Asset Management Plan Summary

Parks and foreshore

Asset management plans

Together, our 14 asset management plans present a detailed description of all the things – roads, cycleways, footpaths, pipes, buildings, vehicles, parks and so on – that the Christchurch City Council owns, across all areas of work, and how these 'assets' are planned, managed, operated and funded.

All our assets, collectively worth $16.8 billion, belong to ratepayers and are managed and operated on their behalf. Ensuring our assets are appropriate for the city's needs enables us to deliver the services that make Christchurch and Banks Peninsula a great place to live, work and visit.

Asset management plans are technical documents. The summary documents give an overview of how we manage our assets through their lifecycles to ensure we deliver services in cost-effective ways.

For the first time, we have published these documents online as part of our commitment to transparency.

What we do

We are responsible for the city's extensive network of parks, reserves and foreshore assets. We develop, manage and maintain a wide variety of parks that fulfil a range of purposes. We provide various visitor and community services and programmes. We also manage parts of the foreshore and provide and maintain marine structures.

Together, all our parks and reserves contribute to the community's natural character and landscape values. They have an important role in responding to the climate change and ecological emergency, and in supporting the 'garden city' image, landscape, treescapes and ecology.

We manage more than 1,276 park sites covering more than 9,877 hectares of park land and improvements, with a total book value of more than $1.06 billion, almost 11 percent of total Council assets.

Why we do it

Parks and reserves, recreational facilities, and other community infrastructure are recognised in the Local Government Act 2002 as core services. Service provision is guided by the Council's strategic objectives and the levels of service agreed with the community. The specific services and how they are provided is guided by the Council's Vision, Community Outcomes, Strategic Objectives and the agreed levels of service.

Public open space provides a publicly accessible network that enhances and protects health, recreation and liveability for residents of and visitors to Christchurch.

The Council provides parks and associated assets to provide opportunities that meet community needs for recreation, sport, culture, heritage, landscape, ecology, education, and burials. Park assets facilitate the use, enjoyment and protection of parks (including reserves held under the Reserves Act 1977) resulting in a range of personal, social, environmental, cultural, and economic benefits.

Christchurch City Council

Our assets

Parks are grouped under different management services and categorised into park types, based on their primary purpose. The portfolio grows year on year, mainly through the subdivision process, the transfer of residential red zone land and new developments.

The types of parks we manage are:

- **Community parks**
  Local parks for recreation, sport, garden, heritage or community activities. Some parks in this group are **utility parks** that have drainage or another primary function.
- **The Botanic Gardens and heritage garden parks**
  A variety of significant parks that primarily provide opportunities for people to relax and enjoy manicured gardens, plant collections and botanical diversity.
- **Regional parks**
  A network of nature-based parks of regional or ecological significance, including the Port Hills reserves, Bottle Lake Forest Park and Travis Wetland.
- **Hagley Park and Ngā Puna Wai**
  These are large parks of metropolitan significance for sports and events.
- **Cemeteries**
  We provide, maintain and administer cemeteries for plot purchases and burials.
- **Plant nursery**
  Here we grow and source a range of native and exotic trees, shrubs and herbaceous plants for landscaping parks, streets and land drainage features, and for community planting initiatives.
- **Residential red zone parks**
  Responsibility for managing and maintaining these areas began being transferred to the Council in July 2020, with ownership transferring in tranches over several years.
- **Foreshore and marine access structures**
  This encompasses public foreshore land and structures including wharves, jetties, slipways and ramps, recreational rafts, boat moorings, wharf buildings and seawalls to protect park land and marine assets.

Asset category	Book value (30/06/2020)	% of asset base
Land (parks and reserves)	$771,952,983	72.55%
Buildings	$59,705,639	5.61%
Renewable improvement assets	$205,933,058	19.36%
Marine structures	$26,386,183	2.48%
Total	**$1,063,977,863**	

	Sites	Area Ha
Grand Total	**1,276**	**9,877**
Neighbourhood Parks	794	777
Utility Parks	160	236
Sports Parks	114	1,259
Regional Parks	104	6,924
Garden and Heritage Parks	61	78
Cemeteries	23	100
Residential Red Zone – Flatland	19	490
Plant Nursery	1	11

Our issues and risks

In this asset management plan we provide a snapshot of the greatest risks recorded for Parks and Foreshore and summarise the main mitigations.

Our network of parks is vulnerable to a range of risks, from issues such as storms and climate change, through to health and safety risks. These are all outlined in the asset management plan, along with the planned mitigations.

Description of risk	Risk Rating
Large Storm Event May result in flooding, wave and wind damage to marine structures, trees, and other park assets. Damage could result in a reduced level of service.	Medium/High
Climate Change and Sea Level Rise Likely to damage foreshore marine access assets such as seawalls, wharfs, jetties and boat ramps and affect coastal, estuary, riverbank and low-lying reserves (especially when combined with storm events).	Medium
Alpine Fault 8 Event Will cause damage to park buildings, sport fields, other infrastructures and disrupt services. Rock fall risk in the Port Hills.	Medium
New risks arising from the need for continual use of assets (“forced life extension of assets”)	Medium

Where we've come from

Since its establishment in 1826, and as it has grown through amalgamations, the Council has committed to providing a diverse portfolio of quality green-space recreation and community facilities. These include parks and reserves, sports grounds, playgrounds, park buildings, cemeteries, and flagship gardens and sites which are accessible and of aesthetic value to both residents and visitors.

What it costs

Our budget for the activity that uses these assets in Year 1 of the Long Term Plan 2021-31 is a combined $93.57 million (total activity net cost of service and capital spend), with the net operational expenditure projected at net opex $67.08 million (net cost of service) and capital expenditure at capex $26.48 million (total capital spend). Tables for each area of spending are included in our activity plan.

How we're funded

The Council's Revenue and Financing Policy sets out how our activities are funded, based on who benefits. This policy is being reviewed as part of the Long Term Plan 2021-31.

- Operating expenditure is funded by rates (targeted, general, separate and differential) and through fees and charges.
- Capital expenditure is funded by borrowing and repaying over several years.
- Private developer vesting – park assets are created in new subdivisions then vested with the Council.

How it's delivered

Delivery is via a combination of Council staff and tendered contracts with private providers.

- In-house teams manage the operational maintenance, response, project management asset management and planning work.
- In-house technical staff and external consultants are responsible for design work
- A mix of Parks Unit teams and private contractors undertake physical works needed for maintenance and major capital works.

We're responsible for managing parks and reserves, public toilet facilities, marine access and foreshore protection assets.

We're part of the Citizens and Community Group, and delivering services through the following teams:

- Parks Planning and Asset Management
- Parks Programmes and Partnerships
- Botanic and Garden Parks
- Community Parks
- Regional Parks
- Specialist Parks
- Residential Red Zone Parks

Our functions and services

We apply design, financial and management practices to achieve the agreed levels of service, for the most cost-effective expenditure. This means optimising investment and outcomes within the constraints of finance, service levels and resources.

Managing our assets involves spending substantial amounts of public money, so it's vital we ensure we are doing the right thing at the right time and for the right price.

While managing our assets to meet agreed levels of service, financial prudence demands that we optimise asset lifecycle costs, so our management planning also aligns to the stages of an asset's lifecycle. Our renewals programme considers the condition of assets, not just their age.

Asset maturity assessment

The 2020 maturity assessment for our assets shows we are performing at an intermediate level, with improvement needed to meet targets.

Improvement areas that will be addressed in our improvement plan are:

- Forecasting demand
- Measurement of asset performance
- Operational service delivery mechanisms
- Management systems
- Capital works planning

Looking ahead

Network plans are being developed that set out the planned provision (and disposal or repurposing) of sports facilities, play spaces, and urban forest. Their purpose is to guide Council investment and provide a framework for responding to community requests. The plans include guidance on design and prioritisation. Future plans are being considered for other asset groups, including biodiversity, recreational routes, and buildings. A master plan for cemeteries is already in place.

Climate change

Christchurch is a coastal city and climate change will have a significant impact, especially on our foreshore and marine assets.

We are likely to see more regular coastal inundation and/or accelerated erosion. This will also affect our estuary, riverbanks and low-lying reserves, especially when combined with storm events.

The exact impact of predicted sea level rise is unknown, but it's likely some assets would need to be modified, rebuilt or relocated to higher ground. Future developments will need to take sea level rise into account.

There will be increased demand on maintenance and renewal work in affected areas over the next 30 years.

Strengthening and repairing sea walls will mitigate some effects, but in time some assets will need to be abandoned or relocated to higher ground.

Our assets will also be affected by temperature extremes. Hotter, drier summers will result in more stress on trees, plants and turf. More irrigation will be needed, or landscape and plant biodiversity adaptions to absorb and respond to environmental changes.

We are already scoping options to address impacts on parks, including design changes. This will inform future versions of the Infrastructure Strategy.

COVID-19

Budget constraints as a result of the economic impacts of COVID-19 will limit what can be achieved in the Long Term Plan 2021-31.

Some operations and maintenance activities and capital projects will need to be reviewed and agreed with the community. It will be important to manage community expectations.

Our focus will need to shift from growth and improvement to investing in renewal programmes and projects. We are benefitting from Government funding for 'shovel-ready' projects, and will look at bringing some work forward in using this funding.

A slow recovery is expected for tourism, but once restored to pre-COVID-19 there may be increased demand for high-profile parks, such as the Botanic Gardens and heritage parks, that are attractive to tourists. Higher demand for more and better park facilities, such as toilets, car parks and recreational tracks will also need to be evaluated. The Akaroa and Diamond Harbour wharves are being renewed which will provided much improved infrastructure to accommodate visitors local and international.

We expect some delays in scheduled capital programme works, mainly because of likely issues with workforce and contractor availability and disruption to material supply chains.

Continuous improvement

We need resources and budget to deliver improvements. The Council's financial position, post-COVID-19, means there is likely to be a lack of resources and that this will make it difficult to deliver on all our improvement plans.

This means planning to ensure the highest priority improvements are delivered first and that future delivery costs are well understood, and that sufficient funding is allocated in the Long Term Plan 2021-31.

2021

Parks & Foreshore Asset Management Plan

Christchurch City Council

Document Control

Version Control

Version numbering changes when a document is approved. Draft document numbering starts at 0.01. Released or approved numbering starts at 1.01.

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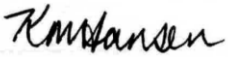
Document Acceptance and Release Notice

This is a managed document. For identification of amendments each page contains a release number and a page number. Changes will only be issued as a complete replacement document. Recipients should remove superseded versions from circulation. This document is authorised for release once all signatures have been obtained.

Name	Role	Status	Signed	Date
Lucas le Roux	Team Leader Asset Management	Final		30/06/2021
Kelly Hansen	Manager Asset Management & Planning	Final		30/06/2021
Andrew Rutledge	Head of Parks	Final		30/06/2021
Mary Richardson	General Manager Citizen & Community Services	Final		12/07/2021

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1 Summary of the Activity

1.1 Activity Description

Christchurch City Council's network of parks and foreshore contributes to the community's natural character and landscape values and plays an important role in supporting the City's garden image, cultural landscape, treescape, and ecology. Parks are an integral part of our city infrastructure. They improve our mental and physical health, and provide environmental, social, and economic benefits.

We provide parks, we develop them for different purposes, we manage and maintain them, and we provide various visitor and community services and programmes to facilitate use and understanding. Our network of parks offer a diverse range of unique open space and recreation opportunities to meet the widest possible range of preferences. They all contribute to a community's natural character and landscape values and play an important role in supporting the City's garden image, treescapes, and ecology.

1.1.1 What do we do?

With our extensive network of parks and foreshore assets this activity provides a range of experiences and functional services to our community and visitors.

Community parks range from a variety of small spaces that service local neighbourhoods, to large, busy, multi-use spaces with an extended user catchment. While they all provide a local park function, they are generally managed for a primary purpose such as recreation, sport, garden, heritage, or community activities.

Local neigbourhood parks provide open space close to home primarily for individuals or groups to enjoy outdoor recreation, play and community activities. Utility Parks mostly functioning as land drainage devices also makes up a large portion of this portfolio and have both a functional and recreational values. These parks are also important for growing trees and providing green spaces in the city.

Our garden and heritage parks primarily provide opportunities to relax and enjoy manicured gardens (some of heritage value) and study botanical diversity, while contributing to plant conservation and research and our garden city image. Many contain artworks, monuments, sculptures, and heritage assets that are managed and maintained under the Parks Heritage activity.

Our sports parks primarily cater for sports but are usually multi-purpose with recreation and community acitivies. These parks typically have infrastructure such as sports fields and buildings, car parks, public conveniences and, in some cases, floodlighting. Many of them have play spaces and community facilities and are used for sport, recreation, community events and activities.

Hagley Park and Ngā Puna Wai are of metropolitan significance for sport and events.

Centrally located within the city, Hagley Park is renowned for its extensive area (165 hectares), its wide open spaces and mature woodlands. It is a major sporting and cultural focal point and offers a diverse range of entertainment and recreational opportunities in close proximity to the city centre.

Ngā Puna Wai is home to specialised sports facilities for athletics, tennis, rugby league, and polo. It hosts major sporting events and tournaments and is linked to Canterbury Agricultural Park which hosts Canterbury's annual A and P Show.

Cemeteries - We provide, maintain and administer operational cemeteries for plot purchases and burials. Closed cemeteries and the heritage associated with them are managed and maintained under the Parks Heritage activity. Cemeteries offer places for burial, remembrance, and reflection.

The Botanic Gardens are home to an impressive collection of exotic and local flora and fauna from New Zealand and around the globe.

Botanic gardens are institutions holding documented collections of living trees and plants for scientific research, conservation, display and education. We provide and maintain specialist garden collections for the community and

visitors to enjoy and study botanical diversity, while contributing to plant conservation and research, and contributing to our ongoing Garden City image.

The Botanic Gardens, along with other heritage garden parks within the city, also hold significant, rare and endangered plant species. These parks also often hold garden craft areas that display ornamental plants for the public to enjoy.

The Botanic Gardens offer a world class visitor experience attracting in excess of one million visitors per annum. Visitor facilities include conservatories, cafes, children's playground and restaurant experiences. The Botanic Gardens host a variety of events every year to enhance the visitor experiences. The Gardens also host many educational activities for children and adults. Heritage Garden Parks Include a variety of significant public city gardens, art, heritage buildings, and include the Central City, the city's heritage buildings, the City nursery and the closed cemeteries.

Regional Parks provide a network of nature-based parks of regional or ecological significance, such as the Port Hills reserves, Bottle Lake Forest Park and Travis Wetland, that provide opportunities to experience, protect, learn about and enhance scenic, cultural, or environmental values, and enjoy resource-based recreation. They typically include natural areas and compatible outdoor recreation facilities like walking and biking tracks, horse trails, and large open spaces for dog exercise. Some have visitor information centres. They provide services such as information, volunteer opportunities, track networks and biodiversity support. Regional parks help protect the region's and tangata whenua's natural and cultural landscape and biodiversity values.

The Harewood Plant Nursery grows and sources a range of native and exotic trees, shrubs and herbaceous plants for the whole of Council including landscaping of parks, streets, and land drainage features. We grow a range of reliably eco-sourced native plants, particularly for community planting initiatives. We anticipate heavy demand on the nursery in support of redevelopment of the residential red zone and carbon mitigation initiatives.

The Council facilitates foreshore and marine access by providing marine structures for citizens, visitors and commercial operators for recreation, sport, tourism, commercial activities and transport. The structures include marine access such as wharves, jetties, slipways and ramps, recreational rafts, boat moorings, wharf buildings and seawalls that protect park land or assets. The Council also manages coastal land, and the plantings on that land, to assist land stability, provide recreational opportunities, maintain natural flood protection barriers and resilience, and natural ecosystems. The Council maintains these structures and natural areas, to provide sustainable coastal access and a protection network that is safe, operational and fit for purpose. Foreshore structures of heritage value are also conserved for their historical significance where practicable.

The Environmental Education Team runs programmes and initiatives that encourage people to use parks and waterways safely and to provide knowledge in respect of the challenges we face as a community to create a sustainable open space environment. With a sustainability focus, the programmes encourage positive behaviour change through consideration of different ecological, cultural, social and economic needs of the citizens of Christchurch.

The 'Learning Through Action' programmes (biodiversity, civics, water and waste) are based at sites around Christchurch. The school groups travel to the site and are guided through a two hour programme that consists of a series of interactive, hands-on activities. Activities are deliberately sequenced to focus on sustainability. The CDEM programmes guide students through a series of activities to encourage awareness of, and preparedness for the civil defence emergencies most likely to affect citizens of Christchurch.

In the residential red zone a large number of residential properties were red zoned after the Canterbury earthquakes (purchased by the Government and housing decommissioned). The Council has recently agreed a global settlement with the government which will see red zoned land in the Port Hills, Brooklands, Southshore and the Avon River corridor transferred to the Council to own and maintain. Council maintenance responsibilities began in July 2020, with ownership phased over several years. The Council will be largely responsible for implementing the Regeneration Plan that has been approved for the Ōtākaro Avon River Corridor.

This Asset Management Plan covers infrastructure assets for parks and foreshore that serve the Christchurch City and Banks Peninsula communities.

In 2021 we have 1,276 park maintenance sites we manage, with a total book value of over $1.06 billion (2018 valuation) covering over 9,875 ha of park land and improvements.

Christchurch City Council owns, plans and manages a diverse range of park sites and assets this includes:

Figure 1-1 Infographic Parks managed assets

The Geographic Asset overview Map of Christchurch City Council Park sites below shows the distribution of land managed by the Christchurch City Parks Unit.

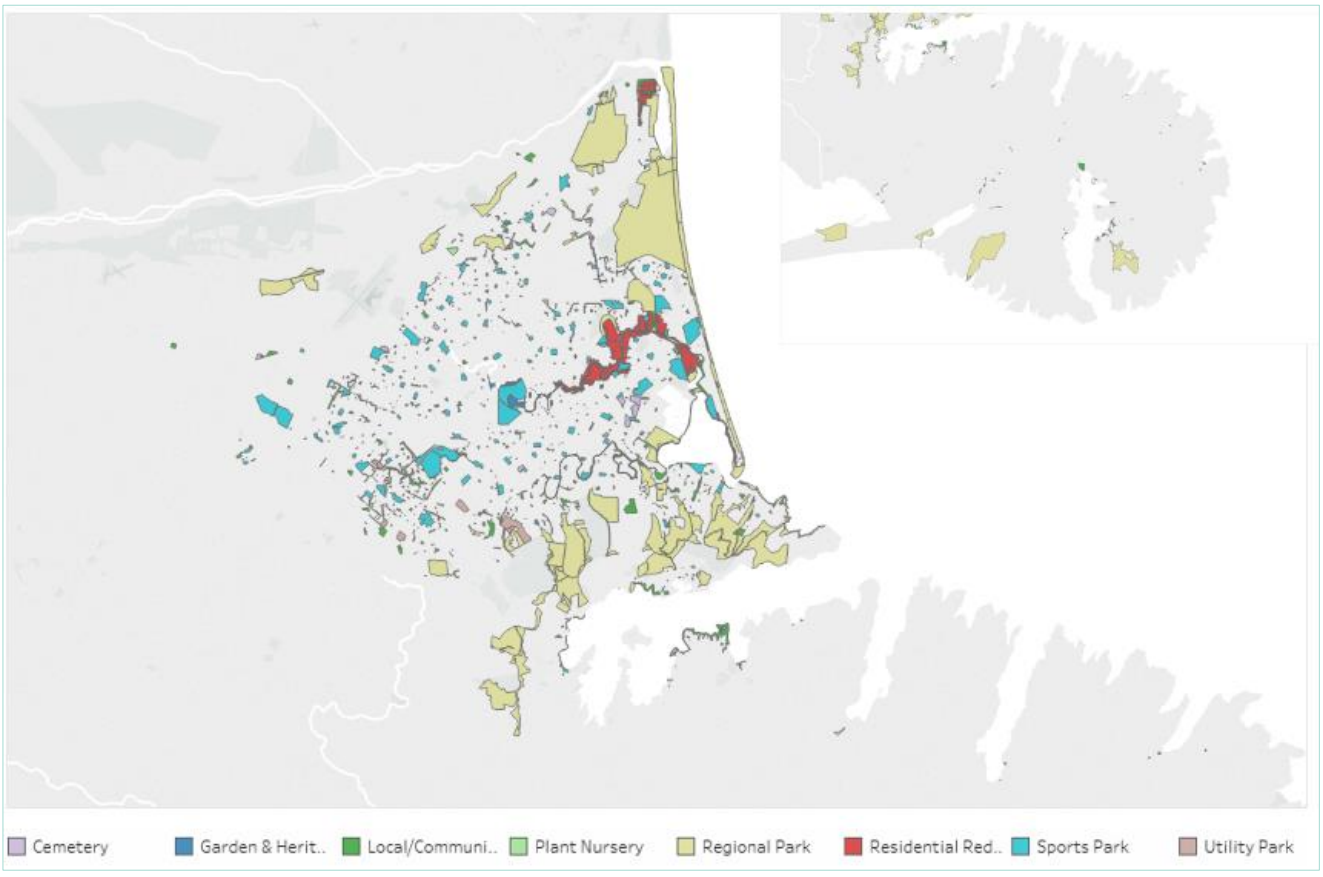


Figure 1-2 Geographic distribution of Park sites

1.1.2 Why do we do it?

We manage parks and foreshore to promote the social, economic, environmental, and cultural well-being of communities.

Some of the key contributions to community outcomes are identified in the table below.

Table 1-1: Councils Community Outcomes related to the Activity

Community Outcomes			
Resilient Communities	**Liveable City**	**Healthy Environment**	**Prosperous Economy**
• Access to the outdoors • Physically active community • Mental health benefits • Hygienic burials and remembrance • Community interaction and connections • Economic activity • Sustainable natural environments and ecosystems • Adaptable public spaces • Community participation and volunteerism • Valued cultural landscapes and heritage • Opportunities for cultural expression • Community events, buildings, groups, and activities	• Enhanced the garden city image • Publicly accessible green space • Wide variety of natural to highly modified settings • Plant supply for citywide planting projects • Public toilet availability	• Protected and restored landscapes, ecosystems, and water catchments • Pest animal and plant management • Biodiversity conservation • Increased awareness and understanding of environmental issues • Extensive treescape • Large areas of permeable open space • Carbon sequestration	• Contribute to quality of life, attracting people to live and do business in the city • Tourism • Economic events and opportunities • Attractive city and public spaces

1.1.3 How much does it cost?

The figure below provides an operational forecast for the Parks and Foreshore Asset portfolio.

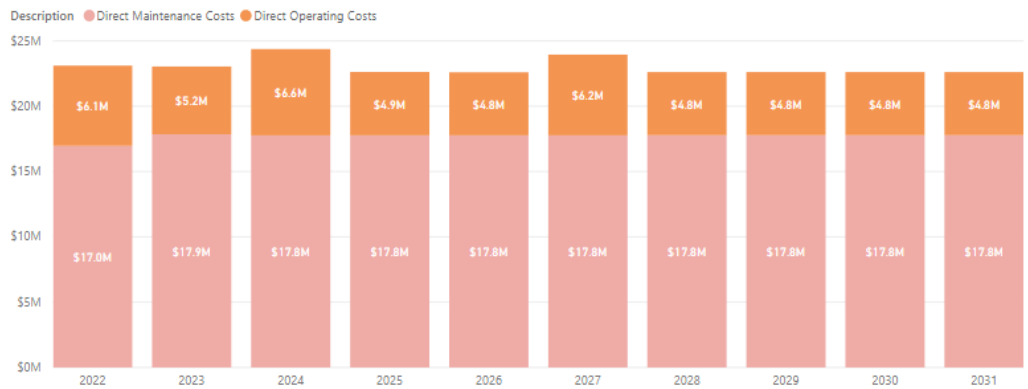


Figure 1-3: 10 Year Direct Maintenance and Operational Cost OPEX forecast (uninflated)

Average estimated increases in operating expenditure of 2.3% pa are expected over the next 10 years. These increases relate to costs associated with maintaining the status quo along with increases in capital expenditure and ongoing maintenance requirements to meet increasing level of service (LoS) demands across the network. Some of the impacts of excessive levels of deferred maintenance are an increased probability of failure (PoF) of the asset, decreased reliability and performance of asset systems, increased frequency and cost of breakdown repairs.

Council's Revenue and Financing Policy sets out how the expenditure needs for Council activities will be funded. The policy is based on who benefits.

Council reviewed its revenue and financing policy as part of the development of the LTP. In brief –

- Operational and maintenance expenditure (opex) – is funded by rates generated by the collection of targeted, general, separate and differential rates and through Council's fees and charges.
- Capital expenditure (capex) – is funded by borrowing and repaying over several years, enabling Council to match best the charges placed on the community against the period of benefits from capital expenditure.
- Private developer vesting – as part of the subdivision process park assets are created and vested with Council.

Operational cost for the unit is funded through the following funding sources.

OPEX Funding Source	***Percentage***
Rates	*94.6%*
Fees and Charges	*4.9%*
Grants and Subsidies Cost recoveries	*0.7%*

The figures below present a high level summary of the total 10 year 2021 LTP programme for the Parks and Foreshore portfolio. This has been prepared using the best available information to date from planning and modelling inputs available in June'21.

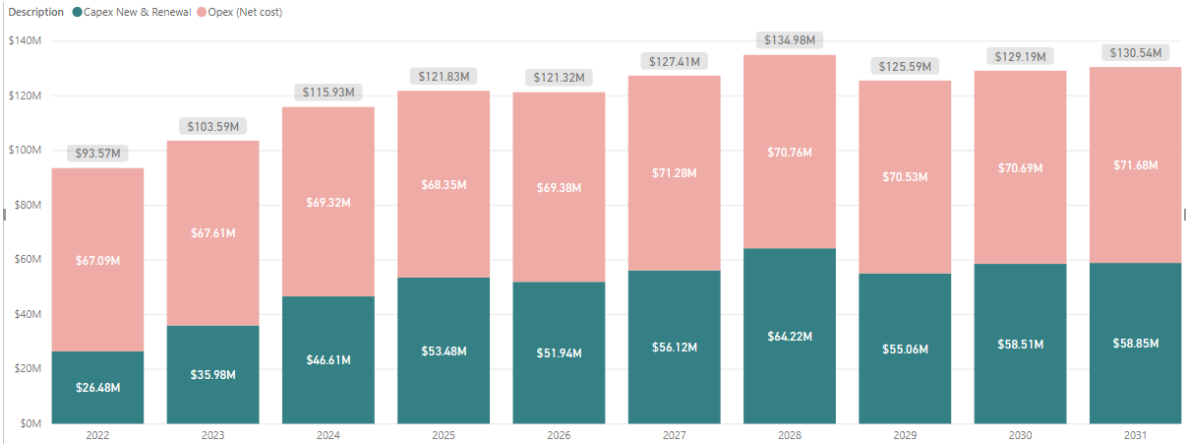


Figure 1-4: LTP 1 Parks and Foreshore OPEX (net cost) and CAPEX programme (uninflated)

1.1.4 How is it delivered?

- The Council's in-house teams manage the operational maintenance, response, project management asset management and planning work.
- In-house technical staff and external consultants are responsible for design work.
- A mix of internal Parks Unit teams and contractors undertake physical works required for major capital works or maintenance, dependent on the discipline.

1.1.5 What are the services provided?

The Parks Unit is responsible for delivery of the following services:

Table 1-2: Services Parks Unit provide

Service Type	Service Description	Service Delivery
Planning	• Planning for park acquisition, development, and renewal to meet diverse and changing community needs • Long term strategic and management planning • Planning support for various community requests and initiatives, leases and licences • Input into subdivision plans and processes • Resource consent advice and input • Lead the development and implementation of asset management systems and data management • Biodiversity advice and planning to internal and external customers • Cemetery capacity planning • Park building maintenance planning and programming	• Council staff provide the core planning and asset management work • External consultants provide specialist expertise.
Development	• Capital works programming • Concept phase of capital projects • Input into delivery of capital works • Monitoring of capital programme	• Internal staff and contractors
Operations and Maintenance	• Monitoring and maintenance of parks and assets • Facilitating community use • Park management	***Contractors*** • Parks Contractors deliver core maintenance services including buildings maintenance and cleaning of facilities and also parks mowing, gardening, soil sports field management, bin emptying & litter collection, weed control and tree maintenance on selected sites not maintained by in-house parks staff. ***In-house Council staff*** • Playground, furniture & structures maintenance and minor renewals (citywide) • Irrigation management (citywide) • Maintenance response (citywide) • Toilet cleaning, track maintenance, visitor engagement & education (Regional Parks) • Botanic Gardens – all maintenance activities excluding tree maintenance; education • Garden & Heritage Parks – mowing, gardening • Sports field management of sand sports fields citywide and Nga Puna Wai sports facilities • Banks Peninsula - all maintenance activities excluding tree maintenance • Marine access and coastal protection monitoring and maintenance
Renewals	• Condition assessments and reporting • Renewals planning and programming • Capital renewal delivery	• Council staff provide the core project management work • External consultants provide specialist expertise • Contractors undertake physical works
Community participation and education	• Provision of visitor and community services and programmes to facilitate use and understanding of the parks and foreshore network	• Council provides the core services.

1.2 Where have we come from and where are we heading

1.2.1 Background

From the city's founding years in the 1800's, the provision and management of Christchurch parks has grown and evolved through various local authority amalgamations and inhouse and external maintenance models. Many parks and assets are inherited from the early days. The portfolio continues to grow with ongoing acquisition of parks through subidivisions and purchases.

In 2015 the Parks maintenance contract boundaries were reconfigured as part of a change to new contracts to three (Northern, Eastern, Southern) area-based contracts to improve alignment with Community Board boundaries, provide a stronger community focus for service delivery, and increase supplier competition. Following a competitive tender process, the Eastern and Northern parks maintenance contracts were awarded to Recreational Services Ltd and the Southern parks maintenance contract to DELTA Ltd. During the procurement process there was an attempt to establish a dedicated, local-based contractor for Banks Peninsula. However, no external party was able to meet the service demand required and Banks Peninsula was subsequently varied into the Southern contract.

