and residents' value in our natural environment strengthens – the way we manage wastewater in the future is likely to change dramatically.

The infrastructure assets that provide the wastewater service are valued at \$400 Million.

#### Taumata Arowai

In 2019, the Taumata Arowai-Water Services Regulator Bill was introduced to Parliament with the purpose to establish a new regulatory body by the same name. Initially, Taumata Arowai will be responsible for administering a new drinking water regulatory system and a small number of complementary functions relating to improving the environmental performance of wastewater and stormwater networks.

A freshwater policy review is also underway. It is likely this will mean stronger regulations and more inter-regional coordination. We expect this would mainly have implications for the current discharge of wastewater and may lead to a stronger emphasis on protecting waterways from uncontrolled overflows.

#### Te Mana o te Wai

This section will be added in 2021

#### Nature calls will answer many of our questions

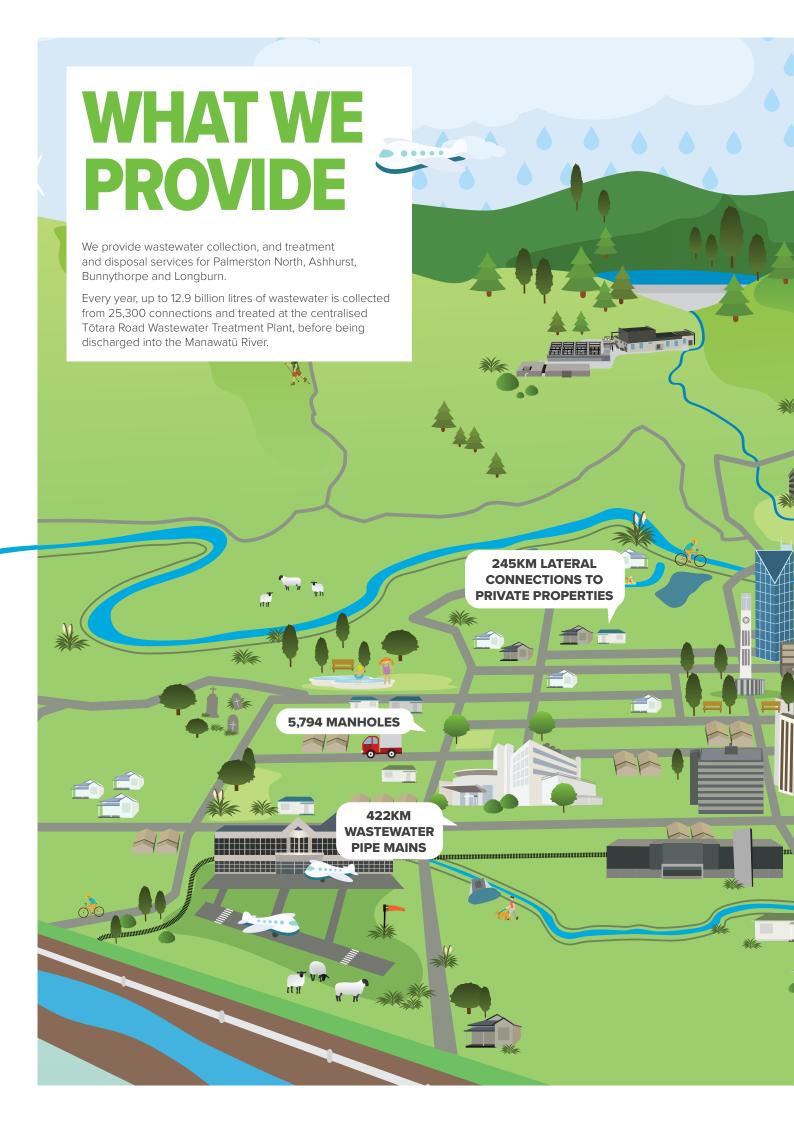
The Nature Calls project is taking a fresh look at how we treat and dispose of our wastewater. We are collaborating with Rangitāne o Manawatū on the wastewater Best Practicable Option review in order to apply for new consents by June 2020. Any outcome will require us to treat wastewater to a higher standard but will also require us to look closely at how we manage our Trade Waste customers and how we manage the network to reduce wet weather flows at the treatment plant.