Sports field renovations and minor capital works remained outside these contracts and trees and buildings are maintained under separate contracts.

Contract expiry in 2019 provided an opportunity to implement an alternative option that involved extending the existing in-house component of the maintenance programme to include maintenance and management of key Garden and Heritage Parks, all Cemeteries, parks in Banks Peninsula, citywide maintenance and management of irrigation, sand sports fields, playgrounds, parks furniture and structures, and maintenance response. Three operational sectors were established - North, South and Banks Peninsula. Recreational Services Ltd was retained to provide mowing, gardening, weed control, and soil sports field management services for parks not managed by the extended in-house team in both the North and South operational sectors.

Asset management progressed with a continuous process of reviewing and updating information of the asset portfolio by identifying and confirming assets, assessing their condition and valuation, preparing and updating the AMP, establishing regular programmes of maintenance, renewal, and condition assessment, and ensuring the correct asset information is made available in all instances to support evidence-based decision making across the asset management lifecycle.

1.2.2 Looking Forward

The Parks and Foreshore activity will continue to provide a publicly accessible network of parks and marine structures that enhances health, recreation and liveability for residents and visitors to Christchurch and protects environmental values. A specific vision and direction for Parks, supported by network and management plans, would support stronger decision making. Increased community involvement in parks is expected to continue, e.g. community partnerships. Continuation of data and process improvements is critical to support the activity.

The Parks Unit continuously aspires to achieve the most cost effective management of this asset portfolio within the resources available. The focus of the proposed 2022 -2031 Long Term Plan (LTP) capital programme for Parks and Foreshore is to improve the quality of existing infrastructure to meet LoS (Levels of Service) before developing new facilities. It is anticipated that limited funds will be available for new capital improvements and operational budgets may be reduced.

A key challenge for the activity will be the addition of large swathes of land in the residential red zone to be maintained and developed.

1.3 Successes, Issues, Opportunities and Risks

1.3.1 Success Factors

Customer satisfaction with Parks in general is at a satisfactory level reflected through customer survey results and a review of our LoS achievement.

The LoS standards and performance measures have been reviewed for the LTP 2022-2031 Activity Plan to be more meaningful and measureable.

Oportunities to improve how we do things in the future are;

- Planning for demand with a resilience and affordability lense
- Improved processes to inform and prioritise the capital programme
- Focus on Asset Management and delivery of capital works
- Improved citizen engagement
- Expanded Internal Team completing activities previously undertaken by external contractor.

1.3.2 Strategic Issues and Risks

The key strategic issues and risks facing the activity are;

Table 1-3: Strategic issues

Strategic Issue	Options for responding to the issue
Meeting sports field demand in an affordable manner	Complete Outdoor Sports Facilities Network Plan to determine optimal quantity, quality and location of sports fields. Assess condition and playability of existing fields and prioritise upgrades and renewals in a consistent manner. Review field allocations for efficiency. Repurpose surplus or unsuitable fields for alternative park uses. Identify opportunities to develop partnerships with external providers.
Shortage of burial land in active cemeteries to meet demand	Increase capacity at existing cemeteries where possible and secure funding for development of new cemetery (plots & ash interments) to meet forecast need.
Cost of service provision/maintenance and operation of increasing asset portfolio	Monitor and review maintenance service delivery models. Quantify impact to ensure timeliness of annual budget adjustment requests. Ensure CAPEX is supported with appropriate level of OPEX. OPEX costs have been capped over recent years and not adjusted for new assets coming on line. This has resulted in new and existing assets not being maintained properly and often not being maintained to acceptable standards. Adjustment of annual OPEX budget is required to cover existing shortfalls, and an annualised increase for maintenance for new assets must be provided to meet the demands of growth.
Under-delivery of planned Capital Programme	Phase capital programme for realistic delivery timeframes within available resources. Review asset renewal programmes for improved synchronisation and efficiency.
Impacts of climate change	Design parks and assets to be resilient and adaptable to climate change, e.g. locate facilities where they will not be threatened by coastal hazards, use plants, turf, and materials that are suited to the environmental conditions. Increase green assets for positive environmental impact. Lower priority of renewals and improvements in hazard areas. Incorporate risk maps and profiles into all parks and foreshore decision making and make information available to all key planning and operational staff. Implement Climate Change Strategy measures.
Meeting community play and recreation needs in an affordable way	Complete Play Spaces Network Plan to guide optimal provision of play and recreation assets. Rationalise playgrounds in consultation with the community to an affordable level of provision. Assess community requests for new or upgraded recreation facilities from a network perspective. Provide a diverse range of recreation opportunities to meet the widest possible range of preferences.
Ageing and declining marine structures	Assess rationalisation opportunities. Pursue community partnerships for restoration opportunities.
Water shortages/ irrigation provision and management/ increased drought conditions	Requirement for additional irrigation infrastructure to protect integrity of key assets e.g. sports fields, Botanic Gardens, Garden & Heritage Parks, Inner City, significant trees. Transition to drought tolerant grass species in parks.

Strategic Issue	Options for responding to the issue
	Redefine management of grass e.g. increased use of meadow/natural grass areas within parks. Accelerate irrigation renewal works for more improved irrigation efficiency.
Contract renewals	FM contract servicing Park Buildings Renewal of Park Tree Maintenance contract Renewal of Parks Maintenance Services contracts Opportunities to pursue cost efficiencies Improve alignment with LoS and Activity Plans
Impacts of COVID-19 pandemic	Identify short and long term impacts on Asset Management Plan, Activity Plan and OPEX-CAPEX programme development. The proposed option plan presented in the AMP will need to be adjusted responding to the negative economic effects of the COVID-19 pandemic, focus will need to shift on investing in renewal programmes and projects, rather than growth and improvement.

2 Introduction

2.1 Background

The purpose of this plan is to demonstrate responsive management of assets (and services provided from assets), compliance with regulatory requirements, and to communicate funding needed to provide the agreed LoS over a 30-year planning period.
The objective of asset management is to:
"Deliver the required LoS to existing and future customers in the most cost-effective way."
In this context the specific objectives for this AMP are to:

- Define the services to be provided, the target service standards that the Council aims to achieve, and the measures used to monitor the performance of the Parks & Foreshore activity.
- Translate the Council's Vision and Strategic Priorities into asset management strategies and actions. The plan identifies forward works programmes based on strategic outcomes sought and forecast financial requirements to meet agreed service levels including catering for growth.
- Demonstrate to stakeholders responsible management of the Parks & Foreshore infrastructure, ensuring that public funds are optimally applied to deliver cost effective services to meet customer expectations.
- Document current asset management practices used by the Council as part of a sustainable and optimised lifecycle management strategy for the Parks & Foreshore infrastructure, and identify actions planned to enhance management performance.
- Comply with the requirements of relevant legislation.

The key output of this AMP is information for the 2021-2031 LTP process, which will be the subject of a public consultative procedure. This plan is for elected members, executive management, interest groups and business partners associated with the management of the Parks & Foreshore activity along with interested members of the community. It covers the services that are provided from ownership to management of the associated assets.
This AMP covers a period of 30 years commencing 1 July 2021 (Financial Year 2022). Operational, maintenance and renewal programmes for the first three years are generally well defined with reasonable certainty of being implemented to budget as planned. Beyond this period, work programmes are generally based on projected trends and demands and there is less certainty with respect to scope and timing of the projects. All expenditure forecasts are based on estimated unit costs as at 1 July 2020. The AMP determines asset and non-asset strategies to inform and achieve the goals set out in the LTP, optimising and providing the operational and capital requirements specific to each asset class group managed by the Parks Unit.

2.2 Relationship with other plans

Many of the asset planning activities undertaken by the Council are applied to all infrastructure assets. For this reason, the Council has developed asset management plans in two parts. A strategic asset management plan (SAMP) document which provides an overview of asset management planning at the Council, and an AMP document specific to each asset group which describes the assets and how the principles contained within the SAMP are applied to the management of the assets.

Figure 2.1 depicts the relationship between the various processes and levels of planning within the Council required to deliver on the Council's vision and goals.

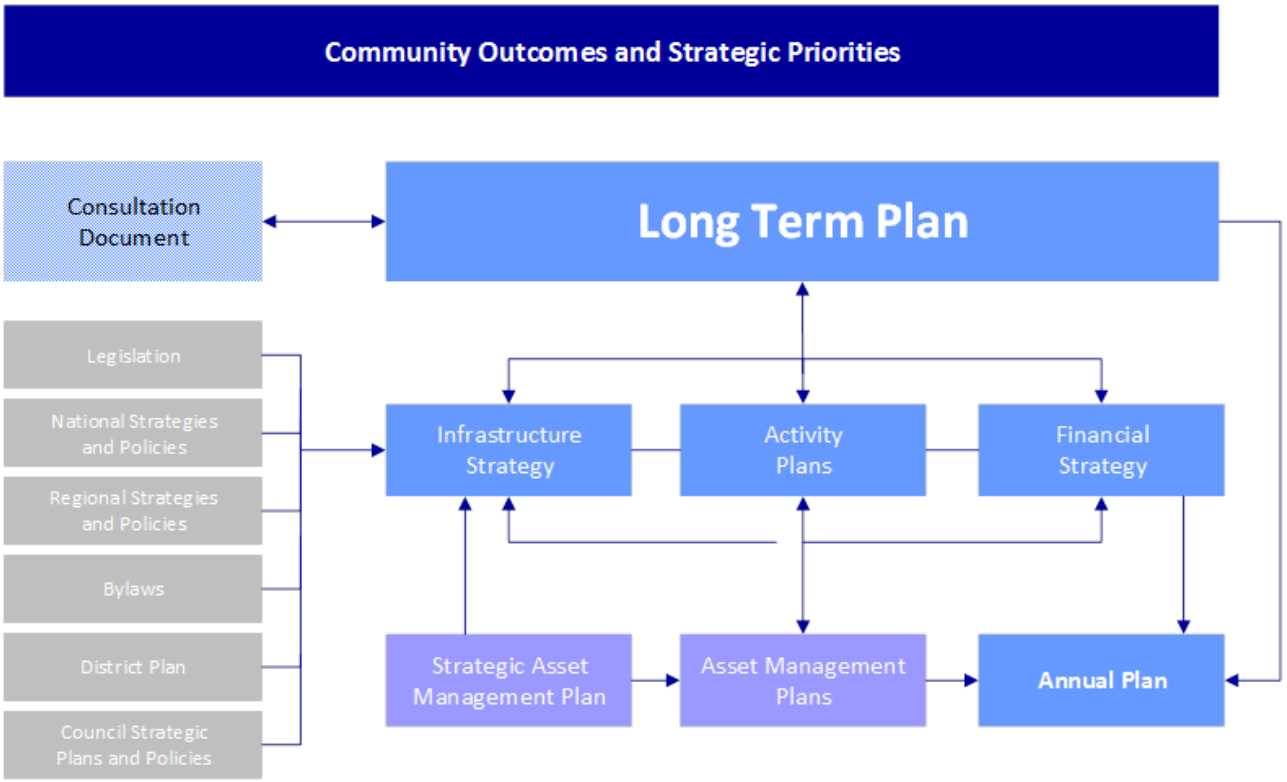


Figure 2-1: Council's Planning Framework

The SAMP provides an overview of the linkages between asset management planning and the other business processes of the Council, such as strategic planning, risk management, financial management and compliance. Throughout this AMP references to the SAMP are frequently made.

The SAMP also describes the linkages between AMPs and other corporate plans and documents. In addition to these corporate documents, the following documents are specifically relevant to this AMP:

Table 2-1: Additional documents relevant to the AMP

Document Type	Document Title
Strategic Plans, Strategies & Policies	2018 Infrastructure Strategy
	Access for People with Disabilities Policy 2001
	Adopt a Park/Cemetery Policy 1993
	Biodiversity Strategy 2008
	Burial Rights for Returned Services Personnel 1994
	Cemetery Headstones 1996
	Cemetery Interments 1994
	Community Gardens Guidelines Policy 2003
	Enforcement Dog Control Act 1996 and Enforcement CCC Dog Control By-Law 2008
	Drones and Remotely Piloted Aircraft Systems Policy 2016
	Greater Christchurch Urban Development Strategy
	Heritage Conservation Policy add date
	Indigenous Trees and Shrubs Policy (Formerly Banks Peninsula DC)
	Local Parks Acquisition Policy 1997
	Memorial seats in Council Reserves Policy 2001
	Naming of Reserves and Facilities Policy 1993
	Parks and Waterways Access Policy 2002
	Physical Recreation and Sport Strategy 2002
	Port Hills Recreational Strategy 2004
	Port Hills Reserves: Future Management Requirements Policy 1993
	Public Amenity Signing Policy 1992
	Public Open Space Strategy 2010-2040

Document Type	Document Title
	Public Toilets Policy 1992
	Rubbish Free Parks 2003
	Significance and Engagement Policy 2014
	Smokefree Public Places Policy 2009
	Sponsorship of Trees and Other Planting of Reserves 1993
	The Christchurch District Plan
	Tree Trimming (private plantings) Policy (Formerly Banks Peninsula DC)
Network Plans	Asset Network Plans (e.g. draft Sports Facilities Plan, draft Play Spaces Plan, draft Community Facilities Plan, draft Urban Forest Plan)
Management and Master Plans	Christchurch Botanic Gardens Management Plan
	Cemeteries Conservation Plans (various)
	Cemeteries Master Plan 2013
	Council Annual Plan and LTP 2018 – 2028
	Park Master Plans (various)
	Reserve Management Plans (various)
Capital Development Plans	Park Landscape and Development Plans (various)
	LTP CAPEX Programme
Operational Plans	Parks & Foreshore Activity Plan 2021 – 2031
	Parks Heritage Activity Plan 2021 – 2031
	Maintenance plans, operating procedures and contracts

These documents guide and govern the planning and management of assets in the Parks & Foreshore portfolio. They also inform how we evaluate and respond to requests and issues affecting parks.

Strategies have a life span of 10+ years and are related to both plans and policies. A plan sets out the means by which a strategy will be implemented and a policy sets out the principles that will guide the execution of the plan. There can be more than one plan or policy relating to a strategy.

2.3 Delivering on Council's Strategic Framework

2.3.1 Alignment of Outcomes, Priorities and Activity Objectives

The Council's strategic framework and general implications for the activities are presented in the Council's SAMP. The table below summarises key responses by the activity to contribute to the community outcomes and strategic priorities.

Table 2-2: Alignment of Outcomes, Priorities and Activity Objectives

Outcome ranking	Community Outcome(s)	How this activity effects the Outcomes
Primary Outcome 1	Safe & Healthy Communities	The Parks and Foreshore activity contributes to healthy communities through planning and provision of safe recreation and sport opportunities, access to natural spaces and healthy environments, and hygienic burial of the deceased with well-documented positive impacts on wellbeing such as physical and mental health, community connectedness, healthy environments, and economic benefits. Even the smallest parks provide beneficial green space with space to grow a tree. We are embracing adaptive management of parks and foreshore for increased resilience to climate change, e.g. dune and wetland restoration for natural defences in extreme weather, increasing tree canopy to mitigate rising temperatures. The impacts are ongoing and benefit the whole community directly or indirectly to varying degrees.
Primary Outcome 2	Unique landscapes and indigenous biodiversity are valued and stewardship exercised	The Parks and Foreshore activity supports this outcome by protecting and restoring significant landscapes and indigenous vegetation and habitat, managing pest plants and animals to protect ecological values, conserving high-priority species and ecosystems on Council land, raising awareness and understanding of biodiversity, encouraging widespread participation in support of biodiversity conservation, supporting biodiversity protection and enhancement by others, and facilitating research and monitoring. This outcome has a positive intergenerational impact and is ongoing.
Primary Outcome 3	Celebration of our identity through arts, culture, heritage, sport and recreation	The Parks and Foreshore activity reflects many of our cultural values and norms. It contributes to our identity through opportunities for recreation and sport, community and cultural activities, enhanced city character, community interaction, and remembrance. Our diverse network of parks reflects Christchurch's varied cultures and environments. Arts, culture and heritage are further recognised in the Parks Heritage Management Activity. Impacts extend to the whole community and are ongoing.
Primary Outcome 4	21st century garden city we are proud to live in	Parks and Foreshore supports the garden city outcome with publicly accessible green spaces that contribute to an attractive, healthy, and liveable city. A wide variety of settings, ranging from natural wetlands to manicured gardens, native and exotic vegetation, are maintained to provide diverse open space opportunities and benefits. Our plant nursery at Harewood is a Council-wide service that provides plants for a wide range of planting projects. Impacts extend to the whole community and are ongoing.
Secondary Outcome 1	Strong sense of community	Parks and Foreshore activates the community and encourages connections between community members and between people and places through participation in recreation, sport, community events and activities, environmental protection and restoration, volunteer opportunities, and burials. Parks host the facilities and activities of numerous community-based clubs and groups. Reserve management committees and community participation activities engage the community in ongoing management of our parks. Impacts extend to the whole community and are ongoing.
Secondary Outcome 2	Healthy water bodies	The Parks and Foreshore activity contributes to healthy waterways through protection and restoration of water catchments, pest plant management in some waterways, and through ecologically sensitive habitat restoration that reduces sedimentation while benefiting indigenous flora, fauna, and fungi. Large areas of permeable green space support surface water management. Impacts extend to the whole community and are ongoing.
Secondary Outcome 3	Modern and robust city infrastructure and community facilities	Parks help make the city a more attractive, enjoyable place to live, offering numerous activities and opportunities to explore. Our assets are maintained fit for purpose providing access to the outdoors and marine environment. Parks and Foreshore accommodates a range of Council and non-Council recreation, sport, community, environmental, transport, land drainage, and utility infrastructure. Our walkways, bike tracks and wharves are an important component of the city's transport network. Impacts extend to the whole community and are ongoing.

Outcome ranking	Community Outcome(s)	How this activity effects the Outcomes
Secondary Outcome 4	Great place for people, business & investment	Parks and Foreshore's wide range of opportunities provided within easy access of home or business appeal to high numbers of residents and visitors. They contribute significantly to quality of life ratings and a healthy environment. They protect and maintain the City's garden and built heritage, cultural landscapes and mahinga kai, contribute to urban landscape identity, allow space for diverse arts and cultural expression, and provide access to sport, cultural, tourism and other economic opportunities. Impacts extend to the whole community and are ongoing.
Secondary Outcome 5	Valuing the voices of all cultures and ages (including children)	Parks are developed with input from the whole community catering to all cultures and age groups with a wide range of opportunities. Our cemeteries provide for a variety of religious, cultural, and community needs. Parks play an important role in addressing long term issues that are important to young people and the wider community such as climate change, natural hazards, and environmental issues. Impacts extend to the whole community and are ongoing.
Secondary Outcome 6	Vibrant and thriving city centre	Inner city parks and facilities such as the Margaret Mahy Playground, the Avon River Precinct, Hagley Park, and the Botanic Gardens play a pivotal role in attracting people to the central city. They add to the attractiveness and character of the city, provide public space for people to enjoy, and host numerous events and activities.
Secondary Outcome 7	Sustainable suburban and rural centres	Parks provide convenient access to various recreation, sport, and community opportunities close to home, improve the attractiveness of areas, provide pleasant places for the community to meet and enjoy, and attract people into neighbourhoods for events and activities, e.g. beaches, New Brighton Pier, sports parks. Parks are often a focal point in suburban and rural centres where they host clubs, community groups, events, community centres, libraries, and play spaces.
Secondary Outcome 8	Sustainable use of resources and minimising waste	Parks and Foreshore protect biodiversity and the environment, provide green permeable spaces, provide trees that reduce heat and improve air quality. Parks can play a lead role in the Council's response to climate change in respect of mitigating carbon emissions with significant opportunities for planting for multiple values (ecology, culture, landscape, recreation). The residential red zone will contribute significantly to this. Our education programmes raise awareness of and learning about environmental issues and waste. Impacts extend to the whole community and are ongoing.

2.3.2 Activity Responses to Strategic Priorities

The Council has confirmed the following strategic priorities requiring specific focus for the next LTP. In response to these priorities, this AMP includes a number of responses as tabulated below. Responses to natural hazard risks and building resilience are dealt with in Section 5.

Table 2-3: Contribution of the Activity to the Strategic Priorities

Strategic Priorities	Possible activity responses
Enabling active and connected communities to own their future	The community is involved in the planning, development and maintenance of parks and foreshore through community engagement and consultation, volunteer groups, education programmes, and leases and licenses. Parks and Foreshore activities include strong and successful education and volunteer engagement programmes. Some parks and marine structures benefit from regular volunteer work parties organised by local community groups; this presents an opportunity to co-design park management programmes that ensure effective use of volunteer time and positive outcomes for general maintenance and ecological values, e.g. planting days, jetty building. Protection and enhancement of indigenous biodiversity requires coordination among different areas of the Council, with different agencies, and between public and private landowners. The Parks Unit can provide leadership in addressing cross-boundary biodiversity issues, such as pest plant and pest animal control. We provide financial and advisory support to several community-based conservation groups who work on both public and private land. Use of parks and marine structures for recreation, sport and community activities connects communities socially. Parks provide linkages through and between different communities connecting them physically.
Meeting the challenge of climate change through every means available	Protection and restoration of indigenous vegetation within the Parks and Foreshore network for biodiversity, amenity, and reduction of sedimentation also contributes to carbon sequestration/offsetting and demonstrates climate change leadership. Increasing the tree canopy throughout the city will also become increasingly important for its ability to reduce heat in the city. Protected and enhanced wetlands and foreshore areas provide essential buffers during extreme weather events and as sea level rises over time. Careful management of these areas enhances their resilience. Climate change will impact indigenous species and ecosystems and protecting and enhancing biodiversity is a key deliverable of the Parks and Foreshore activity. We can demonstrate leadership through management aimed at maximising resilience of indigenous species and ecosystems and facilitating natural regeneration, and allowing for natural adaptation processes to occur. Reducing irrigation requirements is a key consideration being addressed by selecting plant species suited to the environment and planting in the wettest months. New turf and grass species are being trialled to reduce irrigation and mowing requirements. The appropriateness and sustainability of seawalls and other hard engineered protection will need to be weighed up against alternative natural or soft engineered options that may be more adaptable. Social, environmental, and cultural values, costs, and resilience are all to be considered. The Parks network supports low carbon transport by providing walking and cycle paths through safe and enjoyable green spaces.
Accelerating the momentum the city needs	Park attractions such as the Margaret Mahy playground, Avon River precinct, Botanic Gardens, and Hagley Park provide a drawcard to the central city for local residents and visitors. As popular tourist and event venues they attract large crowds. Elsewhere in the city, our network of sports facilities, walking and biking tracks, and natural areas attract visitors and provide opportunities for commercial events and activities. The Regeneration Plan for the Ōtākaro Avon River Corridor has identified opportunities for commercial development in several reaches. Active restoration of indigenous vegetation, facilitation of “wild” pockets of natural regeneration, and incorporation of more indigenous vegetation throughout the Parks network all present opportunities to bring our district’s unique indigenous biodiversity back into the heart of the city. Everyday contact with our taonga would be valued by residents and visitors alike and contribute to Christchurch’s garden city image.

Strategic Priorities	Possible activity responses
Ensuring rates are affordable and sustainable	The Parks and Foreshore activity is challenged by a growing and ageing portfolio of land and assets, increasing costs of service delivery, pressure on resources, and increasing community expectations of quality. Improved efficiency of the Parks and Foreshore activity is required to meet identified community need in an affordable manner. A mix of internal and external service delivery is being implemented for more effective operational delivery. Network plans for provision of parks and facilities are being developed to guide Council investment. They establish processes for prioritising new developments and renewals equitably. The community and environmental benefits of parks save money elsewhere, e.g. the mental and physical health benefits of outdoor recreation reduce healthcare costs, large areas of permeable open space and riparian and coastal vegetation reduce the need for drainage and flood protection, trees help clean our air, provide shade and shelter, have a cooling effect on the city, and play a role in mitigating carbon emissions. Parks provide space for numerous Council and community facilities and utility services that would otherwise require land purchase. The Parks and Foreshore activity generates revenue for the Council through occupation and use of parks and facilities, e.g. fees and leases.
Enabling active and connected communities to own their future	The community is involved in the planning, development and maintenance of parks and foreshore through community engagement and consultation, volunteer groups, education programmes, and leases and licenses. Parks and Foreshore activities include strong and successful education and volunteer engagement programmes. Some parks and marine structures benefit from regular volunteer work parties organised by local community groups; this presents an opportunity to co-design park management programmes that ensure effective use of volunteer time and positive outcomes for general maintenance and ecological values, e.g. planting days, jetty building. Protection and enhancement of indigenous biodiversity requires coordination among different areas of the Council, with different agencies, and between public and private landowners. The Parks Unit can provide leadership in addressing cross-boundary biodiversity issues, such as pest plant and pest animal control. We provide financial and advisory support to several community-based conservation groups who work on both public and private land. Use of parks and marine structures for recreation, sport and community activities connects communities socially. Parks provide linkages through and between different communities connecting them physically.
Meeting the challenge of climate change through every means available	Protection and restoration of indigenous vegetation within the Parks and Foreshore network for biodiversity, amenity, and reduction of sedimentation also contributes to carbon sequestration/offsetting and demonstrates climate change leadership. Increasing the tree canopy throughout the city will also become increasingly important for its ability to reduce heat in the city. Protected and enhanced wetlands and foreshore areas provide essential buffers during extreme weather events and as sea level rises over time. Careful management of these areas enhances their resilience. Climate change will impact indigenous species and ecosystems and protecting and enhancing biodiversity is a key deliverable of the Parks and Foreshore activity. We can demonstrate leadership through management aimed at maximising resilience of indigenous species and ecosystems and facilitating natural regeneration, and allowing for natural adaptation processes to occur. Reducing irrigation requirements is a key consideration being addressed by selecting plant species suited to the environment and planting in the wettest months. New turf and grass species are being trialled to reduce irrigation and mowing requirements. The appropriateness and sustainability of seawalls and other hard engineered protection will need to be weighed up against alternative natural or soft engineered options that may be more adaptable. Social, environmental, and cultural values, costs, and resilience are all to be considered. The Parks network supports low carbon transport by providing walking and cycle paths through safe and enjoyable green spaces.

2.4 AMP Development Process

This AMP review was carried out during 2019 by asset managers, led by the Asset Management Unit (AMU) and covering all Christchurch City Council (CCC) AMPs. The broad timeline is shown below.

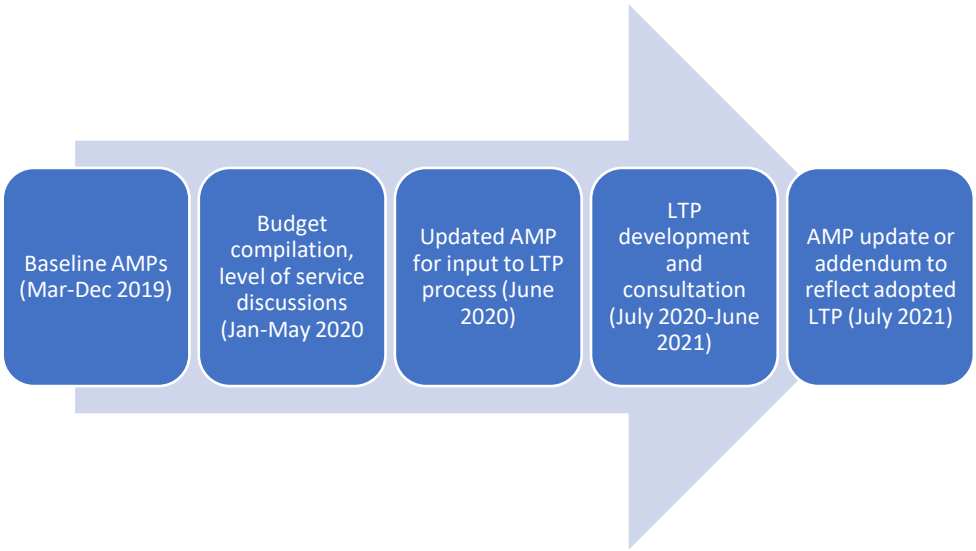


Figure 2-2: AMP Development Timeline

This AMP has been prepared as a team effort by officers dedicated to and trained in Asset Management (AM) planning. This team has been supervised and the AMP internally reviewed by professional Council staff having over 10 years' experience in preparing AMPs with guidance from an external asset management specialist.

2.5 Navigating the AMP

The AMP follows the general format for AMPs recommended in Section 4.2.6 of the International Infrastructure Management Manual. It comprises a series of logical steps that sequentially and collectively build the framework for sustainable asset management for the activity it serves.

Key elements of the plan are

- Specifies the services and LoS to be provided by the organisation,
- Future demand – how this will impact on future service delivery and how this is to be met,
- Life cycle management – how the Council will manage its existing and future assets to provide defined LoS
- Financial summary – what funds are required to provide the defined services,
- Asset management improvement plan – the current and desired state of asset management practices and how the plan will be monitored to ensure it is meeting the organisation's objectives.

3 The Services We Provide

This section outlines the drivers for the LoS requirements, sets out the proposed LoS and performance measures, provides information on how the Council has been performing in recent years against those requirements and identifies projects and programmes aimed at addressing any LoS gaps. (LoS gaps are where performance results achieved are consistently different from performance targets).

3.1 Level of Service Drivers

3.1.1 Customers and Stakeholders

Understanding service expectations from customers and stakeholders helps to inform what is important to customers and therefore what aspects of performance should be measured.

The key stakeholders Parks Unit staff work with to ensure the effective management of assets in its portfolio are represented in the table below:

Table 3-1: Key stakeholders for Parks

Category	Key stakeholders	Expectations
Formal Park Users	Recreation groups Sports clubs and associations Social and community groups Volunteer groups e.g. rotary clubs, youth groups Community agencies and groups e.g. IHC Research organisations e.g. tertiary institutions, NIWA, Landcare Education organisations, e.g. schools and tertiary institutions Business operators, e.g. concessionaires, tourist operators, commercial operators Event organisers Lessees and licensees, tenants, trusts	Well located spaces and affordable good quality facilities for their activities Low or no cost facilities Timely responses to queries and requests Clear and transparent decision making processes
Foreshore Asset Users	Recreational, sport and event users Business / commercial operators Cruise ship companies Coast Guard / Search & Rescue	Safe and fit for purpose marine structures
Affected Parties	Contractors / consultants / equipment suppliers Customers with specific interactions – adjacent residents Utility service providers e.g. Orion, Chorus and other easement holders	Transparent and fair business processes No negative impacts on their activities Responsible ownership and management that is fair and equitable
The Community	Residents, ratepayers, visitors Mana Whenua Various interest groups	Information about and access to various parks and recreation opportunities Protection and enhancement of cultural, heritage, ecological, and landscape values Opportunities to get involved in park management decisions and development

Category	Key stakeholders	Expectations
Internal Customers	Parks Unit staff Elected representatives, Councillors & Community Boards Units with assets located on parks e.g. Community Facilities, Three Waters, Transport Units that operate on parks, e.g. Animal Control and Environmental Compliance, Building Inspectors, Enforcement Officers	Good quality data and asset information, well planned work programmes Good quality advice and information
Key External Stakeholder Groups	Regional regulators – Canterbury Regional Council (ECAN) Central Government, Office of the Auditor General, Ministry for the Environment, Heritage New Zealand, ICOMOS New Zealand, Department of Conservation, Emergency Services Selwyn and Waimakariri District Councils Non-Government Organisations Community funders	Convenient access to parks when required during an emergency e.g. firefighting. Access to suitable spaces during civil emergencies, e.g. earthquake Good quality advice and information

Parks and Foreshore spaces are used by our customers for a variety of activities including:

- Quiet appreciation and relaxation of the outdoors and associated values
- Outdoor recreation activities
- Sport
- Environmental activities
- Cultural harvest and mahinga kai
- Community events and social gatherings
- Commercial activities and tourism
- Burials and interments
- Educational activities
- Marine access
- Emergency services
- Utility services

Community buildings and activities

The Council has several ways in which it seeks customer feedback. The Parks Unit participates in Council customer research in order to better comprehend our customers' and communities' requirements and expectations. This helps us to set appropriate business targets, develop strategies and identify new business opportunities.

Feedback is also received from capital programme consultation, customer service requests, correspondence, the Council website, call centre, social media pages, Community Board deputations, staff interactions, social trends reporting, community research, community service requests and industry knowledge.

Community Boards represent and act as an advocate for the interests of the community, report to the Council and maintain an overview of services provided to the community. Community Boards act as a liaison between the Council and the public and provide important customer related feedback to the business.

Key findings from engagement with our customers include:

- There is a strong desire for access to parks and recreation opportunities close to home, particularly for less mobile people and children, linked to other green spaces with improved access for pedestrians and cyclists. With increasing urbanisation and intensified development, parks are of increasing importance to provide access to outdoor spaces, nature, and community spaces.
- There is a high level of appreciation for natural resources such as beaches, the Port Hills, and rivers. Such features reportedly enhance people's sense of place and influence where they choose to live. On the outskirts of the city in particular, parks are valued for retaining the natural and rural character of growth areas and acting as a green buffer from further urban development.
- Parks are appreciated for adding to the garden city image of Christchurch. Trees, gardens and green open spaces all contribute to the landscape character.

- There is some dissatisfaction with the 'sameness' of Christchurch parks. More variety, and bigger, better play and recreation spaces are commonly requested to cater for different preferences, abilities and ages.
- A balanced approach to risk and safety is required to meet demand for different levels of challenge for a range of abilities. There is demand for more challenging recreation facilities for older children.
- There is demand for positive recreation opportunities for youth to address boredom and associated anti-social behaviour. There is consistent demand for skate and bike facilities and basketball courts in local parks, places to 'hang out' and socialise, and a general desire for more 'fun' things to do. However, there is also some resistance to such facilities from some members of the community.
- There is strong and consistent demand for improved quality of sports facilities
- There is demand for more natural environments, both for play and for the natural character they contribute to a community.
- There is more awareness of and increasing demand for improved environmental management to address climate change issues and our ecological emergency
- There is consistent general demand for more trees, seats, drinking fountains, accessible paths and public toilets.
- People want to be involved in the decision making and have input into the use and design of parks.
- There is competition for park space and resources from various user groups
- There are public perceptions of inequity in provision and maintenance of parks across the city
- There is dissatisfaction with maintenance of some parks and public toilet facilities and ongoing graffiti and vandalism issues
- Issues with the quality and standard of some marine structures

3.1.2 Legislation/Regulation

Alongside customer expectations, we consider a range of legislation, regulations, national and regional strategies, plans, policies, and guidelines. The ones most relevant to Parks and Foreshore which impose minimum standards and/or affect the operation and management of the activity, or require certain LoS, are listed in *Appendix: Legislation, regulations, guidelines most relevant to Parks*.

3.1.3 Industry Guidance

In addition to Christchurch City Council adopted standards and guidelines, other institutions like 'Standards New Zealand' a business unit within the Ministry of Business, Innovation and Employment, approve and adopt standards and codes of practice which are given legal status by the Standards Act 1988. Standards and guidelines relevant to Parks and Foreshore are included in *Appendix: Legislation, regulations, guidelines most relevant to Parks.*

3.1.4 Strategic Framework

LoS for Parks and Foreshore identified through analysis of the strategic framework include:

- Asset performance that contributes to modern and robust city infrastructure and community facilities
- Customer satisfaction with availability of parks and foreshore opportunities and presentation
- Effective maintenance of our parks
- Providing value for money
- Convenient access to parks within walking distance of home
- Community use proposals assessed and responded to in a timely manner
- Protection and enhancement of biodiversity and natural values
- Increasing our tree canopy
- The Botanic Gardens provide unique learning and conservation opportunities
- Conservation groups and community volunteers are supported
- People can access the marine environment
- Appropriate cemetery services are available to meet community needs
- We offer a range of educational programmes and volunteer opportunities

3.2 Defining and Measuring Levels of Service

3.2.1 Measuring our Levels of Service

Key LoS targets and performance measures linked to community outcomes and consistent with the resources available are presented in the Parks and Foreshore Activity Plan.

3.2.2 How we are / should we be performing?

Historically, LoS targets have largely been achieved. However, there are some areas of low customer satisfaction as described below and some assets in poorer condition than the targeted level. LoS have been updated and refined for the 2021-31 LTP for clarity and to better reflect strategic priorities and financial constraints.

3.2.3 Measurement results and trends

LoS performance is measured in different ways and all are reported in the monthly Performance report on the Hub. Past results and trends are identified in the Activity Plan. Survey results inform how the community experiences their interaction with the Council and reflect our performance in delivering to their expectations.

Results from the Council's form recent annual General Service Satisfaction Survey highlight the following trends;

- Garden & Heritage Parks and Cemetery services has shown a slight increase in customer satisfaction with the Botanic Gardens maintaining satisfactory levels,
- Community Parks and Cemeteries are the key areas of concern for those surveyed, with both the range of facilities, the appearance/upkeep and the condition receiving scores below or significantly below LoS targets.

The Council's Point of Contact Service Satisfaction Survey includes specific questions on parks and is carried out at a given number of locations to target specific users.

3.2.4 Levels of Service Variance

Results of these surveys shows some satisfaction levels have been achieved above the target rate and some below. We excel at cemeteries administration, presentation of the Botanic Gardens, Mona Vale, and Hagley Park and the delivery of education programmes.

The general presentation of many other parks, cemeteries, recreation, marine structures and sports parks are the key areas of concern we need to improve.

A number LoS targets have since been amended to align with available resources and to reflect realistic achievable targets. These are reflected in the 2021-31 Parks and Foreshore Activity Plan.

3.3 Level of Service Projects and Programmes

Projects or programmes that are planned to close the gap between the current and target LoS.

Table 3-2: Initiatives intended to close LoS gap

Major Initiatives to address LoS gaps	**Strategic and LoS Drivers**	**Indicative $**	**Year** (if in existing budget)	**Comments**
Evaluate and adjust Parks maintenance delivery where we are failing to meet satisfaction. Much of the maintenance has now been brought in house.	Required to meet LoS targets	OPEX $ to be determined	unscheduled	Further evaluation of contracts vs in house servicing
Progress the development of network plans for better planned provision and management of a network of parks and assets	Increase satisfaction levels with recreation facilities	OPEX $ to be determined	unscheduled	Consider reducing the target to match resources in alignment with Network Plans

4 Demand for our Services

This section provides details of growth and demand forecasts that affect the management, provision and utilisation of services and assets. New works are based on the information outlined in this section.

Section 2.4 of the SAMP provides detailed population and demographic information that is referenced and summarised in this section of the AMP.

4.1 Demand Drivers

Key factors influencing demand for parks and foreshore assets include population and demographics, diversifying park preferences, changing work patterns and leisure time, changing recreation and sport preferences, new and emerging recreation and sport activities, increasing expectations of quality, increasing environmental awareness, and economic factors.

4.1.1 Demographics

Christchurch's population is growing, ageing, shifting and becoming more ethnically diverse. These population changes influence participation in recreation, sport, environmental activities, and demand for parks and associated assets.

Demand driver	Influence	Implications
Population growth	By 2051, forecast population in Christchurch city is 473,000. The key urban growth areas are in the south west and north west of the city. This represents an increase of 100,000 people (25%) over 30 years. Residential intensification in some areas reduces the amount of private open space putting more pressure on public open space.	To meet local community needs new park facilities are provided in greenfield subdivisions, adding to the parks asset base to be maintained. There is increased pressure on sports parks in the south west and north east. In high intensity areas, higher levels of open space are required to replace the disappearing back yards.
Geographic population shift	There has been a general westward population shift post-earthquakes. Selwyn and Waimakariri populations are expanding, bringing more people into the city to use large specialist facilities. The residential red zone has been transferred to Parks. Residential development of the central city is slowly occurring.	Red zoning has created something of a mismatch between residential areas and availability of open space. There is increased pressure on and demand for sports parks in the growth areas in the north west and south west of the city, and new community parks being created in new subdivisions. There is strong community interest in the Ōtākaro Avon River Corridor as a major park of metropolitan significance with potential for ecological restoration, water sports, tourism and community recreation. Redevelopment of other red zoned areas, now with a diminished population, are still to be determined.
Ageing population	On average, physical activity decreases significantly at age 15 and continues to decline with age. Most adults' physical activity is recreational in nature, e.g. walking, jogging, biking, fitness classes, as opposed to sport. Interest in volunteer opportunities and environmental activities will likely increase. Increase cemetery capacity will be required.	There will be increased competition for resources between sport and other parks and recreation opportunities. Provision of assets within parks and along walkways need to cater for elevated disability levels of our ageing population, e.g. smoother surfaces, more seats, seats with back and arm rests, more toilets. The ageing population has more time and interest in information about amenities and assets at a location thus increasing demand for information and interpretation. There will be opportunities to engage the community more with restoration projects and other voluntary work. Additional cemetery capacity will be critical.
Increasing ethnic diversity	Expected increase in demand for facilities for culture-based social gatherings and sports tournaments, e.g. informal community volleyball, kabaddi, large extended family gatherings, community picnics and festivals.	Variety of spaces required to meet diverse community needs and activities. Diverse burial options to be accommodated in cemeteries to meet cultural needs.

4.1.2 Diversifying Park Preferences

Parks need to keep pace with the community's changing needs and preferences to remain relevant. Customer expectations are many and varied and can be contradictory. To cater for the widest possible range of preferences and the greatest number of people, a variety of park opportunities are required from highly developed and manicured to wild and natural parks, from busy, active parks to quiet solitude. Development options are endless and variety is demanded.

Demand driver	Explanation	Implications
All abilities access	There is increased demand for park facilities, especially play spaces that cater for people with disabilities.	New or renewed park developments are to be made as accessible as practicable while also providing challenge for a range of abilities. A number of fully accessible play spaces are to be provided in the city's play space network.
Safety expectations	Safety expectations and acceptable levels of risk vary within the community	There is a need to balance risk, safety and varying levels of challenge in play spaces to cater for a range of abilities and preferences.
Tourism	Parks attract domestic and international visitors to see what is special about Christchurch. The Botanic Gardens in particular attract a very high number of tourists.	Opportunities to experience Christchurch's natural environment, landscape and recreation opportunities need to be provided, promoted and be well managed and maintained.
Marine access	Many of our wharves and jetties were originally constructed for industrial use. Use has largely changed to recreation or passenger transport. Design requirements for safety and functionality have changed.	Design of wharves and jetties to be improved when being renewed or upgraded to meet modern requirements.
Education	Park users are interested to learn about our biodiversity, conservation, heritage and cultural values, e.g. education and raising awareness opportunities in the Botanic Gardens, heritage garden parks, and regional parks.	Visitor and education programmes, use of technology to provide different interpretative methods.

4.1.3 Changing work patterns and leisure time

Demand driver	Explanation	Implications
Available leisure time and convenience	Our pace of life has increased dramatically and leisure time has become fractionated. People seek convenient recreation opportunities that suit them when they have the time, which can be at any time of the day or evening. Use patterns vary with seasons, weather, days of the week and time of day or night. Highest park use is during the day on summer weekends.	A network of easily accessible recreation and sport opportunities throughout the district is needed at all times for people to do their preferred activity at a time and place convenient to them.

4.1.4 Changing recreation and sport preferences

Demand driver	Explanation	Implications
Casualisation of sport	There is a move away from traditional club-based Saturday sport to more casual participation. Outdoor recreation, such as those freely available in parks that require little or no ongoing commitment, continue to be the most popular activities, particularly walking, cycling and jogging.	Demand for outdoor recreation facilities such as walking and biking tracks will continue to increase while overall demand for sports fields is expected to remain relatively stable, but with improved location, size and quality.
Changing sport delivery models	In response to changing community preferences and our fragmented leisure time, many sports codes now have modified versions of their game, e.g. sevens rugby, 20/20 cricket, slo-pitch softball, mid-week competition. Many participants do not want to commit to traditional weekly sporting competition and there are many casual sports events being organised outside of the club system, e.g. one-off events and tournaments.	Sports facilities need to be more flexible and adaptable, e.g. good quality multi-use bookable spaces, available year-round and in convenient locations, large venues for centralised tournaments, floodlighting, able to adapt to different game formats.

4.1.5 New and emerging recreation and sport activities

Demand driver	Explanation	Implications
New activities	New recreation and sport activities are continually emerging and minor sports continue to develop and grow, e.g. e-scooters, e-bikes, drone racing, virtual games, disc golf, canoe polo, American football, ultimate frisbee, blow-karting.	Diverse spaces and facilities are required for emerging activities, in direct competition with more traditional well-established sport and recreation.
Demand for technology	There is demand for technology in parks for electronic devices and for new ways to access information.	There is demand for wi fi, e-charging stations, interactive interpretation, real time information about parks, and electronic sports infrastructure such as scoreboards.

4.1.6 Quality expectations

Demand driver	Explanation	Implications
Increased expectations of quality	Customers increasingly expect parks to be of high quality and of consistent standard e.g. quality of sports turf, modern and clean toilets, well maintained car parks, bigger and more varied playgrounds, protection and restoration of ecosystems and biodiversity. Quality expectations for sports facilities are often driven by national or international sporting organisations with certain requirements to host particular levels of sport, e.g. field size and turf standards, changing rooms, referee facilities, flood lighting.	Some upgrades are needed to modern design standards to ensure facilities are fit for purpose. However, one high quality facility will set expectations for all so it is important for customers to understand a hierarchy of different standard facilities for different purposes. Maintenance and renewal of all assets is critical and must be adequately resourced to ensure facilities are fit for purpose. New techniques, technology, and materials can be utilised for higher quality and more durable assets. Constrained by limited resources, Parks focus is looking after what we have already got before developing more.

4.1.7 Environmental factors

Demand driver	Explanation	Implications
Increasing environmental awareness	The Council has declared a climate change and ecological emergency, set a strategic priority to meet the challenge of climate change through every means possible, and has a target of becoming carbon neutral by 2030. Consumption of natural resources, pollutants, and environmental impacts in the development and operation of our parks is under increasing public scrutiny together with their resilience to the effects of climate change.	Sustainable materials, resilient design, reduced waste, energy, water, and chemical use, protecting biodiversity, and offsetting our carbon footprint is required to meet Council goals. Locate facilities for easy access and reduced need to travel. Minimise impermeable surfaces. Biodiversity and ecological values in parks are to be protected and restored. Environmentally friendly products to be used, e.g. recycled plastic rather than rainforest hardwood, drought resistant turf with reduced irrigation, chemical and mowing requirements.
Climate change	Extremes in weather affect park assets. The likely expected climate change scenario for Canterbury is drier climate conditions and more frequent intense rain storms.	Drier climate conditions will put upward pressure on water demand for irrigation and firefighting. Wet weather increases the need for field drainage and demand for artificial sports turf. Facilities need to be designed to cope with increasing extremes of weather, e.g. type of grass and plants used. Significant assets must be located away from areas at high risk of flooding or sea level rise.

4.1.8 Economic Factors

Demand driver	Explanation	Implications
Disposable income availability	More affluent communities have different park needs and preferences and use parks differently to more deprived communities. Affluent communities are generally more mobile and able to travel to their park of choice. During times of economic prosperity, people have more disposable income to spend on leisure equipment and activities. In the marine environment, potentially more people with time and money have the ability to participate in water sports such as sailing, boating, sea kayaking. Also possible increase in holiday homes and retirement homes by the sea wanting access to the marine environment.	There is greater community need for parks and free recreation opportunities in deprived and less mobile communities and in dense housing areas lacking in open space. There is increased demand for equipment based recreational opportunities and commercial activities in parks and marine environment during times of economic prosperity, e.g. mountain biking, water sports.
Pressure on resources	The cost of providing and maintaining parks continues to increase. The Council remains under financial pressure requiring prioritisation of spending on Parks assets and more efficient ways of operating.	There could be increased reliance on external funding, partnerships, and community volunteers to meet shortfalls in funding. Operation and maintenance practices should be periodically reviewed to ensure they are efficient and effective. Technology improvements offer new ways of operating and maintaining assets which may be more efficient or effective, e.g. more efficient irrigation systems and sports field drainage, longer lasting paint etc.
Tourism	Increased tourism brings more people to our parks and foreshore	More visitor facilities such as toilets, car parking, information centres are required at popular tourist locations such as the Botanic Gardens, various walkways, Akaroa and Diamond Harbour Wharves. Tourism activities can also bring more revenue such as berthing

Demand driver	Explanation	Implications
		fees, but also increased service expectations such as more frequent cleaning.

4.2 Demand Forecasts

Ongoing demand for an increasingly diverse range of park opportunities cannot be quantified. Researching recreation trends and specific community needs is an appropriate method of determining demand and informs our network planning and capital projects.

4.2.1 Historic Demand Changes

There is limited data available on park usage. Demographics, participation trends, community requests, and anecdotal evidence indicate ongoing growth in demand for more diverse recreation opportunities and improved quality of sports facilities.

Cemetery records indicate fluctuating burial and ash interment needs and increasing interest in various cultural and green burials.

Cruise ship numbers have increased significantly in the past, e.g. the number of cruise ships visiting Akaroa increased from under 10 in 2010/11 to over 128 in 2018/19. This has now been affected by COVID-19.

There has been a growing number of environmental groups and volunteers seeking support or partnership with the Council for biodiversity initiatives. Volunteer growth trends are recorded in the Activity Plan.

4.2.2 Forecast Future Demand

Demand for improved variety, quality, and maintenance of recreation, sport, and tourism opportunities, more public toilets, protection and access to more open space areas, increased protection and restoration of biodiversity, and increased burial capacity and options is predicted to continue growing with population growth and increasingly high community expectations of good quality facilities and services that meet changing community preferences.

Expanded or different styles of recreation and sport opportunities are required in some areas while other spaces may be repurposed for other park uses. An increase in tree canopy and biodiversity protection is needed. Parks are in demand for planting to offset carbon emissions. Many community groups and volunteers are keen to be involved.

Network plans are being developed for play spaces, sports facilities, and urban forest to guide Council investment. They detail the level of provision required to meet changing community needs within the resources available, identify areas of over and under provision, and establish prioritisation criteria for Council expenditure.

Of high significance is the level of community interest in development of the residential red zone, particularly the Ōtākaro Avon River, for recreation, ecology, and community use. This a large scale, long term, multi-disciplinary project.

Community demand for protection from sea level rise, i.e. seawalls, is high and will increase as communities are impacted. The Council must make decisions to defend, adapt, or retreat in affected areas.

Demand for cemeteries is expected to mirror age and ethnicity demographics. Increased demand for cultural and green burials is anticipated. Existing cemeteries are nearing capacity as can be seen in *Appendix Cemeteries Administration and Capacity Status* and a large new cemetery is being planned at Templeton to cater for future needs. The Cemeteries Master Plan sets out planned development of cemeteries.

4.3 Impact of Demand on Existing Assets

Much of the projected demand is for improvement to existing parks and assets rather than development of more. This requires an ongoing programme of maintenance, renewal and upgrades, redevelopment of some parks, and reconfiguration of some parts of the park network.

Areas where new development is needed is cemeteries, residential red zone, and ecological restoration. Expansion of the Harewood Nursery capacity is required to support this. Further detailed investigation and discussion on utilisation and potential increase in demand for public toilets needs exploring to determine an optimum balance between capacity and operational affordability. This applies to parks and locations where the Council encourages large numbers of residents and tourists to gather, such as at Council–run events or destination parks.

OPEX costs have been capped over recent years and not been adjusted for new assets coming on line. This has resulted in new and existing assets not being maintained properly and often not being maintained to acceptable standards. Adjustment of annual OPEX budget is required to cover existing shortfalls, and an annualised increase for maintenance for new assets must be provided to meet the demands of growth.

4.4 Demand Management Plan

The Council aims to **increase** use of parks for community wellbeing. Demand is managed to optimise usage rates through design, bookings, field allocations and closures, signage and online information, and controls on cemetery plot purchases. Volunteer programmes, organised activities, promotional material, and new developments encourage use.

Opportunities identified to date for demand management are shown in the table below.

Table 4-1: Demand Management Initiatives and Impacts

Current initiatives			
Initiative that influences demand	**Effect of initiative on demand**	**Can this effect be quantified – what assumptions have we made about the effect of the initiative**	**Potential impact on asset planning (operation / maintenance / revenue / renewal / CAPEX) etc**
Network planning for different asset types	↔	Not quantifiable Establishes a hierarchy of facilities based on identified community need	Improved efficiency and optimal asset provision with reduced adhoc reactive provision. Likely increased expenditure on some assets and reduced expenditure on others. Intensify use of some assets and repurpose others.
Sports field allocation process	↔	Field allocations can be quantified but numbers change each season	Efficient sports field use
Community partnerships programme	↑	Volunteer numbers are being recorded	Increase in planted areas.
Reduce pre-purchasing of cemetery plots	↓	Not quantifiable	Defers demand for cemetery plots
Promotion of parks activities including tourist attractions through web-based information.	↑	Not quantifiable	Increased use of parks
Future planned initiatives			
Potential reintroduction of fees for sports fields and changing rooms	↓	Potential reduction in number of fields requested for allocation if charged and more efficient use	Potentially reduced requirements for sports field preparation and maintenance or opportunity to better control and manage use

4.5 Growth Related Projects and Programmes

New assets are created to meet a backlog of demand, fill a gap in our provision, or meet a changed LoS, or are acquired through new residential development and the subdivision process. New developments are funded by the Council, developments contributions and by third parties. Key proposed new (uninflated cost) developments and upgrades over the next 30 years are shown in the Table below.

These new assets will commit the Council to fund ongoing operations, maintenance and renewal costs for the life of the asset. These future costs need consideration in developing forecasts of future operations, maintenance and renewal costs. OPEX costs have been capped over recent years and have not been adjusted for new assets resulting in some new or existing assets not being adequately maintained. Adjustment of annual OPEX budget is required to cover existing shortfalls, and an annualised increase for maintenance for new assets must be provided to meet the demands of growth.

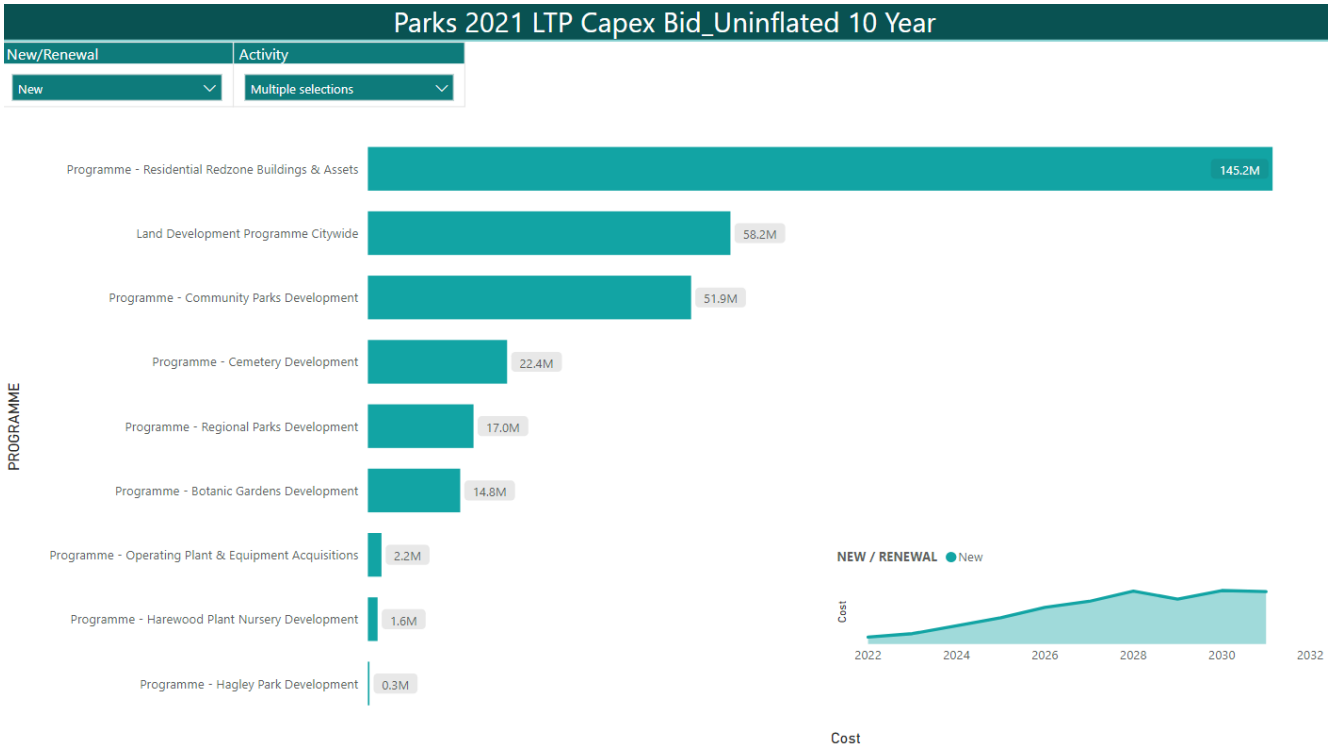


Table 4-2: Proposed development programmes

5 Managing Risk and Investing in Resilience

This section outlines the Council's approach to managing risk and investing in resilience. It includes responses by the activity to build resilience across a number of identified 'disruptors'. A risk register and schedule of proposed risk mitigation actions are also included.

5.1 Council's Approach

Investing in Resilience

The Resilience Greater Christchurch Plan (RGCP) provides a framework and multi-agency actions towards a more resilient City. All of the Council's activities play a role in contributing to this Plan by becoming more resilient to 'disruptors'.

To build resilience in our asset networks, we need to firstly understand the potential disruptors and the impacts on our assets and services. These are outlined in Section 5.2.1.

Key projects or activities to improve resilience, that we have identified and defined sufficiently to be included in this AMP programme, are included in Section 5.2.2.

Where further investigation is required to understand the impacts of disruptors and ways to be more resilient, opportunities are identified in Section 5.2.3.

Risk Management

Council's corporate approach to managing risk is defined in its Risk Policy and Assessment Framework. The framework provides a means for consistently identifying, recording and assessing risks such that risk mitigations can be prioritised across Council. The risk management framework and application to AMPs is summarised in Section 4.3.3 of the SAMP.

Whilst the resilience programme focusses on the big, strategic challenges such as natural hazards and globalisation, Council's risk register (recorded in ProMapp) is also intended to be used to manage higher frequency, lower probability events. For example, while another major earthquake would have very high consequences for many Council assets, lower consequence risks such as third-party damage may be so frequent as to also warrant attention.

In Section 5.3.1 we provide a snapshot of the highest risks recorded for this activity and in 5.3.2 summarise the major mitigation actions that have been included in this AMP.

Resilience Definitions

Acute Shocks: Sudden, sharp events that threaten us e.g. the Canterbury earthquakes represent one of the most significant types of shock any place can endure.

Chronic stresses: Activity that weakens the fabric and functioning of a city on a day-to-day or cyclical basis.

Resilience is the capacity of individuals, communities, businesses, and systems to survive, adapt and grow, no matter what chronic stresses and acute shocks they experience. (100 Resilient Cities)

The Resilience Dividend: The practice of designing projects and policies to address multiple challenges at one time, improving services and/or saving resources i.e. the net social, economic and physical benefits achieved when designing initiatives and projects. (*100 Resilient Cities).*

Multiple Dividends accrue from investment in disaster risk reduction and can: (1) Avoid or minimise losses when disasters strike. (2) Stimulate economic activity in a zone as a result of reduced disaster risk; and (3) develop co-benefits, or uses, of a specific investment.