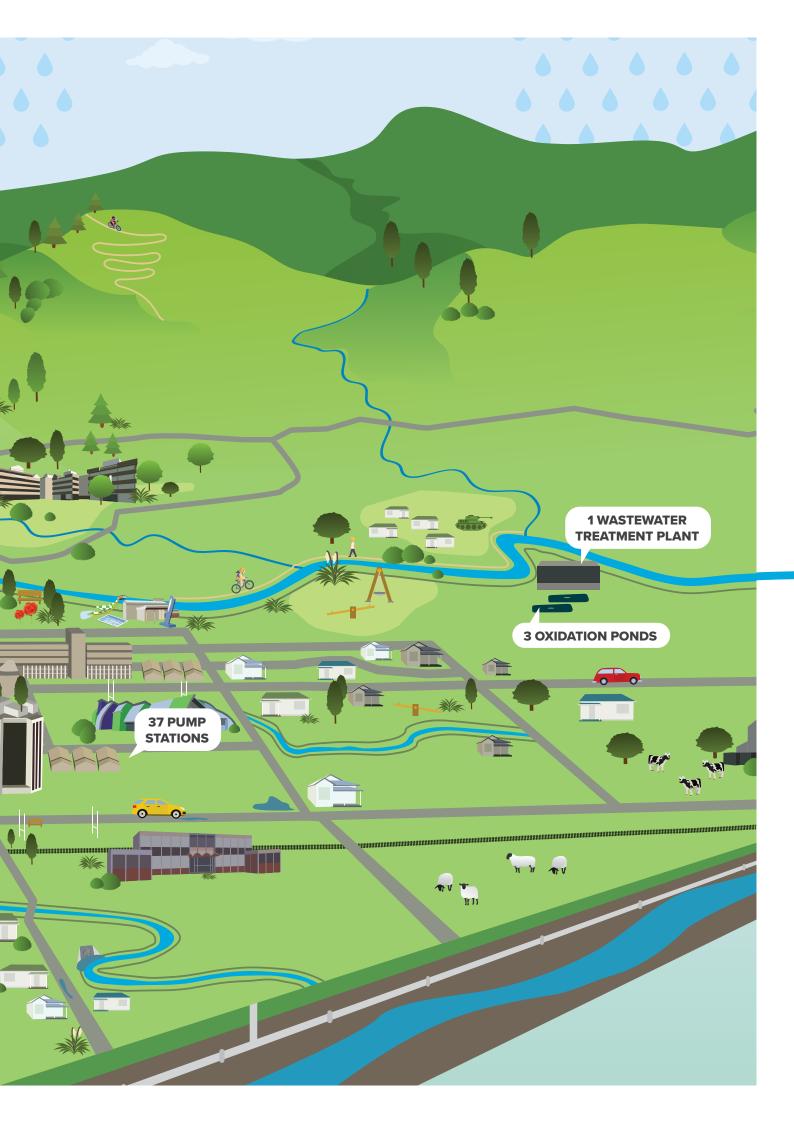
### This Asset Management Plan outlines how we plan to manage and invest in our wastewater assets for the next 30 years

#### Scope of this plan

This Plan informs our 10 Year Plan, Financial Strategy and 30 Year Infrastructure Strategy. It supports us in the management of our wastewater assets to:

- Achieve our strategic outcomes as set by Goal 4: An Eco City and the Eco City Strategy
- Meet the levels of service we have committed to;
- Plan for growth and adjust to other drivers such as climate change and new legislation;
- Minimise risk; and
- Plan operations.





# EVERYONE IS A CUSTOMER



RESIDENTIAL



**VISITORS** 



**INDUSTRIAL** 



RURAL



**EDUCATION** 



FIRE AND EMERGENCY NEW ZEALAND



**HEALTHCARE** 



COUNCIL



**DEVELOPERS** 



COMMERCIAL

We service a population of around 90,000 people by providing wastewater services in Palmerston North City, Ashhurst, Longburn and Bunnythorpe.

Businesses that produce trade waste are consented as their wastewater can contain substances which can be detrimental to the sewage system, treatment plant processes and the environment, and to the health and safety of people working in wastewater plants.

About 500 businesses are required to have a treatment device to prevent fat, grease and oil from getting into the wastewater system. A smaller number of industries pay significant additional fees, mainly to cover treatment and sampling costs.

There are no restrictions on our other customers, but we do remind them to bin wipes instead of flushing them to reduce blockages. This was more of an issue than usual during Covid-19 due to people taking extra sanitary measures.

The majority of residents were satisfied with the wastewater activity in 2020 but village residents were significantly less satisfied compared to 2019. People expect a reliable service and the number of blockages and faults is increasing. Otherwise, we are meeting our customer performance measures.

We have a strong partnership with Rangitāne o Manawatū. Our stakeholders include, regulators, river leadership, adjoining councils and communities and central government.

# WE HAVE SOME CHALLENGES + RISKS

#### Our treatment plant is aging

Under Nature Calls it is likely the treatment plant will come online some time between 2026-2028. The existing treatment plant was opened in 1968 and it has been maintained to a high standard, but it is showing its age. Some of the equipment has been in service for more than 40 years and some of the technology is out-dated. As a result, levels of breakdowns are more frequent, requiring higher levels of maintenance. The treatment plant must remain fully operational until the plant is commissioned, so we have been busy replacing critical components. We have been shifting more and more from a reactive maintenance to preventative maintenance plan.

#### Our pipe infrastructure is at risk of failing

Currently we have \$20M (31km) of highly critical pipes, (typically service a large number of customers or critical providers such as hospitals), that are old and potentially overdue for replacement. The true state of these pipes needs to be understood in order to confirm the risk of them failing, and the priority for their repair or replacement.