Absorption is the ability to absorb shocks or stresses without triggering non-linear, abrupt environmental change (in the wider sense of 'environment' not just the natural environment). *New Zealand Treasury Resilience and Future Wellbeing 2018.*

Adaptation changing something in order to make it suitable for a new use or situation. In a climate change context, the UN Development Program calls it a process by which strategies to moderate, cope with and take advantage of the consequences of climatic events are enhanced, developed, and implemented. *(Oxford Dictionary).*

Mitigation is the action of reducing or minimising the severity and seriousness of any harmful impact *(Oxford Dictionary).*

Resilient Qualities are the characteristics of resilient projects and systems. The 100 Resilient Cities define these characteristics as reflective, resourceful, robust, redundant, flexible, inclusive, and integrated.

5.2 Investing in Resilience

Shocks and stressors most likely to impact on the Parks and Foreshore activity include demographic changes, climate change, earthquakes, flooding, tsunami, and fire.

Christchurch's population is growing, ageing, becoming more ethnically diverse and more urbanised. The community's expectations and preferences and the way they use parks are changing. Convenient access to a range of park opportunities is an integral part of our wellbeing. The Parks and Foreshore activity is responding with multi-use spaces, increased community involvement in planning and managing parks, diversifying recreation and sport facilities for all ages and abilities, and a variety of cultural, heritage and conservation opportunities. Network Plans are being prepared to ensure we meet identified community needs equitably within the resources available.

The effects of climate change are becoming better understood and increasingly evident, and include more extreme rainfall and storm events, more severe droughts and higher temperatures, and sea-level rise. For Parks and Foreshore, climate change effects endanger foreshore marine access assets such as seawalls, wharfs, jetties and boat ramps, as well as coastal, estuary, riverbank, and low-lying reserves. Around 250 parks are vulnerable to coastal inundation in some way, including numerous buildings, sports fields, and playgrounds. Sea-level rise is likely to mean that modifications or rebuilds will be required, and/or relocation of assets to higher ground. Hard engineered protection, such as increasing height of sea walls, requires guidance by Council policy. Greater extremes of temperature will result in increased turf and plant stress, leading to either increased irrigation costs or adaptation of landscape and plant biodiversity. In terms of adaptation, where necessary we will adapt the design and maintenance of parks in response to sea level rise, extreme weather, drought, fire risk, and flooding, for example by selecting plants suited to the environment, trialling different turf species with less irrigation requirements, and realigning walking tracks away from vulnerable areas

Planning parks for climate change can pay resilience dividends, e.g. habitat types such as wetlands and dunes can provide biodiversity, cultural, and landscape benefits, create interesting areas for walking and biking, provide learning opportunities and employment. The resilience of indigenous ecosystems can be supported through restoration programmes, natural regeneration, and greater use of indigenous species in landscaping. Using nature-based methods to address climate change challenges will provide opportunities for people to connect with and value indigenous biodiversity. A number of Parks and Foreshore activities contribute to carbon sequestration and demonstrate climate change leadership, not the least of these being increasing the tree canopy and restoration planting. Trees will also become increasingly important for their ability to reduce heat in the city. The Parks and Foreshore activity is developing a Banks Peninsula and Urban Forest Plan, which takes a strategic approach to canopy cover.

Facilitating ecologically-appropriate restoration and regeneration of indigenous vegetation can assist in hazard mitigation in many ways, for example through enhancing natural buffer areas around waterways and flood basins, reducing sedimentation in streams and rivers, and supporting dune stabilisation. Naturalising areas can also be a cost-effective method of safely managing rock fall hazard in the Port Hills and Banks Peninsula, and flood prone and high erosion areas, e.g. coastal and river areas, by reducing risk from use whilst enhancing environmental, landscape and cultural benefits.

In anticipation of sea level rise, we will locate new and renewed assets away from high risk areas, or design them for more frequent inundation. Hard engineered protection, such as increasing height of sea walls, requires guidance of Council policy. Alternative responses such as naturalised edges and retreat can be considered.

In response to earthquake risk, we are progressively strengthening our buildings to 67% of NBS.

We are investing in our asset data to better understand and manage our assets, their use and condition.

Projects and programmes to build the resilience of our assets are already underway and/or are included in this AMP programme. These projects will position Christchurch to be better prepared for, and more resilient to, the disruptions identified in the Resilient Greater Christchurch Plan as most likely to impact community wellbeing. Operational investment is required to understand how these activities can further contribute, and indeed provide leadership, to the Council's overall strategic approach to climate change. Resource is needed to support community capability, and provide strategic, scientific and implementation support. This will help the Parks and Foreshore activity and the wider Council to better prepare for the 2024 LTP, in which more specific and defined strategic climate change actions will be expected.

5.2.1 Understanding our Resilience Challenges

Section 4.3 of the SAMP detailed the 'shocks and stresses' (disruptors) that provide resilience challenges for Christchurch. The table below summarises how each of these has the potential to negatively impact our assets and services:

Table 5-1: Potential Impacts of Resilience Disruptors

	Disruptors	Potential Impacts on our Assets and Services
Chronic Stressors	Climate Change	*Sea level rise, coastal erosion and coastal parks inundation* This scenario will have a significant impact on the City, particularly the coastal areas, with likely effects being more regular inundation or accelerated erosion and reduced viability of affected park assets and services. A key decision will be on adapting vs retreating. For the parks network a strategy is needed for protection, a reduced LoS, or a managed retreat. Either way there will be a cost. Change in park use or closure and abandonment of assets may be required. *Groundwater rise* There will be reduced asset life and performance of affected sports fields and recreational spaces, trees and other vegetation. Weather extremes More intense storm and rainfall events and increased heat and drought periods will impact on the durability of assets and design requirements to withstand extreme conditions. These events will likely impact on reactive operational cost in response to individual events. New build design and build costs will increase and more thought will go into locational factors such as flood prone areas as well as building methodologies e.g. exceeding minimum above ground levels and the use of modern weather reliant materials. Some coastal assets may incur increased insurance premiums or even the withdrawal of insurance provision, requiring Council to self-insure some assets.
	Demographic Changes	*Population growth* There will be increased demand for developed park spaces and marine access, and increased capacity requirements for burial space. Aging population This will lead to different recreation and sport assets required to meet their needs and increased disability requirements *Ethnic diversity* The most significant impact is likely to be in an increased demand for cultural burial requirements *Population shifts* New parks will be needed in new subdivisions, and reduced or altered provision in red zoned areas.
Acute Shocks	Seismicity	*Large earthquake event causing ground movement or liquefaction* There will be damage to assets and lost or impaired service, changed ground conditions and levels that may no longer be suitable for sports fields, trees, buildings, and marine access structures. Issues of ongoing land settlement, slumping and erosion, and increased rockfall hazards will need to be addressed. A change in park use or closure may be required.
	Tsunami	Large tsunami causing inundation and high water velocity will result in damage to assets and lost or impaired service. There will be a reduced LoS until the clean-up and repairs have occurred. Some assets may not be replaced depending on damage and ongoing viability.

	Disruptors	Potential Impacts on our Assets and Services
	Flooding	Parts of the parks network of assets is susceptible to flooding, particularly around the Avon and Heathcote Rivers.

5.2.2 Resilient Projects or Activities in this Plan

Templeton Cemetery Development:

Project Description	Development of a major cemetery in Templeton to meet burial demands of a growing, ageing and ethnically diversifying population.
Scope and Expected Impact	Development of the cemetery will provide for the city's burial needs for the next 50-60 years and also provide for a greater range of cultural needs and different types of burials than are provided at present. First stage of construction is expected to be in the first 10 years of the LTP.
The Case for Change	The Council is required to provide for the burial needs of the community under the Burial and Cremation Act 1964. Existing Council cemeteries have limited capacity and alternative options for burial provision are limited.
The Resilience Dividend	Cultural burial options will better reflect our cultural diversity. As well as providing for burial needs, the cemetery will also provide a green buffer between the Templeton community and a proposed quarry. It will provide recreation and landscape benefits with planting and walkways. A sports park is proposed to be co-located providing opportunities for some shared services such as car parking and toilets.
Further Opportunities	Planning and development of the cemetery is providing an opportunity to better understand and cater for various cultural requirements and may help to address some residual transport concerns in the area.

Network Plans:

Project Description	A Play Spaces Network Plan, Sports Facilities Network Plan and Urban Forest Plan are currently under development. A Biodiversity Network Plan is also being considered. These plans will respond to changing community needs for outdoor recreation, sport and biodiversity with consideration of the disruptors.
Scope and Expected Impact	The Play Space Network Plan includes playgrounds, flying foxes, skate and scooter parks, bicycle skill areas, outdoor fitness equipment, public ball courts, water play facilities, and nature play. It will establish a framework of the quantity, quality and location of facilities to be provided across the city. The Sports Facilities Network Plan includes outdoor sports stadia, fields, other sports surfaces and associated infrastructure such as pavilions and car parks. Another chapter (not yet started) will cover facilities to service outdoor water sports. The plan will establish a framework of the quantity, quality and location of facilities to be provided across the city. The Urban Forest Plan will set out the proposed network of tree canopy across the city to contribute to various community outcomes. The Biodiversity Network Plan is yet to be scoped but will set out a proposed network of sites to achieve various biodiversity goals for community wellbeing.
The Case for Change	The aim is to achieve a more planned approach to provision that is affordable, equitable, addresses identified need, and is future-proofed. The plans are needed to respond to changing community needs, preferences, economic and environmental conditions. They will provide a framework to guide decision making and resource allocation to optimise outcomes.
The Resilience Dividend	The plans will result in a more holistic and integrated planning that best meets community needs within the resources available. They will also assist other agencies with their planning and funding of facilities and help identify opportunities for collaboration and partnerships.

Further Opportunities	The Network Plans will assist the Council in prioritising funding and coordinating various projects across the Council, and provide a framework for responding to community requests and opportunities.

Post-Earthquake Buildings Strengthening

Project Description	Post-earthquake strengthening of all buildings to 67% of NBS. Engineering inspections and reports were undertaken to highlight any structural concerns, identify remediation options, and undertake works. See figure 5-4.
Scope and Expected Impact	Engineering inspections, review of structural design, strengthening. The Detailed Engineering Evaluation (DEE) reports provide a detailed picture of a building's structure and earthquake damage and assesses its ability to withstand future aftershocks. A full damage assessment comes after the DEE is completed, and details the damage to the building and what steps need to be taken to repair it. Collected data needs to be reviewed and updated assessment percentages loaded against SAP Functional Location. A prioritised programme to bring all buildings up to standard is still to be developed.
The Case for Change	A detailed structural engineering review and analysis on each asset. Validation of structural building strength across the portfolio of assets.
The Resilience Dividend	Increase in asset data integrity. Validation of existence of architectural and engineering drawings for assets. Increased structural preparedness for future seismic events. Increased confidence in the safety of public use of facilities. An increase in the average remaining life of assets due to replacement and refurbishment of assets.
Further Opportunities	Develop a system where individual DEEs can be readily obtained, along with appropriate architectural and structural drawings. Establish an ongoing relationship with appropriate engineering practices where we can readily secure their services in any future associated event.

Advancement of Asset Data

Project Description	Advance the validation and quality of asset information
Scope and Expected Impact	Initiate the improvement, validation, quality of appropriate asset data, its storage and manipulation.
The Case for Change	A vital element of effective Asset Management is decision-making that is evidence-based and data-driven. In addition, sufficient, accurate data and documentation must be collected in order to meet legal and statutory requirements and permit effective asset based communication with stakeholders. Data, information and knowledge needs to be treated as an asset and resourced appropriately.
The Resilience Dividend	Better decision making. More accuracy and timeliness and consistency in decision making. Reducing risks. Better capital investment and resilience planning decisions.
Further Opportunities	Continued investment in data capture, storage and manipulation. Analysis and modelling to improve forward planning scenarios and decision making.

5.2.3 Building the case for Resilience Investment - 2021 LTP and beyond

Often, we will need to do further work to build a case for future investment in resilience e.g. information/data, policy directions, guidelines, modelling, etc. These opportunities are the basis for a potential investigatory programme of work to inform the 2024 and 2027 LTPs and are summarised in the Table below.

Table 5-2: Opportunities to Improve Resilience

Disruptor	Opportunities	Timeframe	Resources
All risks, shocks, stressors	Specific hazard studies and information to support prioritised decision making and optimised lifecycle analysis.	Staged approach commencing 2022	A combined effort Parks Operational staff, Asset and Planning Teams with OPEX for planning works, and CAPEX for design and construction

5.3 Managing Risks

The Council's approach to managing risk is detailed in its Risk Management Policy (including a risk assessment framework) which is summarised in Section 4.3 of the SAMP as a background to the content in this Section.

5.3.1 Strategic Risks

Business unit leads have the responsibility for identifying, recording and monitoring business risks using 'Promapp' that are rated as high or very high. The reporting within Promapp ensures that there is visibility of the risks the Council is managing. The Council risk framework sets out the levels at which residual risks are escalated, reported and governed. Risks identified to date for the Parks Unit are recorded in Trim. Not all risks discussed in the AMP are yet recorded in the register.

In preparation of the LTP forecast potential risks are identified and analysed. A risk register table should include analysis and treatment options for all risks identified.

A complete register of 'extreme' to 'low' risks for the Council's Park assets are still to be developed. This register should allow for risks to be compared across a range of assets against the following;

- Planning risks;
- Management risks;
- Delivery risks; and
- Physical asset risks.

The strategic risks identified in relation to this activity include:

Table 5-3: Strategic Risks for this Activity

Description of Risk
Fit for purpose assets Infrastructure assets are unsuitable or sub-optimal (location, type, capacity, functionality, condition), or do not meet specifications, resulting in failure to deliver LoS, service restrictions, growth not serviced, increased operating costs or risk, non-compliance.
Capital and operational delivery Major delivery variance (under or over budget or schedule) for capital programmes and or operations. Limited staff capacity and resources for future planning
Health, safety and wellbeing Harm to employees, contractors, the public or to property arising from service delivery activities • exposure to contaminants (asbestos, heavy metals etc.) in parks • tree or limb failure • building failure • failure of asset at the end of its life • unsafe operational procedures or equipment failure
Compliance Non-compliance with regulatory requirements pertaining to buildings managed by parks

5.3.2 Asset Risks

The Parks Unit also identifies and records risks at a more detailed level. The impacts of risk events on parks assets is summarised in the table below.

Table 5-4: Impact of risk events on Parks assets

Risk Description	Residual rating	Treatment
Large Storm Event There is an ever-present risk of a large storm event occurring in Canterbury that may result in flooding, wave and wind damage to marine structures, trees, and other park assets. This damage, depending on the scale of it, could result in a reduced LoS.	Medium/High	While the Council cannot control the frequency and scale of storm events, we can ensure that the assets are in good condition, and are designed and maintained robustly for these types of events. It is important to consider the balance between over-engineering, cost and ability to withstand storm events.
Climate Change and Sea Level Rise Likely to damage foreshore marine access assets such as seawalls, wharfs, jetties and boat ramps as well as affecting coastal, estuary, riverbank and low-lying reserves especially when combined with storm events. Increased temperature extremes, e.g. hotter drier summers, will result in increased turf and plant stress, rising cost of irrigation or landscape and plant biodiversity adaptions to absorb and respond to these gradual environmental changes.	Medium	The effect of predicted sea level rise is hard to quantify but it is likely modifications or rebuilds would be required and relocation of assets to higher ground. Future developments will need to take sea level rise into account, with options for floating or adaptable structures. Maintenance and renewal work or abandonment of foreshore protection will be required at an increasing level over the next 30 years. Strengthening and repairs on sea walls will mitigate some of the effects, but in time some assets will need to be abandoned or relocated to higher ground.
Alpine Fault 8 Event Will cause damage to park buildings, sport fields, other infrastructures and disrupt services we provide. Parks and Foreshore assets are not considered an essential service. On that basis no attempts have been made to make assets 'Alpine Fault 8 Event' proof.	Medium	Consideration to be given to balancing the provision of assets in a serviceable condition, the costs associated with strengthening work as well as the costs associated with designing new or replacement assets in risk affected areas to mitigate the impacts of such an event on them.
Forced life extension of assets New risks arising from the need for continued use of assets. Damage to people or property due to failure to renew/replace assets when they reach the end of their useful life or failure to perform at minimum safety standards due to their condition.	Medium	Response to this risk is to ensure robust asset management practices are in place and carried out, to ensure LTP planning is well researched and justified, to ensure good design for new structures and to ensure a planned maintenance schedule is in place, is sufficiently resourced and the works are carried out in line with good building practice. Monitor and plan for pre-failure renewal, condition assessment inspections are carried out on a 3-7 year cycle.
Poor maintenance (Contractor / In House Servicing failure) • sports fields not fit for purpose because of weather and ground conditions, over use, poor/untimely maintenance, limited renovation window, and budget constraints • deterioration of gardens due to limited weed control, lack of regular maintenance, plant removal (vandalism, thoroughfare, death of plants) • deterioration of tracks and carparks due to age, poor weed control, lack of maintenance and upkeep practises • damage to people or property caused by tree and or tree limb failure due to weather, disease, inadequate maintenance regimes • non-compliant playground play equipment and under surfacing from failure to uphold Playground safety standards	Medium	Better manage and control sports field allocations and use. Increased levels of maintenance to be resourced. Rigorous monitoring and response maintenance of park assets to maintain LoS.
Failure to comply with building codes, safety standards for electrical BBQs, Playground Standards etc.	Low	Monitor and improve risk mitigation planning
Harm to employees, contractors, or the public arising from exposure to incidentally discovered contaminants (asbestos, heavy metals etc.) in parks or park buildings	Low	Develop protocols to improve risk mitigation response of discovered contaminants
Failure to comply with provisions of the Burial Act	Low	Monitor and improve risk mitigation planning

Risk Description	Residual rating	Treatment
Failure to maintain up to data asset records across teams, creating uncertainty around the reliability of data on Council platforms	Medium	Monitor and improve risk mitigation planning, communication and use of processes

5.3.3 Investigating effect of disruptions to Parks and Foreshore assets

The figures below provide insight into the scale of parks and foreshore disruptions. This information will inform our approach to resilience planning in future.

Coastal inundation and erosion is most likely when high tides coincide with storm surge or large wave action. Coastal inundation typically causes flooding of roads and carparks, walking paths, and wider park areas and reduces park and beach access. This can have both short and long term impacts in provision of services and maintenance, repair and renewal decisions of assets. The effects of tsunami and liquefaction although identified in the figures below requires more work to fully understand how we are to develop response options.

Some 252 parks covering a total of 3,500 ha of land are vulnerable to coastal inundation. Assets on these parks include 124 buildings, 20 sports fields and 29 playgrounds.

More work is needed to fully consider our responses to these and other disruptions.

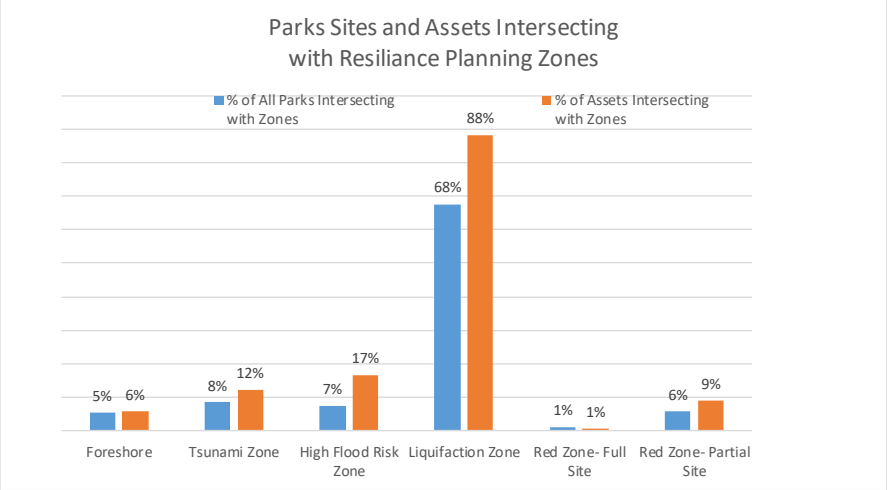


Figure 5-1: Natural hazards impact on Parks

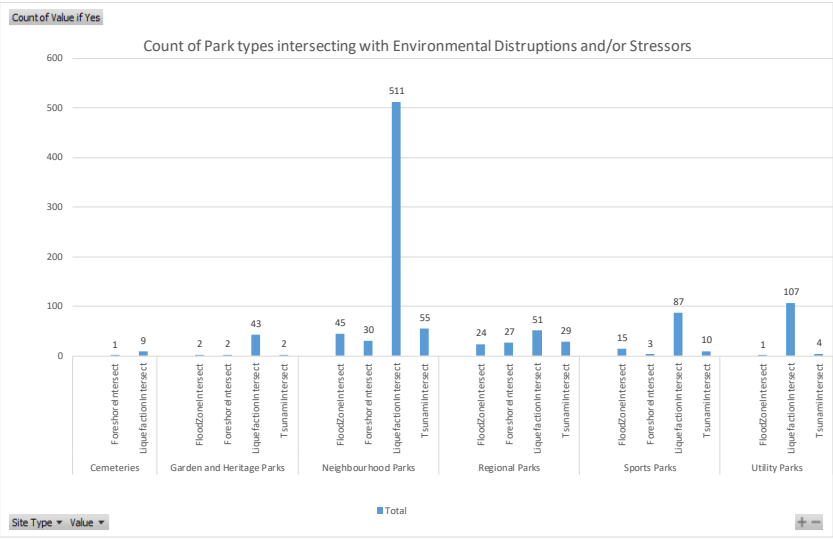


Figure 5-2: Park use types interacting with natural hazard risks

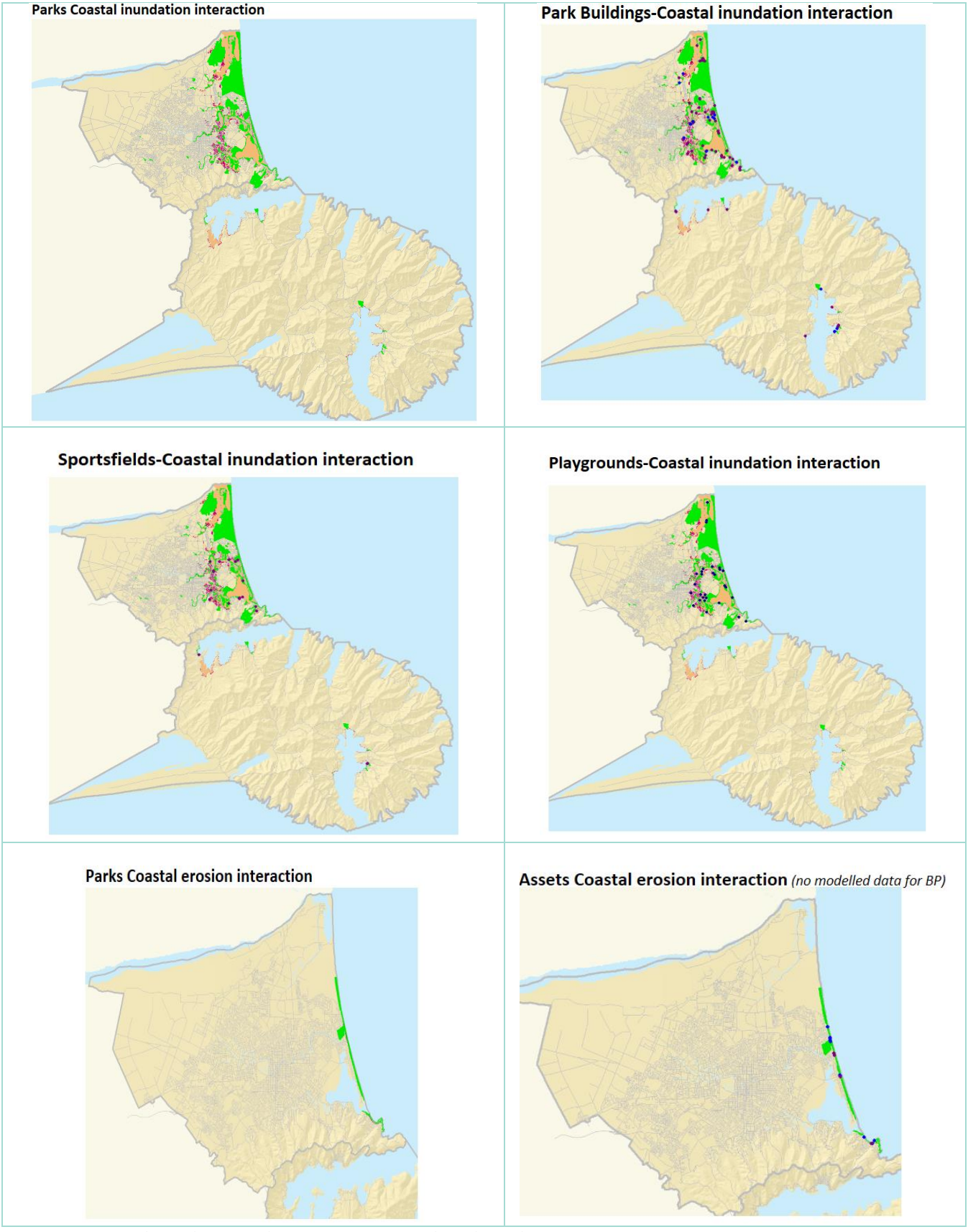


Figure 5-3: Coastal inundation and erosion intersect with Parks and Asset

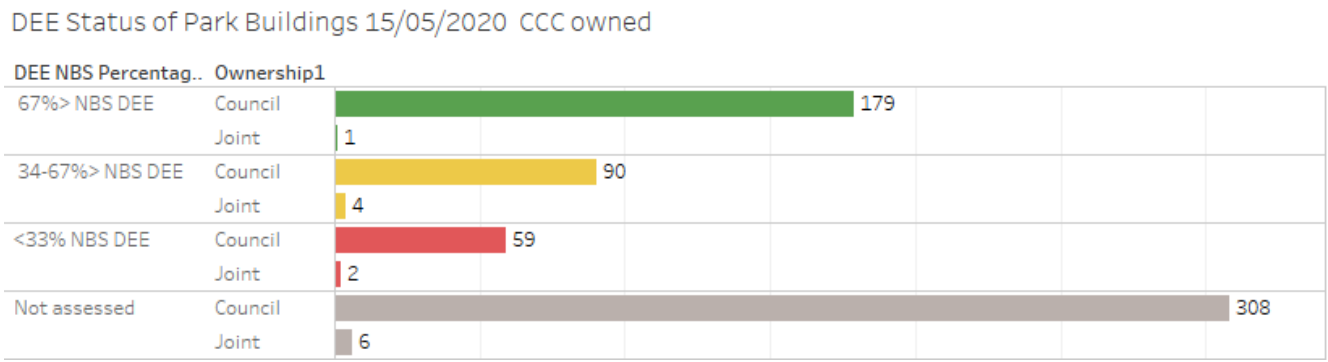


Figure 5-4: Status of compliance with DEE National Building Standards of CCC owned buildings Parks manages

The above figure highlights the importance of planning for appropriate funding to manage the associated risks and restrictions due to buildings not meeting National Building Standards code.

5.3.4 Risk Mitigation Strategies

Risk management is inherent in all of the Council's asset management processes. Significant risk management strategies for this activity include:

Asset Design

Design and construction standards for park assets are continually updated to become more resilient to earthquakes, high use, vandalism and environmental conditions.

Design requirements are set out in the Council's Infrastructure Design Standards (IDS). These standards include approved materials and design solutions to provide resilient assets. During construction, quality assurance processes are in place to confirm that the works are built in accordance with expectations and are fit for purpose. Assets designed and constructed by other parties that are intended to be vested in the Council (e.g. subdivisions) are also required to comply with Council standards.

Our irrigation network is ageing and deteriorating. We are in the early stages of working with irrigation specialist suppliers in assisting us with an irrigation audit of all sport parks around the city. The scope of the audit is the age of pipes/ valves/ sprinklers, solenoids, control systems, pumps and booster pumps. The audit aims to identify deficiencies in performance and will be looking for sustainable improvements that can be achieved through design and upgrading aged assets to increase performance of the systems as a whole. We are incurring increasing internal water costs. In addition to irrigation improvements and efficiencies, we are now considering drought tolerant grass blends that require less irrigation.

New infrastructure installed since the 2010/2011 Canterbury earthquakes is made of modern materials to the latest design standards and has greater resilience to future earthquake damage and potentially other disruption.

Insurance

Significant above ground assets (mainly buildings) are insured for replacement value for all perils including natural disaster. The level of cover required and availability of this cover is regularly reviewed. Where the asset value is less than the policy excess the Council self-covers these assets.

Business Continuity and Emergency Response Planning

Business continuity planning (BCP) is the process involved in creating a system of prevention and recovery from potential threats to an organisation. Plans ensure that personnel and assets are protected and are able to function quickly in the event of a disaster.

Parks & Foreshore has the following draft Business Continuity Plans;

- 20/346043 DRAFT Parks Programmes and Partnerships BCP
- 20/344806 DRAFT Parks Planning and Asset Management BCP
- 20/338098 DRAFT Botanic Gardens and Garden Parks BCP
- 20/324387 DRAFT Community Parks and Specialist Parks BCP
- 20/10779 Cemeteries & Monuments Team BCP
- 17/63310 Regional Parks BCP

The Council's broad risk management strategy is to;

- identify all risks associated with each group of assets;
- allocate responsibility for the management of each risk;
- prioritise the risks so that the highest are addressed first; and
- take action to eliminate, isolate or minimise each risk.

Activity initiatives:

Tactics Parks could implement is to design for resilience when renewing or constructing new assets. In order to make park assets more resilient, they should be designed to be more durable with potential risks in mind (for example, coastal parks are likely to have increased risk of flooding due to climate change and sea level rise). Materials, design details and planting should be chosen to minimise risk. Parks should provide normal public use while also cleverly using elements to respond to the risk, thus maximising both park utility and investment like reinforced seating terraces or low angle sloped mixed surface lining embankments where coastal inundation or erosion is a problem that can also function as seawall protection devices.

We need to move into a proactive planning phase for adapting to climate change by focussing on developing and implementing a strategy to adapt to climate change and in particular to manage assets that are posing the most significant challenges. Contingency plans will need to be prepared to ensure, through operational systems and temporary response plans, that appropriate response can be made to mitigate the effects of a triggered risk.

In managing our operational expenditure, we need to focus on the concern that the rising operational costs of our assets is not affordable, leading to compounding costs, deterioration of and vulnerability in assets.

Each park is unique and thus resilient park assets should be designed to ensure access and a high-quality experience while having the ability to recover quickly from small and large risk events. They should be designed to take potential risks into account while aiding in community-scale resiliency. For example, coastal vegetation can help protect from erosion. Relevant policies and objectives can be included in reserve management plans.

Risks associated with service delivery of assets including building, marine access, foreshore protection and other land improvement assets Parks are responsible for has yet to be identified. The following management practices and procedures are proposed to mitigate and manage risks associated with the management and operation of the Council's Parks assets:

- monitoring condition and performance of assets to predict future performance and potential asset failures through systematic periodic inspections and condition assessments;
- undertaking regulatory inspections of essential services and utilities to ensure satisfactory performance of safety monitoring systems; and
- renew and upgrading assets to maintain service delivery.

A co-ordinated approach is needed to how assets are improved or modified, rationalised or repurposed. Understanding and managing community expectations, and understanding their willingness to pay for particular facilities.

Generic asset criticality to some extent has been considered for individual assets in order to prioritise maintenance and renewal needs. A matrix is still to be fully develop so that asset criticalities are presented in a proposed table covering all assets covered in this AMP.

5.4 Summary of Risk and Resilience Teatments

Risk and resilience improvement projects or activities are included in the AMP and Activity Plan programme and LTP budgets. Mitigation planning are largely investigations, business cases, or extending existing modelling.

6 How we deliver our Services

This section explains how Council delivers the activity through its organisational structure, contracting partners and other agencies involved in service delivery.

6.1 Historical Context

Christchurch has a growing number of parks, currently 1,276, covering more than 9,877 hectares, acquired through purchase, subdivisions, gifting, and rehabilitation of landfills. Historically, these have been developed and managed by the various pre-cursors of the current Christchurch City Council with varying degrees of community involvement. City Care, the former Works Operations Unit of the Council, was separated as a Council Controlled Organisation in 1999 and were the main parks maintenance contractor to the Council for many years. In 2015, new contractors Delta and Recreational Services took over much of the parks maintenance. More recently, some of the maintenance operations have been internalised again. Maintenance continues today with a mixture of internal staff, external contractors and specialists, and various other groups and volunteers. In 2021 we recorded 87,000 volunteer hours. 2020 total was 38,000. 2019 was 33,000, 2018 28,000. Various teams in Parks are responsible for co-ordinating, planning and executing volunteer action in our city's greenspaces to support and utilise the enormous value volunteers brings for Council and the importance to keep supporting their efforts.

6.2 Internal Business Structure

The Parks Unit is responsible for managing parks and reserves, public toilet facilities, marine access and foreshore protection assets.

We're part of the Citizens and Community Group, and services are delivered through these teams:

- Parks Planning and Asset Management
- Parks Programmes and Partnerships
- Botanic and Garden Parks
- Community Parks
- Regional Parks
- Specialist Parks
- Residential Red Zone Parks

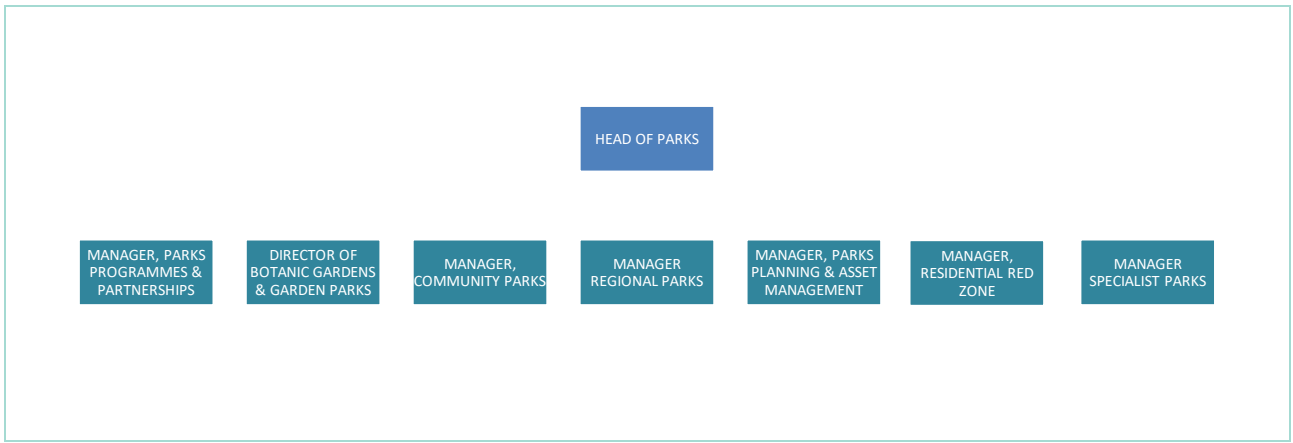


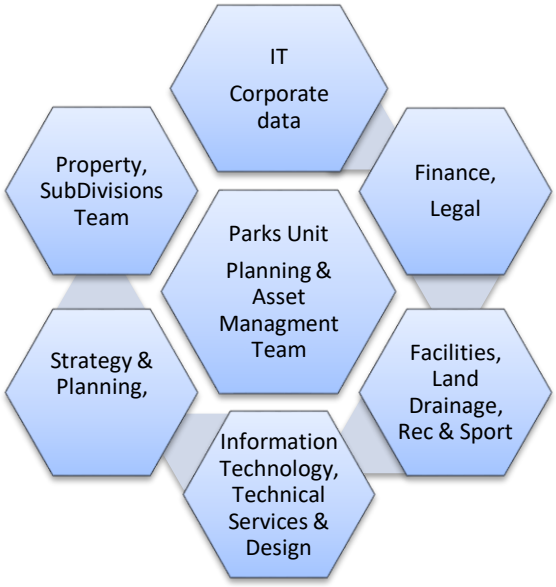
Figure 6-1: Unit chart - Tier 1 level

The roles of the teams reporting to the Tier Level 1 above are described below. The six teams are yet to be fully staffed and functional, particularly the Specialist Park Services.

Table 6-1: Team roles

Team	Role
Parks Planning and Asset Management	Carries out planning for growth and development of new parks, assets and renewal of existing assets. Advises various Council departments and elected members on proposed activities on parks, biodiversity, and parks related regulatory information. Monitors condition of assets and initiates renewal programmes. Maintains and improves asset data information. Leads development of AMPs, Activity Plans, capital programmes, network plans, management plans, leases and licences, parks in subdivisions.
Parks Programmes and Partnerships	This team runs education programmes with schools, leads the development of visitor information and signage, manages the trainee and internship programmes, and leads a community partnership programme.
Botanic and Garden Parks Community Parks Regional Parks Specialist Parks Services	Manages the operations and maintenance of the different park types, including contracts with the Council's service providers. Maintains assets not serviced under maintenance contracts. Performs regular asset performance and safety inspections. Liaises with the public with any customer service requests. Liaises with Business Support services to deliver sexton services. Provides details to assist with renewals programme setting. Manages the renewals budgets and delivery of projects. Responsible within the Council as the "asset owners" and provide decision making throughout the asset lifecycle. Delivers minor asset renewals. Provides operational advice and liaison with Community Boards and stakeholders.

The following diagram shows our main internal partners in Units or Teams that Parks interact with to deliver the services we provide.



6.3 External Contracts and Partners

The Council engages a number of contractors to help deliver Parks maintenance and facilities services. The use of external services takes advantage of provider economies of scale, cost control, area expertise, and breadth of experience not available internally. Contracts for the various service providers are procured according to the Council's Procurement Policy[1]. This policy provides clear direction to management and staff on the principles to be followed in procurement. It

[1] https://www.ccc.govt.nz/the-council/plans-strategies-policies-and-bylaws/policies/council-organisational-policies/procurement-policy/

includes guidance on transparency and accountability; value for money; effective market competition; and emergency procurement.

The main parks contracts are summarised in the table below:

Table 6-2: Major Contracts for Service Delivery

Type of Service	Service Provider	Scope	Term
Parks Maintenance – Planned & Reactive (unplanned) expenditure	**Primary Contractor** - Recreation Services Ltd	Community Parks as well as selected service tasks in Hagley Park and Regional Parks.	2015-2023
Sexton Services	**Primary Contractor** - City Care Ltd	Cemeteries - Sexton Services City and Banks Peninsula	2015-2023
Park Tree Maintenance – Planned & Reactive	**Primary Contractor** Treetech Specialist Treecare Ltd	Community Parks, Cemeteries, Botanic Gardens, Hagley Park and Regional Parks. *(Street Trees managed under Transport)*	2010-2020 >
Reactive maintenance and repair work, Minor Capital works	**Contractors** * Ancillary Works (varies)	Some assets in Parks not serviced through primary contracts.	ongoing
Major Capital Works - Renewals/New E.g. high cost or specialist engineering or technical skills required or bundled packaged delivery projects	**Contractors** * (varies)	Completion of competitive tender contracts for large scale renewal and new projects as per the capital programme. Mostly managed by the Council's Capital Delivery Team.	As per capital programme
Independent contractors performance Quality Assurance Inspection Services	**Service Supplier** * Arborlab Ltd	Quality Assurance inspections (audits) of Parks Maintenance Contract	2014 – 2019>
Asset data validation and capture of new assets. Asset Condition Assessments and Certifications. Conservation Reports for specific assets	**Service Supplier** * City Care Ltd – data capture * (varies)	Data collection and validation of assets in asset register. Cyclic condition assessments of targeted assets and certification inspections of some assets (backflow preventors, etc)	2019-2022 ongoing
Facilities Maintenance – Scheduled Maintenance, Planned and Reactive tasks Safety Inspections	**Service Supplier** * City Care Ltd	Facility maintenance of Park Buildings including scheduled maintenance programme (SMP) that includes clearing guttering, wash-downs, Bwof and HVAC checks. Safety inspections carried out as part of their contractual obligations and further as requested	*2021>*
Security Services	**Service Supplier** Armour guard, ADT	Security lockup, alarm monitoring and patrols of parks and facilities	ongoing
Sportsfield Design Services	**Service Supplier** SSDM	Sportsfield assessment and construction design	ongoing

6.4 Other Service Delivery Partners

The Council is supportive of community led initiatives for the operation of parks and there are a number of programmes and groups involved in the development and ongoing maintenance of parks.

There are many leases over parks with various organisations. The ownership of and responsibility for assets varies. For Council-owned buildings leased to a tenant, structural exterior elements and interior services fall to the Council to maintain. Interior decor and fit-out are normally the responsibility of the lessee.

6.5 Business Reviews Undertaken

A Section 17A review was undertaken in 2017 to determine the best way to provide the Parks Service. A result of this review is a number of the services were brought in-house for delivery. An internal restructure provided for this service within the Specialist Parks and Operational Teams.

Changes from the previous AMP period include maintenance of a significant number of park sites and asset types has been brought in-house including Banks Peninsula parks, cemeteries, playgrounds, BBQ and drinking fountains, inner city parks and gardens, some gardens and heritage maintenance, public artworks, monuments and sculptures, irrigation and sand based sports fields.

There are no other business reviews being undertaken that may affect this AMP.

6.6 Significant changes planned for the activity

There are no significant changes planned to the services provided or the way in which the activity is to be managed in the future.

Maintenance of parks, buildings and trees, performance auditing and asset data capture delivered through current contract agreements will continue until their respective expiry ranging from 2021 – 2023 when services will be reviewed.

Residential red zoned land is for Council to maintain from July 2020 as agreed in the Global Settlement. This will need to be adequately resources and is potentially underfunded in the agreement. Funding for implementation of the Ōtākaro Avon River Corridor Regeneration Plan (OARC) is being requested from the Capital Acceleration Fund.

7 Portfolio Lifecycle Management Plan

The lifecycle management plans detail how the Council plans to manage the network of assets at the agreed LoS (defined in Section 3) while optimising life cycle costs.

Section 7 provides the lifecycle management information and strategies at a portfolio level. Section 8 provides this information at an asset class level.

7.1 Asset Lifecycle Approach

Council has established a lifecycle management framework, aligned to the *International Infrastructure Management Manual* as illustrated in *Figure 7-1*. Section 7 and 8 are structured to align to the lifecycle stages.

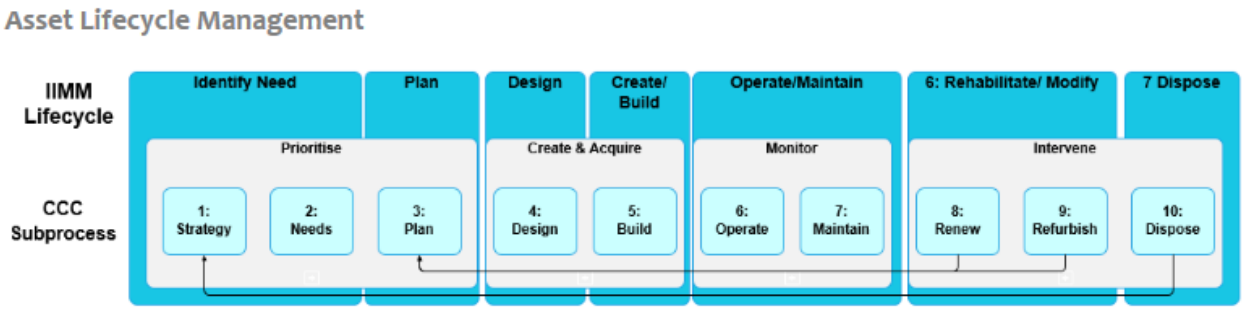


Figure 7-1: Asset Lifecycle Categories

7.2 Our Asset Portfolio

7.2.1 Overview of assets

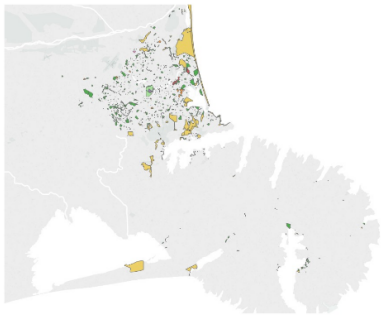
Christchurch City Council owns, plans and manages a diverse range of park sites and assets this include

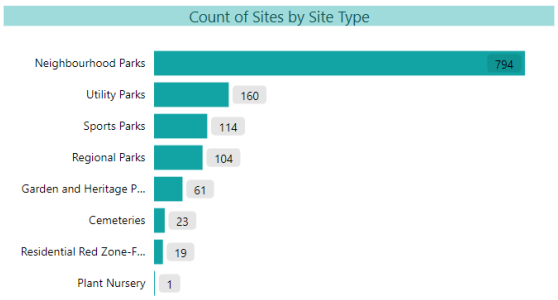
7.2.2 Location and Value

Parks are grouped under different management services and categorised into park types based on their primary purpose. The count of different park types and the associated maintenance area are shown in the table below. The maintenance area differs from the legal area of parks as it often includes a wider area such as the road frontage. The Botanic Garden grouping includes the Nurses Memorial chapel reserve due to its proximity to the Botanic Gardens. Closed Cemeteries are categorised as Garden and Heritage Parks and included in the Cemeteries group.

SAP and GIS applications provides the details of sites as held in the current asset register.

SiteType	Count	Area_M2	Area Ha
Neighbourhood Parks	794	7,774,577	777.46
Utility Parks	160	2,362,510	236.25
Sports Parks	114	12,593,946	1259.39
Regional Parks	104	69,237,569	6923.76
Garden and Heritage Parks	61	783,437	78.34
Cemeteries	23	1,000,303	100.03
Residential Red Zone-Flatland	19	4,901,851	490.19
Plant Nursery	1	112,378	11.24
Total	**1276**	**98,766,571**	**9876.66**





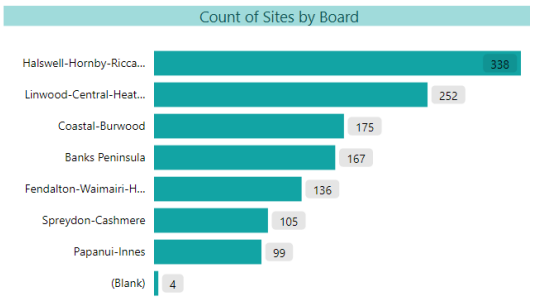


Figure 7-2: Distribution of Park types managed in the City and Banks Peninsula

In June 2019, assets under direct Council control carried a book value of $10 billion dollars.

The total book value for land and improvement assets in the Parks and Foreshore Activity from the 2017 and 2018 valuation data was valued at $1.06 billion dollars and detailed in the tables below. Asset valuations are established at 3-yearly intervals.

Of note is that;

- valuations used the best available asset information known at the time.
- the Council uses Optimised Depreciated Replacement Cost (ODRC) methodology revaluing assets.
- asset groups and classes are as per the Asset Information Management System (SAP).
- assets are valued at the maintenance management item component level where appropriate.

Valuations figures are for assets under Parks and Foreshore activity and all assets managed under the Heritage activity are included in the Heritage AMP.

The timing of valuations varies causing some misalignment between land valuation and land improvement (new assets created on the land) valuation figures. Aligning the revaluation of both land and Improvements will improve accuracy. The table below is an overview of the current available book values.

Table 7-1: Asset Portfolio Value (Land & Improvements)

	Book Value	**% of P&F Asset Base**	**% of Total Council Assets**
Land and constructed Improvements on the land			
Land (Parks & Reserves)	$771,952,983	72.55%	7.71%
Buildings group of assets	$59,705,639	5.61%	0.60%
Renewable Improvement assets	$205,933,058	19.36%	2.06%
Marine structures group of assets	$26,386,183	2.48%	0.26%
Total constructed land Improvement assets for Parks & Foreshore	**$1,063,977,863**		**10.63%**

	Book Value	% of P&F Asset Base	% of Total Council Assets
The total Council Assets total to $10, billion *The book value for Parks is based on 30 June 2019 available info (excluding Heritage buildings and assets)*			

As well as Parks and Foreshore assets, there are a number of other assets located on or adjacent to parks. Some of these are maintained by the activity to varying degrees on behalf of other Council Units, e.g. some land drainage assets and road landscaping. These Council assets are not included in Parks valuations as their value is captured under other activities. There are also a number of assets located on parks that are owned and maintained by other entities including community groups, sports clubs, other lessees and utility owners. These assets are excluded from the Parks valuation and capital renewal planning information. Examples include:

Council assets

- Land drainage and surface stormwater devices, channels, drainage weirs and structures
- Pools, paddling pools
- Community facilities
- Libraries
- Pump stations and utilities

Non-Council owned

- Sports club facilities such as artificial turf, hard courts, bowling greens, BMX tracks, flood lights, goal posts, scrum machines, clubrooms
- Food forests and community gardens e.g. fruit trees, edible plants, garden edging
- Graves/headstones
- Power poles/pylons
- Community group buildings
- Utilities such as electrical substations, weather stations, utility fittings, cell phone towers
- Access to private property bridges and structures

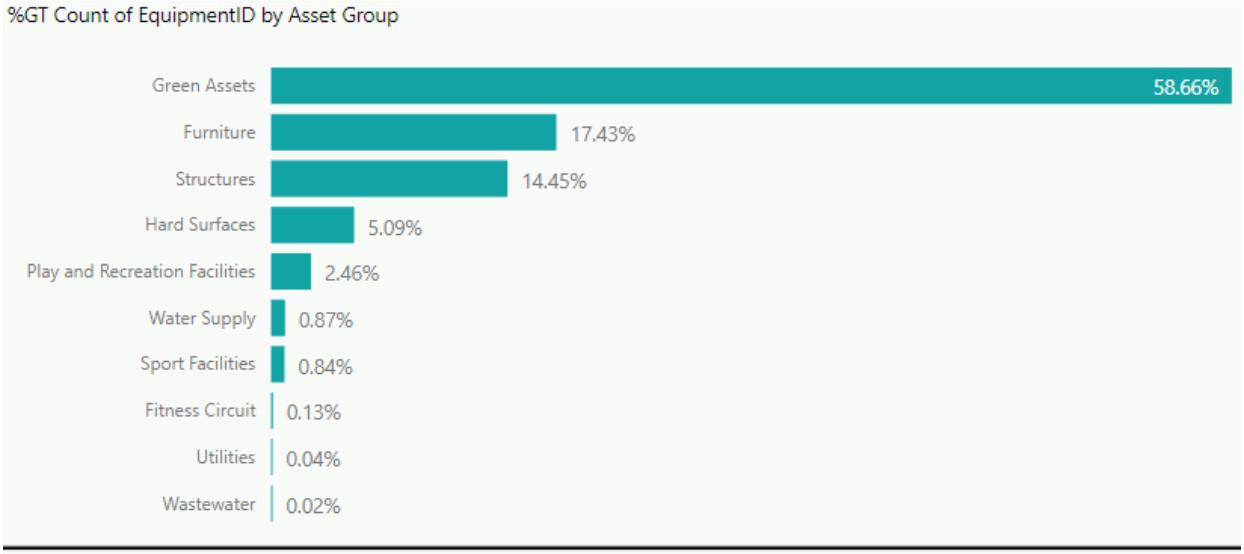
Consistent with the Council's Asset Management and Information systems, asset data is recorded for each park (functional location) in SAP and SmartMap.

Assets are grouped as shown in the figure below.

SAP Functional Location Level 03	SAP Functional Location Level 04 (Asset Class and Asset Types)		
PRK (Park)	Buildings Structures Park Furniture Hard Surfaces Green Assets	Play Equipment Outdoor Fitness Assets Recreation-Sport Assets Trees Mechanical assets	Water Supply Waste Water assets Utility assets
FSH Foreshore	Wharfs-Jetties-Pier Slipways/Boat Ramps Recreational Rafts	Moorings Seawalls/Coastal protection structures	

Figure 7 5: Asset classification

A summary table of assets and method of measurement (count, area (m2/Ha) or length (m) is provided in the tables below. Recorded Park assets number more than 126,000 and are grouped in different categories.



Asset Group	Botanic Garden	Cemeteries	Community Parks	Foreshore	Hagley Parks	Plant Nursery	Regional Parks	Residential Red Zone	Total
Water Supply	130	137	620		99	2	114		**1102**
Wastewater		5	25						**30**
Utilities			46						**46**
Structures	45	421	14277	159	189	38	3124	3	**18256**
Sport Facilities			969		62		28		**1059**
Play and Recreation Facilities	17		2906				185		**3108**
Hard Surfaces	102	143	4747		105	10	1319	2	**6428**
Green Assets	1673	4659	58696		6170	50	2715	133	**74096**
Furniture	545	633	15787	83	1108	4	3858	1	**22019**
Fitness Circuit			141		21		2		**164**
Total	**2512**	**5998**	**98214**	**242**	**7754**	**104**	**11345**	**139**	**126308**

Figure 7-3: Distribution assets

Asset Class Group	AssetType	Count	Length_M	Area_M2
Fitness Circuit	Fitness	135		
Fitness Circuit	Play Surface	29		1414
Furniture	BBQ	30		
Furniture	Bin	974		
Furniture	Bollard	2889	100	163
Furniture	Clock	2		
Furniture	Collection Box	4		
Furniture	Cycle Equipme	484		
Furniture	Flag Pole	66		
Furniture	Fountain	222	1	
Furniture	Gate	4076	11104	26
Furniture	Light	2398		
Furniture	Light Pole	998		
Furniture	Picnic Table	726		
Furniture	Plaque	961	1	
Furniture	Pool	11		2052
Furniture	Safety Barrier	1	25	
Furniture	Seat	3433	4617	
Furniture	Shower	15		
Furniture	Sign	5772	3	12
Furniture	Stile	154		
Furniture	Tree Cage	38		
Furniture	Tree Grate	7		
Furniture	Water Feature	19		
Furniture	Weather Static	3		
Green Assets	Garden	11445	24	1994712
Green Assets	Hedge	589	16075	
Green Assets	Natural Area	1481	1	50157601
Green Assets	Stand of Trees	614	5875	9982195
Green Assets	Tree	52319		
Green Assets	Turf	7770	78	14676175
Hard Surfaces	Boardwalk	210	4358	7098
Hard Surfaces	Car Park	748		542062
Hard Surfaces	Judder Bar	153		
Hard Surfaces	Ramp	183	1135	1973
Hard Surfaces	Terraces	15	211	
Hard Surfaces	Track	5177	639335	1599391
Play and Recreation Fa	Dog Exercise A	6		273321
Play and Recreation Fa	Dog Exercise E	72		
Play and Recreation Fa	Play Equipmen	1664		
Play and Recreation Fa	Play Modular U	324		
Play and Recreation Fa	Play Surface	1044		113048
Sport Facilities	Play Surface	1		119
Sport Facilities	Sports Area	488		259038
Sport Facilities	Sports Equipm	596		
Structures	Boardwalk	5	164	651
Structures	Boat Ramp	61	855	7294
Structures	Bridge	463	3681	8645
Structures	Cattle Stop	55	134	
Structures	Fence	13403	836138	
Structures	Jetty	76	1319	11009
Structures	Natural Area	3		66553
Structures	Ramp	7	83	196
Structures	Retaining Wall	1572	43083	12
Structures	Safety Barrier	1629	16520	
Structures	Shelter	199	8	4343
Structures	Stairs	670	4062	7278
Structures	Stockyard	30		6329
Structures	Viewing Platfo	65		387
Structures	Water Tower	11		40
Structures	Water Trough	164		
Utilities	Cable	42		
Utilities	Electrical Syste	3		
Utilities	Fuel Tank Syste	1		
Waste Water System	Tank	1		
Wastewater	Tank	32		
Water Supply	Backflow Preve	158		
Water Supply	Irrigation Syste	865		
Water Supply	Pump Unit	6		
Water Supply	Tank	74		

Figure 7-4: Register of Asset types in the Parks and Foreshore Activity

The majority of Park Buildings are recorded in SAP, however the confidence of the asset information and data in SAP needs improvement and work is currently underway to validate the register and update asset information.

The Parks Buildings asset register is built around the SAP Plant Maintenance data and linked to SAP Real Estate Data. Parks Buildings may be owned and maintained by Parks, owned by Parks but leased and/or maintained by a third party, privately owned, e.g. sports clubs. A number of other Council units also maintain buildings on parks.

Privately owned buildings are of no real concern, other than ensuring that the owners maintain them compliant with statutory building regulations, and that they are safe and aesthetically acceptable. The number, ownership and building use are presented in the figure below. Buildings holding a heritage value is indicated in red.

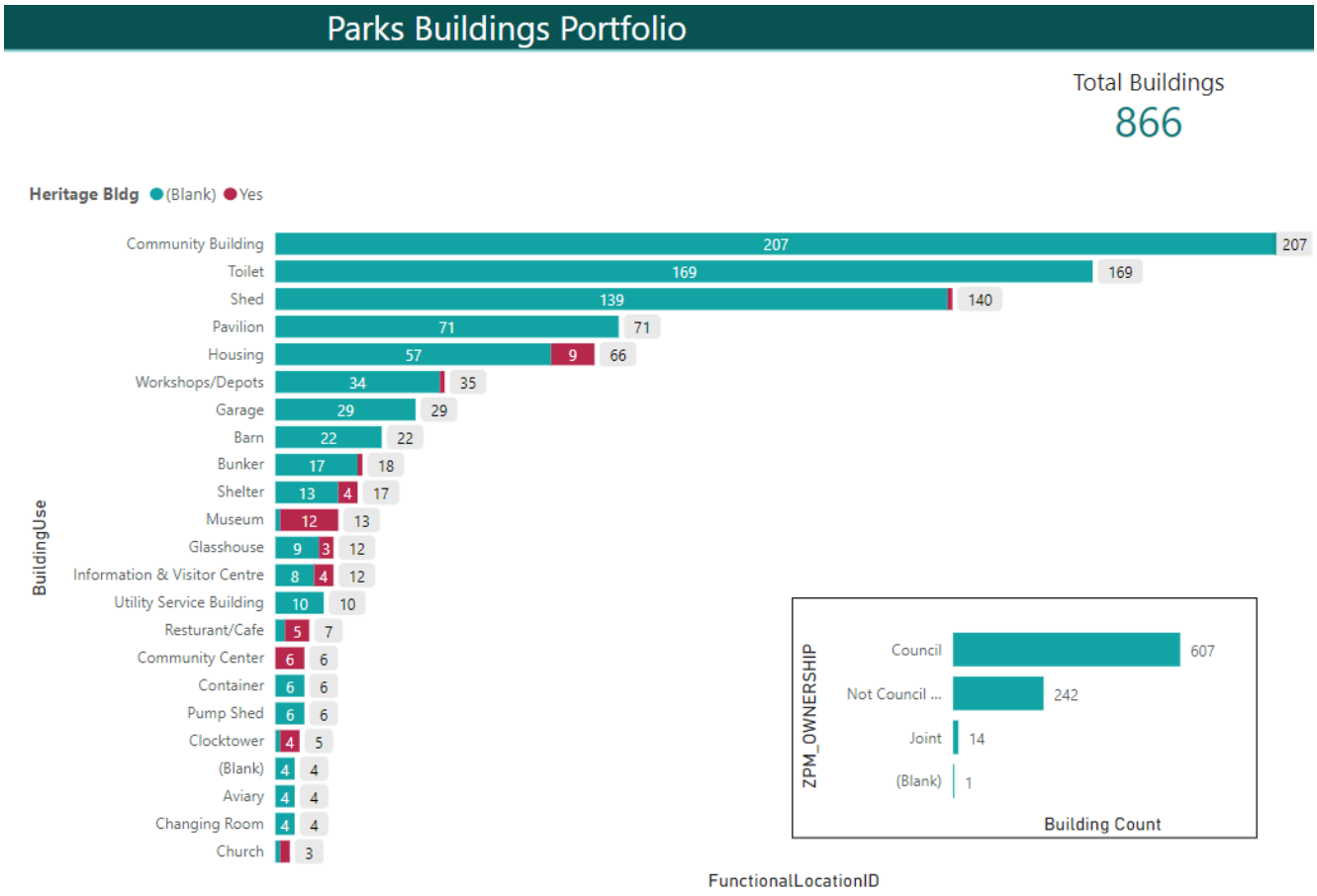


Figure 7 7: Buildings ownership and use

The majority of Parks Buildings are located within the City limits, with a smaller number in Lyttelton, the bays and Banks Peninsula. Detailed GIS location and building footprint visibility is available and under review for improvement in SmartMap. The age profile of Parks buildings ranges from 1 to 80+ years.