## We need to stop stormwater entering our wastewater pipes

Stormwater and groundwater can get into our wastewater pipes in a variety of ways, including through downpipes, gully traps and leaking pipes. This is known as inflow and infiltration and increases as pipes and manholes age and deteriorate. This can lead to more overflows during heavy downpours and puts a higher demand on treatment and disposal facilities (flows increase some can be 6 fold to 150,000 m3 per day). As there are multiple entry points it is a challenging issue to address. The cost of locating defects and repairs needs to be carefully balanced with early renewal and treatment plant upgrades so a targeted approach is being proposed. The catchments with the highest assessed inflow and infiltration have been the focus of our renewals over the past few years.

#### Disaster resilience is more than earthquakes and floods

In late 2019, the Ministry of Civil Defence & Emergency Management updated its National Disaster Resilience Strategy, Rautaki ā-Motu Manawaroa Aituā. This strategy covers natural hazards, pandemics, technological risks, security risks, and economic risks.

We have a good understanding of our natural hazard risks from earthquakes and floods. Our Business Continuity Planning has identified a residual risk of wastewater overflows potentially impacting low lying properties in the unlikely scenario of the Manawatū River being in flood following a major earthquake.

Around 80% of our pipes are made of brittle material like concrete or earthenware that could fracture or be damaged in a major earthquake. Our Operational Planning is key to managing risks that we cannot "build" our way out of but needs revising to reflect the recent creation of the Water Operations Division.

Covid-19 has forced us to revise our Business Continuity Planning to manage biological hazard risks and ensure that wastewater services continue as a critical service during pandemics.

However, technological risks, security risks, and economic risks have not been comprehensively assessed for the Wastewater Activity.

#### Climate change will have an impact

Current research suggests that the main impacts of climate change on the wastewater activity will be a significant increase in rainfall in winter, resulting in higher peak flows and total wastewater volumes due to more Inflow and Infiltration. This increase in wet weather flows will increase energy and treatment costs. Climate change will also increase the intensity of short duration events. The impact of more downpours is likely to result in an increase in the number of overflows during wet weather. A budget has been proposed to identify and reduce Infiltration and Inflow, which will also benefit the Nature Calls project.

## We are meeting our level of service though and our customers are satisfied

While the risk of failure is considered too high, particularly at the wastewater treatment plant, the actual performance of our network is currently considered satisfactory for our customers. This is based on the number of pipes blocked, sewer overflows and customer satisfaction surveys.

## Our short-term focus is on projects that support growth and demand

While we are still unsure what the treatment and discharge solution will look like in the future, it is clear our region is showing strong signs of economic recovery from Covid-19 and growth.

This means a key short term focus is supporting this growth and the increase in demand. This work includes constructing new assets for land that is rezoned for residential and industrial growth, as well as implementing capacity upgrades of existing pump stations.

# WHAT'S OUR PLAN?

#### Improve health and safety

We have some health and safety hazards which though currently controlled, need to be further mitigated to minimise the risk. These include access for staff around the digesters at the Tōtara Road Wastewater Treatment Plant, our wastewater pump stations as well as the quality of equipment we use for maintenance.

#### Reduce risk of service failure

When we upgrade our pump stations for health and safety reasons, we will also make them more resilient through standardising equipment and ensuring they have enough storage and backup power supplies. Standardisation will also reduce maintenance

We will consolidate the renewal of more critical pipes (trunk mains) into a single programme of works in order to better prioritise projects as better inspection data is obtained.

An investigation has found that the network is vulnerable in locations such as in gullies, below stormwater services and trees. We plan to relocate these services to reduce the risk of stormwater ingress or sewage spills, particularly in Aokautere.

There are a number of large diameter mains that are no longer in service but have not been decommissioned. To prevent collapses in these old pipes we plan to properly decommission these assets to prevent property damage and keep the public safe.

#### Maintain the front end of the plant

The treatment plant will be upgraded under the Nature Calls Project, but the front end of the plant is unlikely to change. Therefore, we plan to carry out seismic strengthening on the sedimentation tanks, screen and pumping chamber and main building.

#### Collect more condition data to inform renewals

Better pipe condition data will either confirm our risk of failure profile as unacceptable or lower it. Either way, better data is needed to prioritise renewal investment to address the current backlog. Better plant condition data will ensure fewer "surprises" and better resource planning.

#### Improve network and treatment performance

We will be Investigating inline storage options to mitigate the risk of overflows occurring during wet weather. Storage will also attenuate peak flows reaching the plant and improve treatment performance.

In addition to carrying out more condition inspections we need to better identify sources of inflow and infiltration. This will also help with prioritisation of pipe renewals and will generate a backlog of prioritised defects to repair.

Sludge removal – 25% of aerated ponds is sludge and we need to better manage sludge removal and disposal from the ponds.

#### Maintain existing levels of services

We plan to keep operating the existing services at the same level and continue to look for ways to improve operational efficiency. This includes responding to growth in a way that enables new customers to receive the same level of service, at an optimum cost.

# HOW MUCH WILL IT COST?

(This will be added at a later date and likely be a couple of pages)