Parks Unit also manage 62 Jetties and Wharfs, 60 Boat ramps and 51 retaining walls in its portfolio of foreshore assets.

7.2.3 Critical Assets

Critical assets warrant a higher level of asset management because their failure would likely result in a significant disruption in service and financial, environment and/or social cost.

The Parks Unit is yet to develop a formal matrix to assess asset criticality, but in general we assess criticality based on the likelihood of the following should an asset fail:

- Health and Safety / physical harm
- Significant disruption of services
- Commercial cost
- Social cost ie. reputational, image, community dissatisfaction

Using the above framework as a guide, the critical assets initially identified are:

- Buildings
- Wharfs, jetties, boat ramps
- Tracks and carparks
- Sports fields, especially high profile fields
- Playgrounds
- Bridges & viewing platforms

This list is still to be reviewed as part of an improvement plan.

7.2.4 Network Age and Lifecycle Stage

The age of many Parks and Foreshore assets is largely unknown. Many of the asset start up dates are likely to be a reflection of when the data was entered into SAP rather than the age of the asset, therefore the age profile cannot be relied on for renewal plan modelling. Approximately 70% of the assets (excluding trees) have a recorded start-up date of 2009 or 2008 (given as default at the time of capture). 10% of assets have no start-up date recorded at all. Recorded trees have start-up dates ranging from 1870 to 2019. At least 30% of the tree start-up dates are age estimates, but an unknown quantity of start-up dates reflect when the data was collected rather than the actual age of the tree.

Expected life for constructed assets typically varies from 5 to 100 years. Due to the varied nature of assets it is very difficult to accurately predict their design lives. Factors influencing their effective lifespan include;

- Materials used
- Construction style
- Physical location (exposure to coastal environmental conditions)
- Use
- Design standard
- Maintenance and repair regimes

Modelled useful lives was based on a mid-range of design styles of an asset type and construction materials, the install dates (recorded SAP asset start date) as well as physical inspection of their condition.

Where physical inspection has not been undertaken, remaining useful life has been estimated based on known or averaged install dates.

Even allowing that potential useful life may be greater than shown in the modelled data, it is reasonable to assume that there will a significant peak in some assets reaching the end of their useful life within the LTP period.

7.2.5 Asset Data Confidence

Asset data is held in SAP and various other stand-alone applications such as spreadsheets and databases. A variety of information such as plans, specifications and reports are held in hard copy. The table below summarises the asset information available for Parks and Foreshore both in terms of completeness (% of assets for which that data type is stored) and reliability (using the A-E grading below).

Table 7-2: Asset data confidence for Parks & Foreshore assets

Asset Category	Material / Size/type	Asset Value	Asset Age	Asset Condition	Asset Criticality	Asset Capacity
Buildings	95% / B	90% / B	80% / C	5% / A	0% / E	0% / E
Structures	95% / B	90% / B	90% / E	60% / A	0% / E	0% / E
Furniture	95% / B	90% / B	90% / E	80% / A	0% / E	0% / E
Hard surfaces	95% / B	90% / B	90% / E	95% / A	0% / E	0% / E
Green assets	90% / B	60% / C	90% / E	70% / A	0% / E	NA
Play & Recreation facilities	95% / B	90% / B	90% / E	95% / A	0% / E	0% / E
Sports facilities	95% / B	90% / B	90% / E	95% / A	0% / E	0% / E
Water and Waste Water	95% / A	0% / E	90% / E	20% / A	0% / E	0% / E
Marine structures	90% / A	90% / A	90% / E	90% / A	0% / E	0% / E

Table 7-3: Confidence matrix

Confidence Grade	Description
A Highly reliable.	Data based on sound records, procedure, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate ± 2%.
B Reliable.	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10%.
C Uncertain.	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated ± 25%.
D Very uncertain.	Data based on unconfirmed verbal reports and/or cursory inspection and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy ± 40%.
E Unknown.	None or very little data held.

7.2.6 Asset Data Improvements

The following improvements to data quality are included in the AM Improvement Plan in Section 10.

- Ongoing condition assessment of assets, predominantly building condition
- Solutions as to how refurbishment works completion updates asset condition
- Facilitate more advanced data analysis as data is captured

An action to improve the quality of the Parks buildings asset register, asset attribution information and condition assessment data stored in SAP is currently underway as a priority improvement. This will allow for more advanced analysis in the establishment of future maintenance and asset lifecycle planning.

7.3 Asset and Network Planning

7.3.1 Asset planning strategies

Assets are planned to achieve community outcomes, guided by the Council's numerous policies, strategies, plans, legislative requirements, LoS, and community demand. Capital programmes are approved through the LTP and Annual Plan.

New assets fall under the following categories; New Services, Improved LoS, Growth based Projects and Backlog projects and can be either Council funded or developer funded (funded by developers as part of subdivisions or developer contributions).

Developer funded projects are guided by the Council's Public Open Space Strategy 2010-2040 and our LoS. Council funded projects are based on community need identified through community research, strategies and plans, or driven by demand.

Network plans that set out the planned provision of sports facilities, play spaces and urban forest are being developed to guide Council investment and provide a framework for responding to community requests. The plans include guidance on prioritising projects and design. Future plans are proposed for other types of assets, e.g. biodiversity, recreational routes, and buildings. A master plan for cemeteries is already in place.

Some options being considered for public toilets include:

- Status Quo. Provision by a mix of Council and non–Council providers is adequate to meet the overall demand. This does not address differences in the quality of the toilets provided.
- Improve LoS at existing Council–owned toilets.
- Increase provision of Council–owned toilets in retail locations. Council could choose to provide toilet facilities in retail areas to address the lack of services provided by the retailers linked to the limitations of the Building Code.
- Reduce provision of Council–owned toilets in retail locations. Council could rely more fully on businesses to provide services for their customers.
- Improve community awareness of availability and standards. Explore opportunities to improve awareness of the availability of public conveniences for residents and tourists, the standards they should expect and the options available for them to raise concerns.
- Charge for access to public toilets. Some cities in other parts of the world charge for access to public toilets as a means to fund the service.

7.3.2 Parks Play Spaces Network Plan

A network plan is being developed for our play spaces incorporating playgrounds, flying foxes, skate and scooter parks, bicycle skill areas, outdoor fitness equipment, public ball courts, water play facilities and nature play. It will guide future provision and renewal of play spaces by establishing the quantity, range and geographical spread of play spaces to be provided. It is proposing a hierarchy of local, community, and destination play spaces to serve small to large catchments with design guidelines. The network plan is expected to be completed in 2020.

7.3.3 Sports Facilities Network Plan

A network plan is being prepared for all Council sports facilities to identify how many facilities are needed, their style, size and quality, and where to locate them to meet community need. Of relevance to Parks and Foreshore are the chapters on outdoor sports facilities and outdoor water sports facilities.

The outdoor sports facilities chapter establishes a hierarchy of park types and uses and the standard of facilities associated with them from premier grade through to local community use. It will also establish a process for prioritising Council investment in both new and renewal facilities. It is expected to be completed in 2020.

The chapter on outdoor water sport facilities is yet to be scoped but will follow a similar format to establish a proposed network of facilities to meet identified needs. It is proposed for completion in 2021.

7.3.4 Regional Parks and Biodiversity Network Plan

With the Council's declaration of a climate change and ecological emergency, there is increased demand for protection and restoration of ecosystems. A network plan for regional parks and biodiversity is being scoped. The plan is proposed for completion in 2021.

7.3.5 Asset Planning Improvements

The following improvements to asset planning processes are included in the AM Improvement Plan in Section 10.

- Review Parks categorisation and data improvements
- Continue to accumulate asset data that is accurate and consistent stored in a system that can effectively and efficiently process and retrieve it.
- Advance lifecycle cost analysis using pertinent asset data
- Evaluation of projects from an AM perspective in order to ensure greater confidence in data, performance and risk predictions, and budgets and delivering the most cost effective service

7.4 Asset Creation (Design and Build) and Acquisition

7.4.1 Identifying and recording capital projects

New works are those works that create a new asset that did not previously exist or works which upgrade or improve an existing asset beyond its existing capacity. Assets may be developed by the Council or developers and handed over on completion. In this AMP, a number of projects have been identified through consideration of:

- LoS requirements (Section 3).
- Growth and demand requirements (Section 4).
- Investment in network resilience (Section 5).
- Other asset planning initiatives described in Section 7.2 and 7.3.

Potential projects are put forward and prioritised through the LTP process. Community need, alignment with Council strategies, policies and LoS, costs, environmental impact, alternative options and contribution to community wellbeing are all considered, but ultimately it is elected members who decide what to include in the programme.

The Council's capital delivery is documented and managed within the Capital Programme Management System (CPMS). Once completed, new assets are recorded in SAP.

7.4.2 Asset Design

Vesting of property and assets is approved by the Parks Unit and processed by the Council property consultancy. Vesting agreements do not proceed for assets which fail to meet Council requirements for design and construction.

Once the asset has been accepted by the Council, the asset information is captured within the asset management systems, and provision made for the appropriate operation and maintenance of the asset, according to the life-cycle plan for that asset.

7.4.3 Management of Vested Assets

Property vesting is handled through the Council property consultancy, but service-providing assets must be approved as compliant to Council requirements by the business unit which is accepting them for operational purposes. Vesting agreements do not proceed for assets which fail to meet requirements.

Capital works are carried out to adhere with standard contract documents which list the Council's design, specification and construction documents that the works must accord with. If the quality of construction is demonstrated through the provision of the required quality assurance records and compliance with contract and/or consent documents the handover will be accepted.

Once the asset has been accepted by the Council, the asset information is captured within the asset management systems, and provision made for the appropriate operation and maintenance of the asset, according to the life-cycle plan for that asset.

7.5 Operations and Maintenance

7.5.1 Portfolio-level O&M Strategies

Most planned works are delivered via contracts such as the Facilities Maintenance (FM) contract, Park Tree Maintenance contract or Parks Maintenance Contract. These contracts provide for planned preventative and reactive maintenance for most of the Council's buildings, trees and general park assets portfolio. Operations and maintenance of Hagley Park, Ngā Puna Wai, Botanic Gardens, Mona Vale, inner city garden parks, cemeteries, playgrounds, and much of the regional parks is undertaken internally. Other work outside the scope of the main contracts is managed by internal maintenance teams or specialist contractors appointed through the procurement framework.

7.5.2 Earthquake Prone Buildings

An Earthquake Prone Building (EPB) is defined as an existing building which has a seismic capacity of less than one third of a (current) design earthquake code.

There is a legal requirement to complete structural works on these assets to raise seismic capacity to greater than or equal to 34% (or to demolish the building) within the following timeframes:

- 15 years for most Council owned buildings
- 7.5 years for buildings which accommodate a 'vulnerable' group or which are located on key transport routes.

Parks have 24 buildings on the Christchurch District Council Earthquake Prone Building list. Five of these buildings are heritage buildings, 16 in Community Parks, 1 in the Botanic Gardens, 1 in a Garden and Heritage Park and 1 at Harewood Nursery.

Of the 19 buildings relevant to this AMP three are priority buildings with a compliance period of 7.5 years from the date of issue of the EPB notice. Priority buildings are those that are located on Strategic Routes and/or their collapse could impact on high pedestrian thoroughfares and/or they contain unreinforced masonry elements. The Parks buildings with compliance due in 2025 are:

- Toilet - Papanui Memorial Reserve
- Pavilion and toilet - Barnett Park
- Townend House – Botanic Gardens.

The remaining 16 Non-Priority buildings have a compliance period of 15 years from the date of issue of the EPB notice expiring in 2032-2033.

Toilet - Papanui Memorial Reserve – assessed at 21%. There is a repair strategy but renewal could be more economical option.

Pavilion and toilet - Barnett Park - a reassessment was done under the new guidelines when planning strengthening for the building and found it was not EQP updating of the register is in process.

Townend House – Botanic Gardens - <34%, strengthening options have been done, review of information, final design and construction is in process.

A clear strategy for managing costed design strengthening options to allow for the planning and budgeting of these works is still to be defined and implemented.

7.5.3 Asbestos

Council is undertaking a programme to survey more than 2000 of its assets for asbestos containing material (ACM) in stages over the next five years. In most cases where ACM is found it can safely be removed when the building is next being renovated or repaired.

Once the applicable information comes from this survey for Parks managed building assets the contingent liability on maintenance budgets can more readily be appraised and an understanding of the magnitude of the risk can be appreciated. Once methodologies are appraised maintenance programming and financial allocations can be budgeted.

7.5.4 Operations and Maintenance Improvements

The following improvements to operations and maintenance processes are included in the AM Improvement Plan in Section 10.

- Develop and implement a system for ensuring that the future OPEX costs associated with new and upgraded assets are identified at the design stage and that this information is used to inform future OPEX budgets
- Record maintenance requirements against each asset in SAP
- Ensure all key data from existing and future O&M manuals is integrated in to the asset systems/contracts and is easily accessible
- Develop maintenance strategies so that longer term impacts of new introduced assets to the parks asset network can be identified and mitigation measures put in place to ensure appropriate budget and resource is planned for.

7.6 Renewals

7.6.1 Portfolio Renewal Strategies

Renewal expenditure for assets is major work which does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original or lesser required service potential. Work over and above restoring an asset to original service potential is upgrade/expansion or new works expenditure.

Asset Condition reflects the physical state of the asset, which may or may not affect its performance. Condition data is typically used to determine the need and timing of some preventative or remedial action to prevent loss of service or economic loss.

The performance of the asset is the ability to provide the required LoS to customers. Generally, this can be measured in terms of reliability, availability, capacity, and meeting customer demands and needs.

All of this is critical information for determining the remaining useful life of an asset and more importantly the timing for possible intervention steps to bring LoS, provided by the asset, back to a desired standard.

Condition assessment and asset performance are inexorably linked. Condition and performance failure can be considered as 'cause' and 'effect' respectively. That is, condition deterioration is a cause of failure, the effect of failure is poor performance (failure to meet required LoS).

Where possible, renewals planning uses a risk based approach that considers the condition and criticality of the asset. For some asset groups there is a lack of key data (such as condition and age) to effectively inform renewals planning and in these situations it has been necessary to make assumptions based on the data that is available and anecdotal information from staff involved with the day to day management of the assets.

The general renewal strategy is to either replace or rehabilitate assets when justified by:

- Age and condition – the age or condition of the asset is or will result in a condition based failure.
- Asset Performance – when it fails to meet the required LoS. The monitoring of asset reliability, capacity and efficiency during planned maintenance inspections and operational activity identifies non-performing assets. Non-performing assets can be identified by factors such as:
  - Repeated asset performance failure
  - Structural failure (condition based)
  - Excessive maintenance requirements
  - Ineffective and/or uneconomic operation
  - Vandalism
- Risk – the risk of failure of the asset and the associated financial, environmental and social impact justifies action.

- Economics – the cost of maintenance for that asset component is deemed to be uneconomic to continue repairing the asset when the annual cost of repairs exceeds the annualised cost of renewal. Economic factors may also come into consideration in order to co-ordinate renewals with other major works.
- Political and Community Feedback – Any feedback received from political or community sources that influence or change decision making.

Preference is given to renewal projects generated from condition data which is obtained through condition assessment surveys by competent assessors of selected parks assets, undertaken as part of the condition monitoring programme for park assets. Assets are condition graded on a scale of 1 to 5, and renewed at condition factor 4 or 5. This aims to align Activity Plan Targets with the Capital Programme. In some cases renewals are done sooner than scheduled if the benefits outweigh the costs of replacing an asset before it has reached the end of its life. This may be done for safety or amenity reasons. In other cases the life expectancy of an asset may be extended so that renewal is delayed if there is no immediate need. Consideration is also given in some cases of widening the renewal of play equipment and garden assets in one location where assets condition graded to one scale below 5 are also renewed to provide for a greater visual impact motivated by economies of scale.

In the absence of condition information, the theoretical life expectancies and replacement costs of asset components are used for financial projections. It is important to understand where critical component renewal has occurred for each structure too, as renewal of piles and beams, for example on a marine structure, will extend the life of the whole of asset beyond its theoretical life.

7.6.2 Renewal Programme and Projects

Over time as assets are created they age and will need renewal. Key proposed renewal programmes or projects (uninflated cost) over the next 30 years are shown in the Table below.

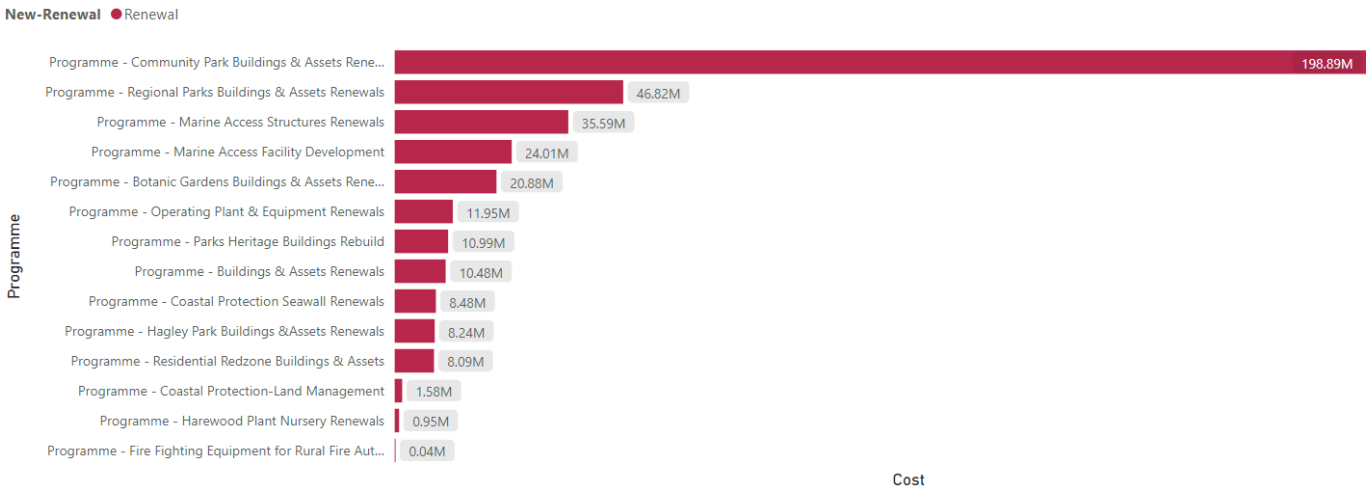


Figure 7-4 Key proposed renewal programmes (uninflated) 30 years

7.6.3 Renewal Process Improvements

The following improvements to asset renewal processes are included in the AM Improvement Plan in Section 10.

- Continue to improve and develop renewal assessment tools for the prioritisation of renewal candidates.

7.7 Asset Disposal

Disposal of a decommissioned asset includes sale, demolition, or relocation. Any revenue gained from asset disposals is accommodated in the Council's LTP.

The Council Disposal Policy details Council strategy regards asset disposal. It governs how each applicable asset, including sub-assets, equipment and materials is valued and disposed of at the end of its useful life, whilst ensuring the Council is acting in an impartial and transparent manner.

This policy does not make any determination on when (or if) assets should be disposed of - it merely guides the process once a decision to dispose has been taken by the appropriate asset owner, in accordance with any specific statutory or Council processes.

Disposal of Parks and Foreshore assets will be considered where these assets are no longer required. In all cases disposal processes must comply with the Council's legal obligations under the Local Government Act 2002 and the Reserves Act 1977 and meet requirements to involve the public in significant decisions.

As with all Parks and Foreshore assets, when assets reach the end of their useful life, they are reviewed by Council staff to determine if they are still required and whether they should be renewed or disposed of. Costs of disposal are included within the funding provided for the development of a new use or asset if it is replaced, and therefore there is no budget allowed or required for the disposal of assets. Cost of disposal of assets not to be replaced is an Operational expense.

An improvement task is to evaluate and document any park assets or reserves identifying them as being "Strategic Assets". Under Section 97 of the Local Government Act 2002, any decisions to transfer the ownership or control of these assets or a decision to construct, replace or abandon these assets, can only be taken if the decision is provided for in the LTP (not withstanding emergency health and safety disposal of assets following the earthquakes). Any proposals for the disposal of significant assets will be referred to the Council and the community for their consideration and comment and will comply with relevant Council policies and strategies.

Disposal of a park or reserve refers to removal of the capability or functions provided by that area, and not the removal of particular items and their replacement with others. The Council has the final decision in the disposal of a park or reserve land, providing the land has not been derived from the Crown. If the land has been acquired from or via the Crown than the Council has usually been acting on behalf of the Crown as the administrator of the land e.g. maintaining and developing the land on behalf of the Crown. If the Council determines it no longer requires Crown derived land it can resolve for the administration of the land to be returned to the Crown, usually through the Department of Conservation who act on behalf of the Crown. The disposal of a land used as a park or reserve may be subject to the Reserves Act, Local Government Act and or the Public Works Act, which will usually involve some form of public notification and consultation. There are no Parks or reserves disposals currently scheduled.

As with the creation of new amenity areas, disposal of amenity areas is determined by the elected Council to meet needs and aspirations identified by it. There are no Parks or reserves disposals currently scheduled.

Trees can be disposed of where they are removed by either staff or Community Board decision and not replaced. A draft Tree Policy under development will outline this process

8 Lifecycle Management Plans

8.1 Lifecycle Management Plan

8.1.1 Issues and Priorities

Table 8-1: Key issues and priorities of this plan

Key Issue	Priority for this Plan
Aging assets and deferred renewals	Use renewal analysis to develop and cost works programs with the intention of populating future LTP 2021-31 budgets and delivery of programmes
Quality of sports fields	Upgrade existing sports fields to improve availability under wet and dry conditions
Reducing reactive maintenance	Prioritising asset renewal based on condition and risk to reduce pressure on OPEX budget and resources
Minimal accurate condition data on buildings	In 2020 complete an assessment of each Council owned asset regarding its fitness for purpose. Obtain accurate condition data on all assets. Determine what data is to be captured and methods of analysis and reporting.

Limited renewal analysis of Park buildings	Develop strategies around renewal analysis. Undertake renewal analysis and costing. Addressing the renewal backlog through LTP budgeting. Establish a program to address asset condition 4 and 5 buildings as priority.
Planning for the effects of climate change on affected assets	Develop strategies to address the effects that climate change will have on assets

The whole premise of asset management is that asset requirements and asset management strategies need to be driven by defined and acceptable service levels and performance standards. LoS is a generic term used to describe the quality of services provided by an asset.

For example for buildings it is;

- compliance with building and fire regulations
- user requirements and availability
- clean and healthy facilities
- accessibility of facilities

and for playgrounds it is;

- condition and appearance
- compliance with Standards
- availability of playground equipment

Performance relates to the ability of Parks assets to provide the required LoS to the customer. This differs from condition which relates to structural integrity of an asset.

8.1.2 Age and Condition

Asset condition reflects the physical state of the asset, which in most cases influences its ability to provide the required LoS. Every asset is subject to deterioration resulting in a reduction of future service potential. The following condition rating model for the condition assessment of assets is based on the condition assessment model suggested in the International Infrastructure Management Manual. Asset condition is measured using a 1 – 5 grading system. The grading scores utilised are generic across all Council activities and the general meanings of the grades are as follows:

Table 8-2: Asset Condition grading matrix

Grade	Measurement description	Remaining Service Potential
1	**Very Good Condition**- (No work required) Asset in sound physical condition designed to meet current standard	**85-100%**
2	**Good Condition**- (Only minor work required (if any)) Acceptable physical condition but not designed to current standards or showing signs of wear. Wear has minimal impact on assets performance.	**65-85%**
3	**Moderate Condition**- (Work required but asset still serviceable) Functionally sound but showing some wear with minor failures and some deterioration in performance. Minor components or isolated sections need repair or replacement.	**30-65%**
4	**Poor Condition**- (Substantial work required in short term, asset barely serviceable) Asset functioning but requiring a high level of maintenance to remain operational. Likely to cause a marked deterioration in performance in short term.	**10-30%**
5	**Very Poor Condition**- (Major work or replacement required now) Unserviceable/Unsafe with failure imminent. Asset life effectively exceeded and excessive maintenance cost incurred. Major work or replacement required urgently.	**0-10%**

The criteria for condition grading of asset classes is described in *Appendix_Park Assets Condition Assessment Criteria*.

All field captured condition assessment data are stored in SAP as a "measurement point" against an individual asset (SAP equipment) that reflects who did the inspection, when and what the grade assessed was, any specific comments of note, and a date stamped photo of the asset. This allows for an accurate record to be kept of how the condition of the asset changes with time and provides essential data for renewal forecast planning.

The condition assessment programme is coordinated by the Parks Asset Management Team. Grading scores are assigned by either outsourcing assessment of a selected portion of assets annually to either a competent external supplier, internal trained staff, or an internal engineer / technical specialist as required (structural engineer, asset expert etc.). All condition assessments are based on visual assessment of current asset condition. Circa 75% of all targeted recorded Parks assets in the asset register (excluding Buildings) have so far been assessed and recorded.

It is intended to continue to provide a comprehensive overview of asset condition grouped by asset type to help inform Activity Plans and financial forecasting. However, until such time that data and robust models to support advancements on current practises is available and well tested, a combination of methods will be used to model asset renewal planning.

Where condition scores are available these have been used to inform the asset renewal model for Parks.

The recommendation to carry out a condition assessment and the frequency of those assessments is based on the following industry sector guidelines;

- the New Zealand Handbook for Tracks and Outdoor Visitor Structures (SNZ HB:2004) recommends all structures receive an assessment every two years, and every six years is assessed by an Engineer
- NAMs International Infrastructure Management Manual - asset criticality is a driver for decision making on frequency and the mechanism used for condition assessment.

As owners of structures such as bridges, viewing platforms, wharfs, jetties, shelters, and retaining walls the Council has certain legal obligations in relation to the Building Act & Code stipulated by Schedule 10 of the Local Government Act. The Council is obligated to monitor and maintain our structures so they may be safely used for their intended purpose by members of the public, until agreed otherwise. Currently a number of critical assets such as vehicle bridges, wharfs and jetties are inspected through a three year inspection programme depending on their age, material type and condition. The Council may choose to divest this obligation by closing or disposing of them through the available legal channels.

Note: some assets do not receive a condition assessment because it is not cost effective to collect a condition rating, the asset has a short life, the asset is low cost to replace and/or can be easily replaced reactively from a small reactive programme fund. Examples of assets that in some cases do not receive a condition assessment include turf, natural areas, stand of trees etc.

Condition data is updated at cyclic intervals for targeted assets or when refurbishment renewal works are completed. To minimise the risk of collapse or items failing, assets identified in category 4 or 5 are considered for renewal.

In addition to an asset's condition a criticality rating would be advantageous to record a rating against each asset to help prioritise renewal and repair work. This initiative is still to be developed for all assets in the register and is planned as an improvement item.

Table 8-3: Measurement Rating descriptions

Criticality Rating	Measurement description
High	Assets where total or partial failure will have a **major impact** on LoS provision, Health & Safety, cost or community activities when not renewed, repaired or replaced when due
Medium	Assets where total or partial failure will have a **significant impact** on LoS provision, Health & Safety, cost or community activities when not renewed, repaired or replaced when due
Low	Non Critical Assets that have a no or **minimal impact** on providing LoS provision, cost or community impact if not renewed

The table below sets out the recommended programme to assess the physical condition of Parks and Foreshore assets. A Park Building assets assessment programme is still to be developed.

Targeted Annual percentage of renewable assets to assess ranges from all assets of a class to 10-25% of assets.

Table 8-4: Recommended best practise programme to condition assess assets

Frequency	Asset Type	
Annually	BBQ	
	Fountain - Drinking	
Bi Annual	Dog Exercise equipment	
	Playground Equipment	
	Playground Surface	
3-4 yearly	Bin	Gate
	BMX Structures	Jetty
	Boardwalk	Picnic Table
	Bollard- lockable/traffic	Retaining Wall
	Flagpole	Safety Barrier
	Shelter	Seat
	Skateboard Structures	Water Feature
	Sports Equipment	Water Tanks
	Viewing Platform	Vehicular Bridge
	Garden	Sports Area (hard surface only)
5-8 yearly	Boat Ramp	Pedestrian Bridge
	Cattle Stop	Ramp
	Hedge	Stile
	Judder bar	Track (unsealed)
	Light & Light pole	Tree
	Water Tower	Tree Cage and Tree Grate
	Water Trough	
8-10 yearly	Carpark / Driveway sealed	Stairs
	Culvert – road only	Stockyard
	Fence	Track and Cycle Path (sealed)
To be determined	Stand of Trees	
	Turf – Sports only	

The percentage of assets with rated condition scores varies. With an average of 70% of targeted asset types under each asset group condition assessed, a programme to continue measuring performance of assets is recommended. The results will be used for capital renewal planning and to measure how well we are meeting LoS targets.

Gaps in condition assessment presents some measure of risk to build accurate forecasting models to support an asset renewal programme for some asset types and the development of maintenance strategies, plans and cost forecasts.

Over time we have managed to significantly improve our asset condition knowledge and we are now well positioned to sustain a programme of cyclic inspections.

Data presented in the condition status views below is only for assets with recorded condition ratings and does not constitute the entire portfolio of assets. One of the main focusses for Parks is to extend the condition rating of assets programme to cover all buildings as very little currently exists for these.

The information provides a summary of progress on condition rating as currently recorded in SAP. Depending on their nature, a condition assessment is not justified for all assets e.g. assets that can easily be managed on a reactive basis such as judder bars, bollards, and fences, and those with little management intervention such as natural areas. It is recommended that a pragmatic approach is followed to allocate sufficient resources and funding to improve and sustain a well-managed programme of condition assessment data. Condition reporting is done on an individual equipment level in SAP and the figures below presents an overview of the current status of our assets from a 1) asset high level grouping and 2) asset grouped by type and 3) asset type perspective.

The current condition profile of our assets in the managed sub activities is shown in the figures below.

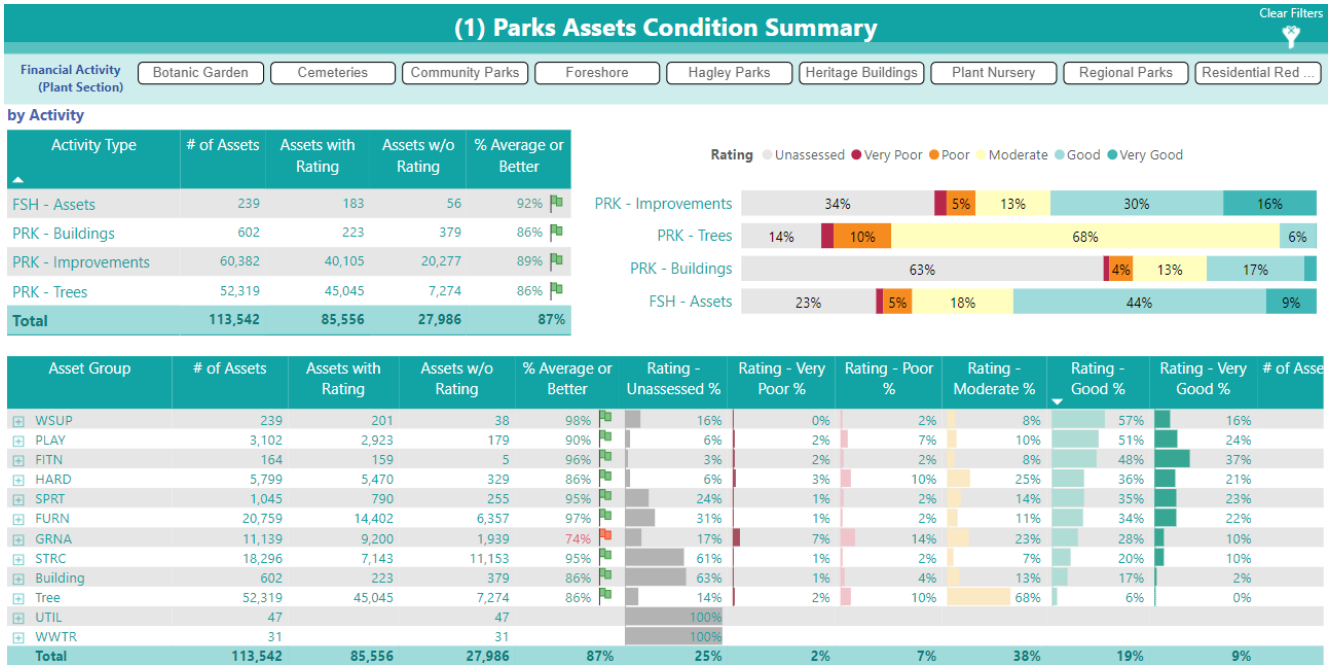


Figure 8-1: High level overview of current condition of our assets (Asset Group) 30/06/2021

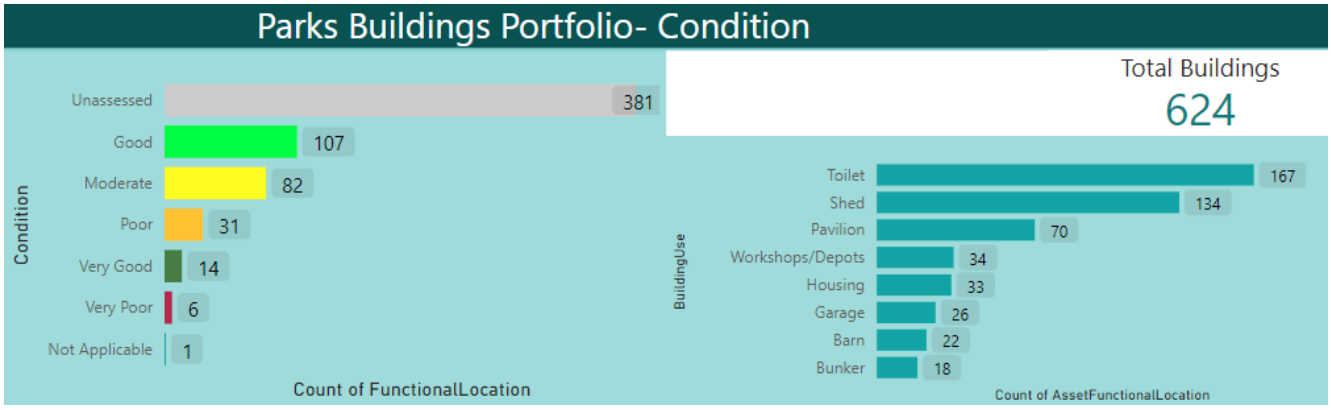


Figure 8-2: Overview of current condition of our Parks managed Building assets (incl Heritage) 30/06/2021

(3-2) Parks Improvements (by Asset Type)

Botanic Garden | Cemeteries | Community Parks | Hagley Parks | Plant Nursery | Regional Parks | Residential Red Zone

FITN | FURN | GRNA | HARD | PLAY | SPRT | STRC | UTIL | WSUP | WWTR

by Asset Type

Asset Type	# of Assets	Assets with Rating	Assets w/o Rating	% Average or Better	Rating - Unassessed %	Rating - Very Poor %	Rating - Poor %	Rating - Moderate %	Rating - Good %	Rating - Very Good %
Backflow Preventor	160	140	20	99%	13%		1%	9%	57%	21%
BBQ	28	27	1	93%	4%		7%	11%	71%	7%
Bin	943	892	51	98%	5%	0%	2%	9%	70%	14%
Boardwalk	203	185	18	96%	9%	3%	1%	15%	65%	7%
Boat Ramp	16	10	6	90%	38%		6%	19%	38%	
Bollard	2,867	2,175	692	99%	24%	0%	0%	7%	48%	19%
Bridge	451	440	11	95%	2%	1%	3%	11%	52%	30%
Cable	42		42		100%					
Car Park	729	716	13	90%	2%	3%	7%	26%	42%	21%
Cattle Stop	55	48	7	98%	13%	2%		7%	78%	
Clock	2	1	1	100%	50%					50%
Culvert	65	50	15	96%	23%		3%	18%	52%	3%
Cycle Equipment	484	417	67	97%	14%	0%	2%	2%	25%	56%
Dog Exercise Equip	72	63	9	97%	13%		3%	4%	72%	8%
Electrical System	3		3		100%					
Fence	13,305	3,023	10,282	94%	77%	0%	1%	3%	11%	7%
Fitness	135	135		99%			1%	4%	53%	41%
Flag Pole	66	42	24	100%	36%			2%	50%	12%
Fountain	220	211	9	99%	4%	0%	1%	11%	50%	34%
Fuel Tank System	2		2		100%					
Garden	10,556	8,640	1,916	72%	18%	8%	15%	23%	26%	10%
Gate	2,798	2,118	680	97%	24%	1%	2%	10%	43%	20%
Hedge	577	560	17	95%	3%	1%	3%	12%	73%	7%
Jetty	38	34	4	88%	11%	8%	3%	13%	61%	5%
Judder Bar	153	144	9	92%	6%	2%	5%	39%	32%	16%
Light	2,257	1,690	567	97%	25%	1%	2%	2%	31%	39%
Light Pole	986	655	331	99%	34%	0%	1%	3%	28%	35%
Picnic Table	722	697	25	94%	3%	1%	5%	32%	37%	22%
Play Equipment	1,662	1,562	100	99%	6%	0%	1%	8%	58%	27%
Play Modular Unit	324	319	5	100%	2%			5%	66%	27%
Play Surface	1,074	1,004	70	73%	7%	5%	20%	15%	34%	19%
Pool	11	9	2	100%	18%			45%	18%	18%
Pump Unit	6		6		100%					
Ramp	183	151	32	98%	17%		2%	13%	48%	20%
Retaining Wall	1,490	1,178	312	95%	21%	2%	3%	14%	43%	17%
Safety Barrier	1,624	1,370	254	95%	16%	0%	4%	18%	48%	14%
Seat	3,391	3,250	141	97%	4%	1%	2%	32%	38%	22%
Shelter	192	162	30	94%	16%	1%	4%	6%	55%	18%
Shower	15	4	11	100%	73%					27%
Sign	5,673	1,965	3,708	95%	65%	1%	1%	2%	15%	15%
Sports Area	467	360	107	93%	23%	2%	3%	20%	25%	27%
Sports Equipment	577	429	148	97%	26%	0%	2%	9%	44%	19%
Stairs	656	527	129	97%	20%	1%	2%	21%	43%	14%
Stile	154	149	5	93%	3%	1%	5%	33%	54%	3%
Tank	104	61	43	95%	41%	1%	2%	6%	44%	6%
Terraces	15	12	3	100%	20%			7%	33%	40%
Track	4,519	4,262	257	85%	6%	3%	12%	25%	33%	22%
Tree Cage	38	13	25	100%	66%			3%	18%	13%
Tree Grate	7	7		100%					57%	43%
Turf	6		6		100%					
Viewing Platform	65	58	7	97%	11%		3%	14%	57%	15%
Water Feature	19	17	2	100%	11%			26%	53%	11%
Water Tower	11	10	1	90%	9%		9%	9%	27%	45%
Total	**60,382**	**40,105**	**20,277**	**89%**	**34%**	**2%**	**5%**	**13%**	**30%**	**16%**

Figure 8-3: Overview of current condition of our assets in Parks (Asset Group and Type) 30/06/2021

Data analysis of modelled renewals shows that gardens, playground equipment and hard surfaces (tracks and access roads and carparks) have the largest backlog in renewals based on condition. However, many of the assets are still performing well.

Asset renewals (replacement or refurbishments) are bundled into 3 year capital delivery packages allowing for prioritisation and efficient delivery of works. To renew assets (excluding buildings, foreshore assets and trees) rated as 4 (Poor) and 5 (Very Poor) over the next 10 years, an average capital outlay of $3m per year is recommended. Assets with grading scores in the “Poor” to “Very Poor” range will deteriorate at an increasing rate in future years if they are not renewed. There are significant gaps in condition data and age and maintenance records suggest renewal requirements could be higher than forecast.

The Council commissions consultants and use internal technical qualified staff to carry out detailed condition assessments of wharves and jetties, seawalls and boat ramps. Wharves and jetties and other timber marine structures undergo detailed above and below sea level engineering inspections every three years.

The timber structures have been split into two groups to spread the workload and cost of assessing these structures across three years. Seawalls, ramps and slipways (concrete or rock construction) undergo condition assessment every five years. Recreational rafts are removed from the water every year for cleaning and to check the mooring lines.

Regular visual checks are carried out on the structures by staff or service supplier to ensure no obvious defects or safety hazards are present.

(4) Parks Trees

Clear Filte

by Tree Age Class

Tree Age Class	# of Assets	Assets with Rating	% Average or Better	Unassessed %	Very Poor %	Poor %	Moderate %	Good %	Very Good %
Mature	22,543	19,985	85%	11%	2%	11%	72%	3%	0%
Juvenile	11,468	9,014	89%	21%	3%	6%	62%	8%	0%
Semi-Mature	11,027	9,550	86%	13%	2%	9%	68%	6%	0%
Over Mature	4,178	3,478	80%	17%	2%	15%	62%	4%	0%
	3,103	3,018	85%	3%	1%	13%	59%	24%	0%

by Tree Size

Tree Size	# of Assets	Assets with Rating	% Average or Better	Unassessed %	Very Poor %	Poor %	Moderate %	Good %	Very Good %
Large	18,826	16,572	85%	12%	1%	12%	69%	5%	0%
Small	12,431	11,052	87%	11%	3%	9%	70%	7%	0%
Medium	10,878	9,669	86%	11%	2%	10%	72%	5%	0%
Juvenile	9,981	7,609	86%	24%	3%	7%	57%	8%	0%
	203	143	88%	30%	3%	5%	60%	2%	

by Site Type

Site Type	# of Assets	Assets with Rating	% Average or Better	Unassessed %	Very Poor %	Poor %	Moderate %	Good %	Very Good %
Sports Parks	27,745	25,480	86%	8%	2%	11%	72%	7%	0%
Neighbourhood Parks	14,211	11,296	84%	21%	3%	10%	61%	6%	0%
Garden and Heritage Parks	4,598	3,302	87%	28%	1%	8%	60%	3%	0%
Cemeteries	3,585	3,332	85%	7%	2%	11%	77%	2%	0%
Utility Parks	1,629	1,234	88%	24%	3%	7%	60%	7%	
Regional Parks	420	394	91%	6%	1%	8%	84%	1%	
Residential Red Zone-Flatland	131	7	100%	95%			5%		
Total	**52,319**	**45,045**	**86%**	**14%**	**2%**	**10%**	**68%**	**6%**	**0%**

by Tree Genus

Tree Genus	# of Assets	Assets with Rating	% Average or Better	Unassessed %	Very Poor %	Poor %	Moderate %	Good %	Very Good %
Quercus	7,050	6,539	89%	7%	1%	9%	75%	7%	0%
Acer	3,060	2,628	87%	14%	1%	10%	64%	11%	0%
Prunus	2,823	2,438	89%	14%	2%	8%	62%	15%	0%
Populus	2,805	2,597	91%	7%	1%	7%	81%	3%	
Fraxinus	2,669	2,464	84%	8%	2%	12%	67%	11%	0%
Betula	2,617	2,349	89%	10%	2%	8%	73%	7%	0%
Ulmus	1,880	1,754	87%	7%	2%	10%	72%	9%	0%
Pinus	1,843	1,614	79%	12%	3%	15%	67%	2%	0%
Plagianthus	1,814	1,544	77%	15%	5%	14%	64%	2%	
Eucalyptus	1,608	1,421	84%	12%	2%	12%	72%	2%	0%
Cupressus	1,575	1,222	75%	22%	2%	17%	57%	1%	0%
Cedrus	1,456	1,367	89%	6%	1%	9%	80%	4%	
Podocarpus	1,216	999	88%	18%	2%	8%	69%	3%	0%
Sophora	1,196	884	81%	26%	4%	10%	57%	3%	0%
Alnus	1,181	1,014	90%	14%	2%	7%	70%	7%	0%
Salix	1,141	979	79%	14%	3%	16%	67%	0%	
Tilia	993	874	92%	12%	1%	6%	69%	12%	0%
Platanus	990	962	91%	3%	1%	8%	75%	14%	0%
Pittosporum	914	663	88%	27%	3%	6%	62%	1%	0%
Aesculus	832	771	93%	7%	0%	6%	79%	7%	0%
Hoheria	785	549	77%	30%	8%	8%	52%	2%	
Fagus	723	621	86%	14%	3%	9%	62%	12%	0%
Magnolia	630	439	87%	30%	1%	8%	54%	6%	0%
Acacia	457	405	74%	11%	7%	16%	65%	1%	
Carpinus	455	414	92%	9%	0%	7%	74%	10%	
Cordyline	447	236	86%	47%	1%	6%	40%	5%	
Pseudopanax	374	169	75%	55%	6%	6%	28%	6%	
Sorbus	372	287	86%	23%	1%	10%	53%	13%	
Liquidambar	362	327	87%	10%	3%	9%	74%	4%	
Nothofagus	355	254	87%	28%	3%	6%	53%	9%	0%
Taxus	332	315	95%	5%	1%	4%	86%	3%	
Ilex	310	244	83%	21%	2%	12%	59%	6%	
Total	**52,319**	**45,045**	**86%**	**14%**	**2%**	**10%**	**68%**	**6%**	**0%**

Figure 8-4 Overview of current condition of our Park Tree assets 10/06/2021

Replacement of Park trees monitored as a 2018 LTP Service plan target shows that annual targets are being met.

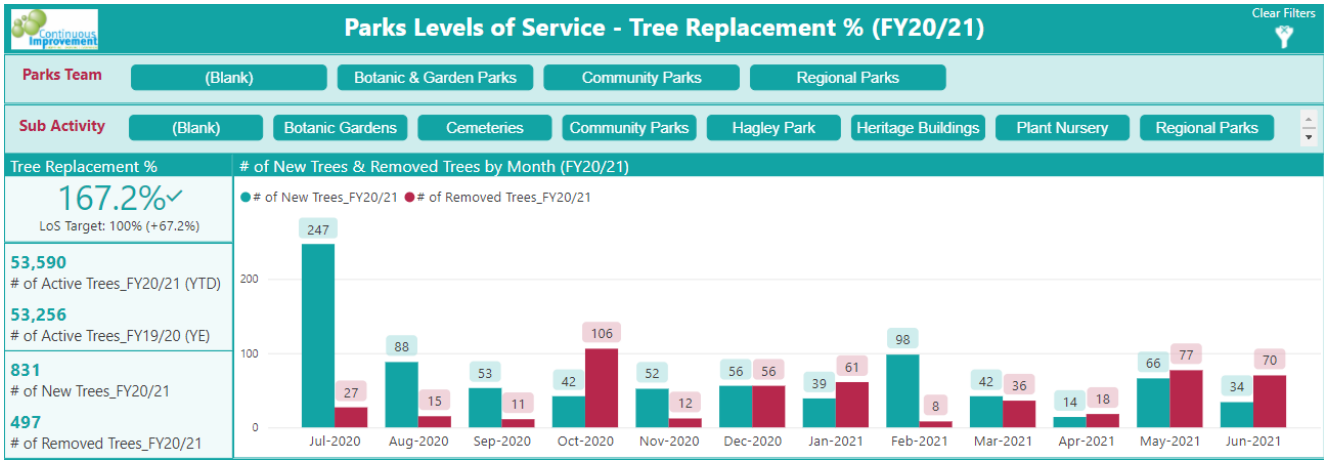


Figure 8-5: 2018 LTP Service Plan targets status report for FY21 (Year 3 of LTP)-Park Trees

Following the Canterbury Earthquakes, the Council engaged structural engineering companies to undertake Detailed Engineering Evaluations (DEEs) on all Council owned buildings. Although most work identified following these evaluations has been completed, some Parks buildings that have not yet been assessed or require an updated evaluation.

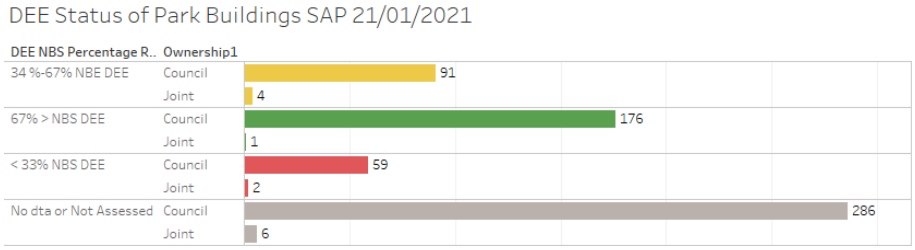


Figure 8-6: NBS DEE status of Parks Buildings and/or Buildings on Parks CCC owns

Assets which are not owned by the Council are not considered part of the Parks group of activities.

Condition monitoring and asset data changes record keeping of buildings needs to be maintained and overseen by Parks staff inputting data received from our FM contractor City Care who is required to notify Council as to repairs and/or maintenance completed or required.

The theoretical useful lives of parks assets are provided in the table below. These originate from industry literature and have been refined over time based on performance observations and staff knowledge. Renewal modelling of Parks assets applies the base life, together with condition in calculating forecasted year of renewal.

Table 8-5: Theoretical useful lives of parks asset

Base Life (Years)	Asset Type		
10-20	BACKFLOW	SIGN	BIN
	COLLECBOX	GARDEN	SPORTAREAS
	FOUNTAIN	JUDDERBAR	
	SPORTSEQ	PLAYSURFC	
25	BBQ	PLAYEQMU	TANK
	PICNICTBL	RAMP	TREECAGE
	PLAYEQ	SEAT	
	WATERFEAT	STILE	
30	CYCLEEQ	FENCE	TREEPLNTR
	DOGEXEQ	HEDGE	WATERTRGH
35	BOATRAMP	LIGHT	STAIRS
	CARPARK	SHELTER	TRACK
40-50	BOARDWALK	GATE	TREEGRATE
	BOLLARD	LIGHTPOLE	VIEWPLAT
	FLAGPOLE	SAFETYBAR	CATTLSTOP
60 -80	BRIDGE	RETAINWAL	WATERTWR
	JETTY	TERRACES	CULVERT

This information will be coupled with the previous maintenance programme, enabling the repair and maintenance to be carried out at the same time.

It is difficult to determine the current capacity and performance of the entire parks portfolio as limited / partial information on assessments or data gathered is available. It is anticipated that in time these measures will be established as part of the improvement programme, particularly in relation to the critical assets.

The Council does not have an established programme to assess the use of parks assets other than at the Botanic Gardens and some Regional Park tracks and marine structures where track counters are installed. The Asset Management Team has recently also installed counters in 27 public toilet locations to monitor their use over a year to inform capacity demand. Targeted facilities are mainly around Banks Peninsula where peaks in usage occur at specific times of the year. This utilisation information is used to assess whether the provisions made at those sites are appropriate for the numbers of people using them. This utilisation information is used to assess whether the provisions made at those sites are appropriate for the numbers of people using them.

8.1.3 Capital development plan

New land and equipment, park developments, and asset upgrades are driven by LoS, growth, legal and safety requirements, and community demand. Capital development proposals are developed through various planning processes and prioritised and approved through the LTP and Annual Plan. Funding limitations and capacity to deliver require the deferral of some projects.

Projected upgrade/new asset expenditures programmes are summarised in Fig 8.6

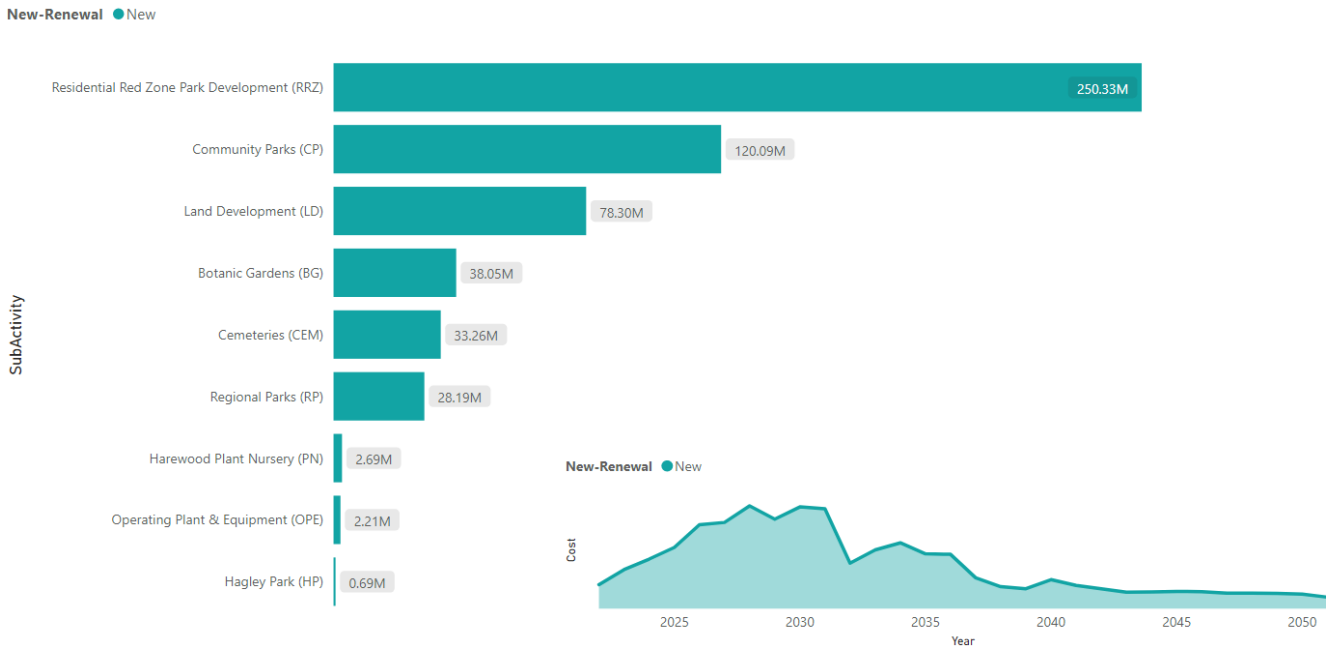


Figure 8-6: Projected size of the 10 year Capital programmes Upgrade/New asset expenditure (uninflated)

8.1.4 Operations and Maintenance Plan

The operation and maintenance plan is based on current and planned new assets, their age and condition. Ideally, maintenance and renewal plans will be co-ordinated but this will require improved condition data and forecasting.

Maintenance activity involves the ongoing repair and minor replacement works required to keep assets operating at required service levels over its useful life and falls into two broad categories:

a) Planned (proactive) maintenance - proactive inspection and maintenance works planned to prevent asset failure,
b) Unplanned (reactive) maintenance - reactive action to correct asset malfunctions and failures on an as required basis (e.g. emergency repairs).

Operational activities are undertaken to ensure efficient operation and serviceability of assets to enable the assets to provide intended service over its useful life. Asset operation may not have any effect on asset condition but is necessary to keep the asset appropriately utilised. Examples of operational activities include:

- cleaning of buildings
- park mowing, gardening, tree maintenance
- electricity costs for lights, security
- playground maintenance

- litter collection maintenance

Maintenance costs are the primary costs associated with the Parks AMP forecast, and are influenced by LoS. Operational expenditure is expected to remain relatively constant over the LTP 30 year forecasting period with increases in line with the projected growth of the asset portfolio over time.

While the initial cost of provision of this additional infrastructure vested to Council through subdivisions will be borne primarily by developers, the ongoing operation and maintenance liability will transfer to the Council upon handover and acceptance of these new assets. These future costs, excluding increases in depreciation charges, should be better identified and considered in developing forecasts of future operating and maintenance costs.

Reactive maintenance makes up a large part of our annual OPEX costs. The most common failures and causes for park asset classes include:

- Litter (General littering and Fly-tipping)
- Trees (Storm event responses)
- Public Amenities (vandalism, theft, soiling)
- Playground (vandalism, component failures)
- Irrigation (leaks and system failures)
- Graffiti
- Carparks and tracks (Potholes and asset deterioration)
- Gardens (reactive maintenance and asset deterioration)
- Park furniture and signs (reactive maintenance, vandalism and asset deterioration)

Our strategies for addressing these reactive maintenance issues are:

- to repair as soon as possible
- regular frequent inspection of key areas of reoccurring graffiti
- rationalized asset provision of specific assets that will result in operational cost saving using smart technologies like self-compacting bins.

In addition to day to day maintenance and reactive maintenance budgeting, it is also recommended that appropriate provision for programmed (planned) operational budgets for proactive maintenance and general upkeep of the assets is included in the OPEX LTP budget. This would help to alleviate undue pressure on the cost of early renewal (refurbish/replace) through the Capital budget.

This practise would also have the added benefit of moving away from reactively responding to customer reported defects or unexceptional presentation standards of assets that are costly to react to. The indicative forecast cost recommended below to support this practise are highlighted in the table below.

Table 8-8 Recommended programmed (Planned) Operational programmes (uninflated)

Programmed (Planned) Activity	Motivation	Annual Budget
Playground Bark Softfall top-up	Softfall top up to meet Playground Safety Standards	120,000
Garden Mulch-Composting-Fertilization	Plant protection, healthy plants and weed control	100,000
Playground Equipment Paint & Stain	Rust treatment & prevention	100,000
Park Furniture & Structures Paint & Stain	Painting, staining, minor component repairs to upkeep assets aesthetic appearance and operational	90,000
Sportsfield Turf Renovations	Seasonal turf cover and condition renovations to maintain optimum functional and safety levels	250,000
Hard surface minor Repairs	Unsealed hard surfaces renovations to maintain optimum functional and safety levels	100,000

Some challenges to be considered in O&M plans include;

- the majority of the Council's parks do not generate income and are unable to offset the long-term cost of maintenance and renewal
- The continual growth and development of new green space and improvement assets when added to existing deteriorating asset base will continue to place a significant burden on the Council's future financial resources in both OPEX and CAPEX.
- The impacts of reduced revenue from cruise ships due to the impacts of COVID-19 on the travel and tourism industry is still to be seen.

8.1.5 Renewals Plan

Capital expenditure for renewals is classified as a core expenditure under the LTP. Two thirds of the Capital budget for Parks and Foreshore has been targeted towards renewal of existing assets. Renewal expenditure has been determined from condition assessment, predictive modelling and rate of asset depreciation.

Restoration and renewal provides for the progressive replacement of individual assets or its components, which have reached the end of their service life. Deteriorating asset condition primarily drives renewal needs and will generally involve substantial replacement of the asset or a significant asset component to its original size and capacity to restore its service potential. Examples of renewals expenditure includes:

- replacing large sections of building roofs or gutters, internal fit-outs;
- replacing or refurbishing playground equipment and play spaces;
- resurfacing of tracks, carparks and park access roads;
- refurbishment of gardens
- renewal of sports fields
- replacement of small plant and mechanical equipment
- replacement of major structures such as bridges and retaining walls or their components; and
- replacement of park furniture such as BBQ's and litter bins.

Due to limited funding, maintenance and renewal of assets is prioritised based on criticality of asset and condition, i.e. most critical and worst condition assets are prioritised for renewal over less critical and good condition assets. The backlog in the renewal work in this LTP is planned to be addressed by a methodology of assets in the worst condition getting preference. Smoothing has been applied to renewal rates and forecasted cost in the programme to spread the financial spend over a longer period of time.

Our renewals approach for modelled SAP Equipment level renewable assets is summarised in the table below.

Table 8-6: Renewals approach for modelled SAP equipment level assets

Activity	Approach Used	Criteria
Renewal forecasts 1-30 years	Age / remaining life based	Nearing or past remaining useful life
Renewal scheduling	Condition and Criticality	Condition 4 & 5 and Criticality H

The Renewal Model calculates projected timing and cost of renewal of just over 55,000 renewable assets in Parks. Projected future renewal and replacement expenditures are forecast to increase over time as the asset stock increases from growth. The expenditure is summarised in Fig 8.12.

The majority of renewals are driven by LoS that require assets to be in average condition (condition rating 3) or better. Renewals of assets are mainly managed as programmes grouping together assets by type and location into project delivery packages or depending of the nature and scope of the deliverables, as a standalone project.

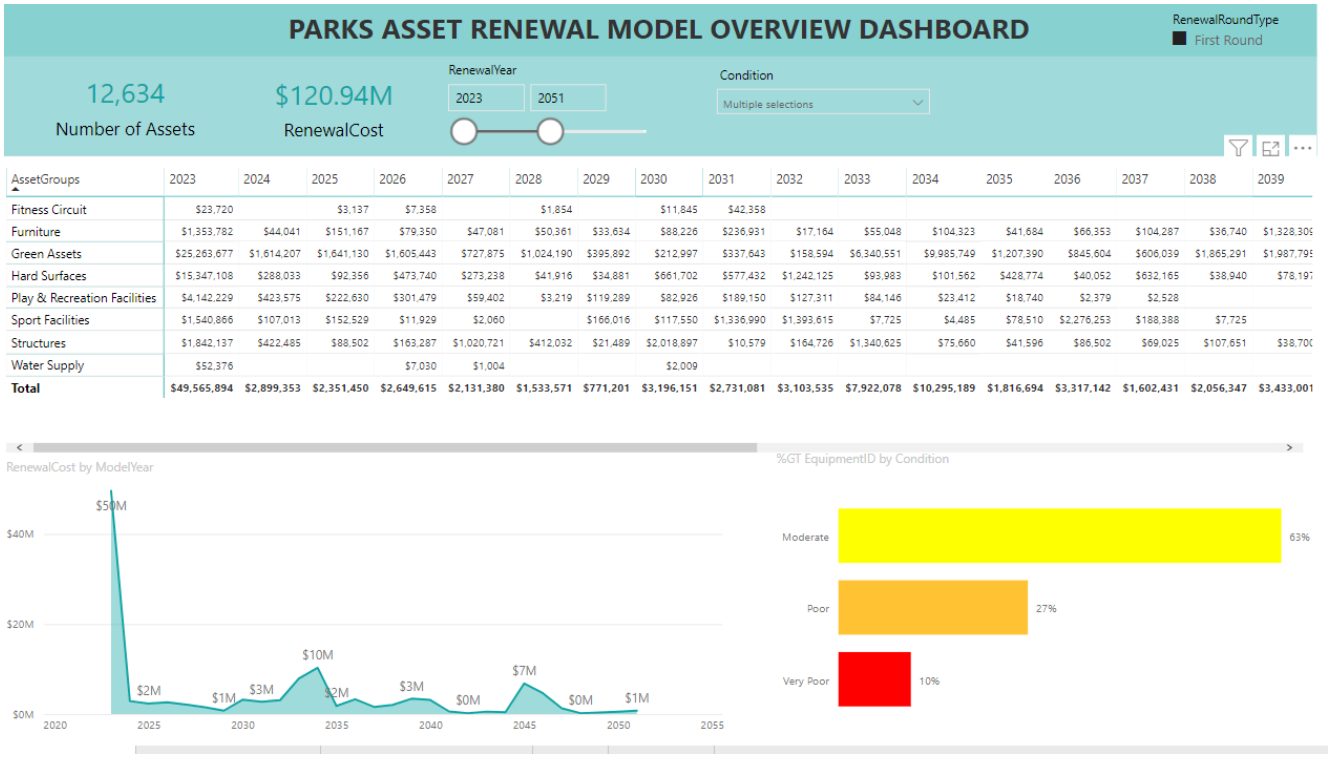
Summary of future renewal and replacement expenditure

Asset renewals aim to restore the service potential or future economic benefits of the asset by renewing the assets at a cost less than replacement cost. Peaks and troughs are associated with larger renewal works is evident throughout the

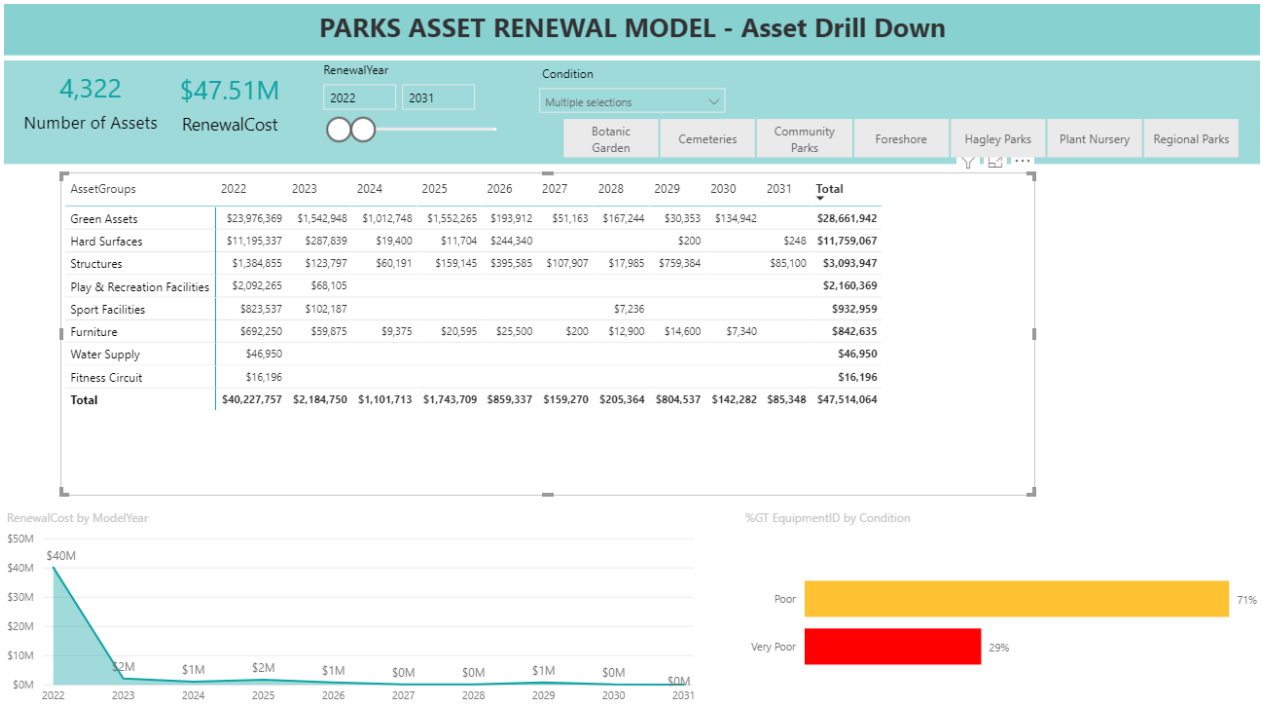
forecast period. Costs for the furthest out years in the period are expected to increase in future as greater knowledge about what is required becomes known.

The figures below shows future renewal and replacement expenditure of renewable asset types in the assets class groupings for;

- Hard Surfaces
- Gardens
- Furniture
- Structures
- Fitness Circuits
- Play and Recreation facilities
- Sport facilities
- Water Supply



AssetGroups	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Fitness Circuit	$23,720		$3,137	$7,358		$1,854		$11,845	$42,358								
Furniture	$1,353,782	$44,041	$151,167	$79,350	$47,081	$50,361	$33,634	$88,226	$236,931	$17,164	$55,048	$104,323	$41,684	$66,353	$104,287	$36,740	$1,328,30
Green Assets	$25,263,677	$1,614,207	$1,641,130	$1,605,443	$727,875	$1,024,190	$395,892	$212,997	$337,643	$158,594	$6,340,551	$9,985,749	$1,207,390	$845,604	$606,039	$1,865,291	$1,987,79
Hard Surfaces	$15,347,108	$288,033	$92,356	$473,740	$273,238	$41,916	$34,881	$661,702	$577,432	$1,242,125	$93,983	$101,562	$428,774	$40,052	$632,165	$38,940	$78,19
Play & Recreation Facilities	$4,142,229	$423,575	$222,630	$301,479	$59,402	$3,219	$119,289	$82,926	$189,150	$127,311	$84,146	$23,412	$18,740	$2,379	$2,528		
Sport Facilities	$1,540,866	$107,013	$152,529	$11,929	$2,060		$166,016	$117,550	$1,336,990	$1,393,615	$7,725	$4,485	$78,510	$2,276,253	$188,388	$7,725	
Structures	$1,842,137	$422,485	$88,502	$163,287	$1,020,721	$412,032	$21,489	$2,018,897	$10,579	$164,726	$1,340,625	$75,660	$41,596	$86,502	$69,025	$107,651	$38,70
Water Supply	$52,376			$7,030	$1,004			$2,009									
Total	**$49,565,894**	**$2,899,353**	**$2,351,450**	**$2,649,615**	**$2,131,380**	**$1,533,571**	**$771,201**	**$3,196,151**	**$2,731,081**	**$3,103,535**	**$7,922,078**	**$10,295,189**	**$1,816,694**	**$3,317,142**	**$1,602,431**	**$2,056,347**	**$3,433,001**



AssetGroups	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Green Assets	$23,976,369	$1,542,948	$1,012,748	$1,552,265	$193,912	$51,163	$167,244	$30,353	$134,942		$28,661,942
Hard Surfaces	$11,195,337	$287,839	$19,400	$11,704	$244,340			$200		$248	$11,759,067
Structures	$1,384,855	$123,797	$60,191	$159,145	$395,585	$107,907	$17,985	$759,384		$85,100	$3,093,947
Play & Recreation Facilities	$2,092,265	$68,105									$2,160,369
Sport Facilities	$823,537	$102,187					$7,236				$932,959
Furniture	$692,250	$59,875	$9,375	$20,595	$25,500	$200	$12,900	$14,600	$7,340		$842,635
Water Supply	$46,950										$46,950
Fitness Circuit	$16,196										$16,196
Total	**$40,227,757**	**$2,184,750**	**$1,101,713**	**$1,743,709**	**$859,337**	**$159,270**	**$205,364**	**$804,537**	**$142,282**	**$85,348**	**$47,514,064**

Figure 8-8: Land improvement assets (excluding buildings and trees) in Very Poor, Poor and deteriorating Moderate condition in need of replacement of the next 30 and 10 year period (uninflated) 30/06/2021

Key points of note is that;

- There is a historic backlog of assets in poor (condition 4) and very poor (condition 5) condition requiring renewal as depicted on the graph in FY22,
- A prioritisation system is needed to renew within resources available,
- The renewal programme funding proposed to bring the worst condition and aged asset types into acceptable LoS targets will require an average annual spend of $14.2m over the 30 year programme.

Modelled renewal data shows that the Green Asset group (Gardens) and Hard Surfaces Asset group (Tracks and Carparks) have the highest proportion of poor assets and requires prioritised attention in the next 10 years of the LTP.

Restoration & Renewal activities: Provides for the progressive replacement of individual assets or its components, which have reached the end of their service life. Deteriorating asset condition primarily drives renewal needs and will generally involve substantial replacement of the asset or a significant asset component to its original size and capacity to restore its service potential. Renewals expenditure includes:

- replacing large sections of building roofs or gutters;
- replacing or refurbishing playground equipment and play spaces;
- resurfacing of tracks, carparks and park access roads;
- refurbishment of gardens
- renewal of sports fields
- replacement of small plant and mechanical equipment
- replacement of major structures such as bridges and retaining walls or their components; and
- replacement of park furniture such as BBQ's and litter bins.

Renewal CAPEX planning have been determined from condition assessment, predictive modelling and rate of asset depreciation. Asset condition is the primary determinant in renewal intervention.

Renewals of assets are mainly managed as programmes grouping together assets by type and location into project delivery packages or depending of the nature and scope of the deliverables as a standalone project.

Our projected size of the first 10 years of the LTP (uninflated) that includes renewals delivered through either delivery packages, one-off projects or ongoing programmes i.e. modelled Equipment level renewals, playspaces, sportsfields, trees and buildings etc.

The figure below shows the proposed projected size of 10 Capital Renewal and Replacement programmes for the LTP.

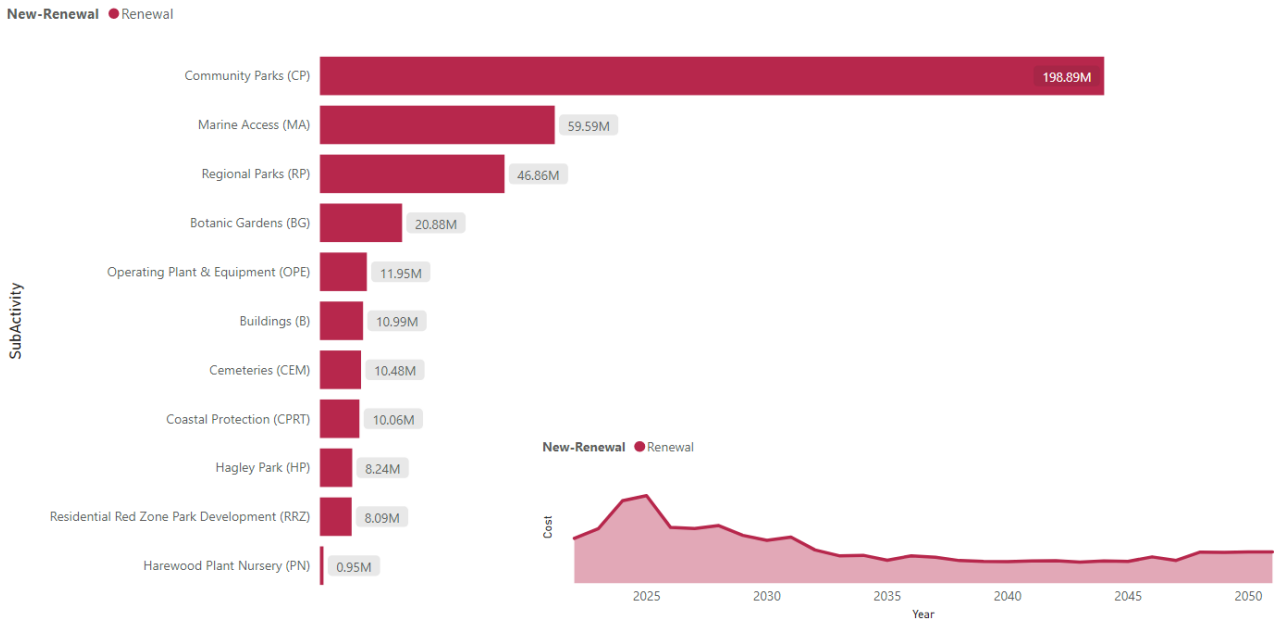


Figure 8-10 *Projected size of 10 Capital Renewal and Replacement programmes (uninflated)*

8.1.6 Disposal plan

Assets identified for possible decommissioning and disposal are shown in Table 8.5 below together with estimated annual savings from not having to fund operations and maintenance of the assets if known at this stage. These assets will be further reinvestigated to determine the required LoS and see what options are available for alternate service delivery, if needed. Disposals of equipment level assets are routinely covered under renewal costs.

Table 8-5: Assets Identified for Disposal

Asset	Reason for Disposal	Timing	Disposal Expenditure	Operations & Maintenance Annual Savings
16 buildings identified for demolition ranging from sheds, residential properties, club, pavilion and toilet use buildings	Non serviceable	TBC-next 3 years	TBC	TBC
Former tennis courts -Rawhiti Domain and Oaks Reserve	Non serviceable	TBC-next 3 years	TBC	TBC

Identified for further investigation is also 14 buildings that are earthquake-prone. Under new national legislation that came into effect on 1 July 2017, the Council has up to 15 years to strengthen or demolish them. Following investigation it is likely a number of them will be put forward for demolition.

9 Financial projections and trends

This section outlines the long-term financial requirements for the activity based on the long-term strategies and tactics described earlier in the Plan.

9.1 Key Assumptions

General assumptions in preparing this forecast include:

- No smoothing of costs has been undertaken.
- Inflation has been allowed for according to Accounting Unit standards

Impacts of COVID-19 – short and longer term

Early forecasting advice from economic commentators (e.g. The Treasury, ChristchurchNZ, financial institutions) signals significant economic impacts locally, nationally and internationally. This advice is being updated regularly and is likely to change over time (The Treasury's economic scenarios released on 14 April caution that economic impacts are "highly uncertain").

What does this mean for Parks?

- The proposed option plan presented in the AMP will need to be adjusted responding to the ongoing negative economic and supply delay effects of the COVID-19 pandemic, focus is likely to shift on investing in renewal programmes and projects, rather than growth and improvement to relief pressure on OPEX.
- A reprioritisation focus approach is to be considered on infrastructure that supports COVID-19 recovery and delivers the remaining post-earthquake anchor and regeneration projects (e.g. progress 'shovel ready' infrastructure projects identified as part of central government stimulus package; complete committed major projects such as Akaroa Wharf, Naval Point development and Diamond Harbour renewal projects.
- Highly likely that there will be short-term (now, and LTP years 1-3): some delays in scheduled capital programme works, potential issues with workforce availability/contractor viability following lifting of restrictions; uncertainty about materials supplies; changing priorities for work programming (e.g. accommodating the norm of social distancing); opportunities for bringing forward 'shovel ready' work; increased financial pressure on Council budgets would impact delivery of approved programmes and projects.
- Expected that there will be medium term (LTP years 4-6) impacts: Possible re-prioritisation of capital works programme; changed programme priorities (as above); continued financial pressure on Council budgets
- Longer term (LTP years 6 – onwards): Uncertain at this stage; potential bow-wave effect of deferred operational spend due to above factors

Significant risks associated with these assumptions include:

- Managing operational expenditure – concern that the rising operational costs of our assets is not affordable, leading to compounding costs, deterioration of and vulnerability in assets.
- There is no allowance for financial constraints attributed to the economic impact of the COVID-19 crisis.
- Price increases of construction materials and labour is anticipated to be at a higher rate than the consumer price index therefore there is a risk that continued increase of these construction costs means future years budgets have less net useable value.
-

9.1.1 Significant Changes

The significant changes expected in expenditure over the period of the AMP are shown in the Table below:

Table 9-1: Changes in expenditure

Item	Movement	Rationale for change
Personnel	Increase ↑	2% allowed to match standard contacts.
Contracts	Increase ↑	The retendering of maintenance contracts will take into consideration steady increases in construction costs reflected in the contracts lump sums, schedule of rates and quoting for planned works.
Construction Materials & Labour	Increase ↑	Construction and material cost are generally increasing and in a post COVID-19 economy supply will most likely be significantly affected.
Energy	Increase ↑	Electricity prices are generally increasing to maintain and operate buildings and assets like Park lights, pumps, irrigation systems, electrical small plant, artworks etc.
Insurance	Increase ↑	Insurance costs have steadily increased to represent a move by insurers to more risk based pricing to reflect seismic, flooding and climate change risk. Where assets are unable to be commercially insured Council will need to make financial allowances for self-insurance.

9.2 Operating Forecasts

9.2.1 Financial Projections

The figure below shows the operating and capital forecast as captured and discussed in the Parks & Foreshore Activity Plan. The adopted (uninflated) LTP 2021-31 budget is presented below.

	Current Year Plan P010 FY-2021	Future Year Plan WIP FY-2022	Future Year Plan WIP FY-2023	Future Year Plan WIP FY-2024	Future Year Plan WIP FY-2025	Future Year Plan WIP FY-2026	Future Year Plan WIP FY-2027	Future Year Plan WIP FY-2028	Future Year Plan WIP FY-2029	Future Year Plan WIP FY-2030	Future Year Plan WIP FY-2031
Parks and Foreshore											
000's	**Annual Plan 2020/21**	**LTP 2021/22**	**LTP 2022/23**	**LTP 2023/24**	**LTP 2024/25**	**LTP 2025/26**	**LTP 2026/27**	**LTP 2027/28**	**LTP 2028/29**	**LTP 2029/30**	**LTP 2030/31**
Activity Costs before Overheads by Service											
Community Parks	16,147	15,356	15,380	15,390	15,364	15,367	15,370	15,384	15,386	15,387	15,388
Botanic Gdns, Inner City & Heritage Park	8,116	8,731	8,675	8,647	8,639	8,615	8,628	8,621	8,620	8,618	8,615
Regional Parks	7,073	7,200	7,290	8,704	7,280	7,280	8,635	7,288	7,289	7,288	7,288
Cemeteries	2,060	1,961	1,963	1,973	1,974	1,974	1,975	1,975	1,975	1,975	1,975
Environmental Education	362	313	318	319	319	319	319	319	319	319	319
Foreshore and Marine Access	1,227	910	888	874	872	873	876	876	876	876	875
Harewood Nursery	612	635	647	650	649	650	650	650	650	650	650
Residential Red Zone	1,940	3,138	3,138	3,142	2,792	2,792	2,792	2,792	2,792	2,792	2,792
	37,538	38,243	38,300	39,698	37,889	37,870	39,246	37,906	37,907	37,905	37,903
Activity Costs by Cost type											
Direct Operating Costs	4,960	6,141	5,186	6,610	4,855	4,828	6,185	4,834	4,836	4,835	4,834
Direct Maintenance Costs	17,757	16,968	17,856	17,765	17,769	17,769	17,767	17,781	17,781	17,781	17,781
Staff and Contract Personnel Costs	14,706	15,021	15,147	15,210	15,155	15,162	15,183	15,181	15,179	15,178	15,177
Other Activity Costs	114	113	111	113	111	111	111	111	111	111	111
	37,538	38,243	38,300	39,698	37,889	37,870	39,246	37,906	37,907	37,905	37,903
Activity Costs before Overheads	**37,538**	**38,243**	**38,300**	**39,698**	**37,889**	**37,870**	**39,246**	**37,906**	**37,907**	**37,905**	**37,903**
Overheads, Indirect and Other Costs	8,044	9,033	9,153	8,963	8,895	9,057	8,945	8,929	9,005	8,792	8,778
Depreciation	21,411	21,945	22,118	22,385	22,881	23,409	23,600	24,152	23,767	24,139	25,066
Debt Servicing and Interest	1,853	1,811	1,992	2,195	2,592	2,944	3,395	3,680	3,756	3,755	3,837
Total Activity Cost	**68,846**	**71,031**	**71,563**	**73,241**	**72,257**	**73,279**	**75,186**	**74,666**	**74,435**	**74,590**	**75,584**
Funded By:											
Fees and Charges	3,007	3,487	3,487	3,487	3,487	3,487	3,487	3,487	3,487	3,487	3,487
Grants and Subsidies	10	53	58	32	11	11	11	11	11	11	11
Cost Recoveries	397	405	405	405	405	405	405	405	405	405	405
Total Operational Revenue	**3,414**	**3,945**	**3,949**	**3,923**	**3,902**	**3,902**	**3,902**	**3,902**	**3,902**	**3,902**	**3,902**
Net Cost of Service	**65,432**	**67,086**	**67,614**	**69,318**	**68,355**	**69,377**	**71,284**	**70,764**	**70,533**	**70,688**	**71,682**
Total per Query:	*65,432*	*67,086*	*67,614*	*69,318*	*68,355*	*69,377*	*71,284*	*70,764*	*70,533*	*70,688*	*71,682*
Variance:	-	-	-	-	-	-	-	-	-	-	-
Funding Percentages:											
Rates	95.0%	94.4%	94.5%	94.6%	94.6%	94.7%	94.8%	94.8%	94.8%	94.8%	94.8%
Fees and Charges	4.4%	4.9%	4.9%	4.8%	4.8%	4.8%	4.6%	4.7%	4.7%	4.7%	4.6%
Grants and Subsidies	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cost Recoveries	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.5%	0.5%	0.5%	0.5%	0.5%
Capital Expenditure											
Replace Existing Assets	10,206	11,767	18,965	24,875	27,456	19,642	19,448	20,493	17,009	15,232	16,403
Improve the Level of Service	10,093	12,125	10,676	12,087	10,297	16,038	23,856	31,740	24,231	30,066	29,899
Meet Additional Demand	3,084	2,593	6,339	9,653	15,727	16,258	12,821	11,984	13,817	13,208	12,553
Total Activity Capital	**23,382**	**26,484**	**35,981**	**46,615**	**53,480**	**51,938**	**56,125**	**64,217**	**55,058**	**58,506**	**58,855**
Total per Query:	*23,382*	*26,484*	*35,981*	*46,615*	*53,480*	*51,938*	*56,125*	*64,217*	*55,058*	*58,506*	*58,855*
Variance:	-	-	-	-	-	-	-	-	-	-	-

Figure 9-1: Financial resources for the Activity needed (Operational and Capital)

Maintenance costs are expected to steadily increase over the LTP period, but this is not fully reflected in the proposed LTP budget, which will apply considerable pressure to the OPEX budget over the next few years. Revenue will be down due to lower tourist figures as a result of the economic outcomes of COVID-19.

9.3 Capital Forecasts

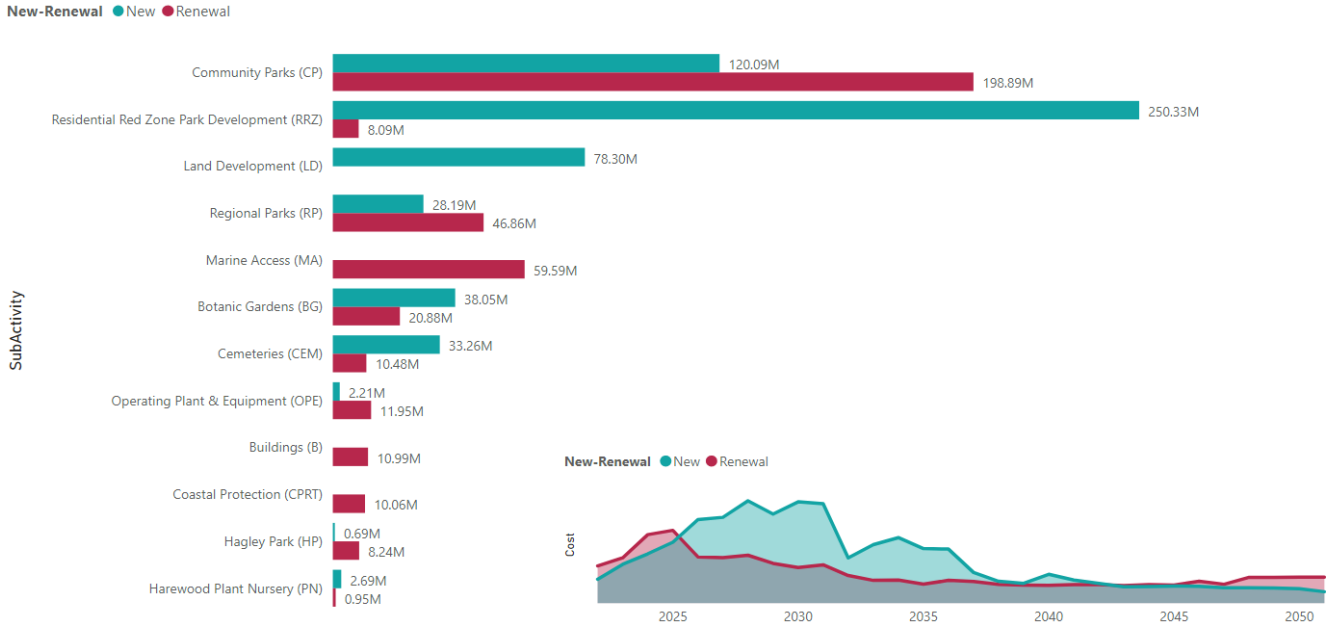
Capital investment requirements to address renewal, LoS, growth and resilience requirements are detailed in the Lifecycle sections.

The most significant projects and programmes include:

- Playspace and Margaret Mahy Playground renewals
- Naval Point Development
- Akaroa wharf renewal
- Templeton Cemetery development
- Lancaster Park development
- Red zone parks development
- Community Parks developments and regeneration
- Building renewals
- Sportsfield development and renewals
- QE2 stage 2 development
- Botanic Gardens development and renewals
- Garden renewals
- Carparks and track renewals
- Regional Parks development and renewals

9.3.1 Capital Forecasts

The proposed 10 Year Capital bid (New & Renewals) for Parks & Foreshore is shown in the figures below. The adopted details (uninflated) LTP 2021-31 budget is presented in Figure 9.1.



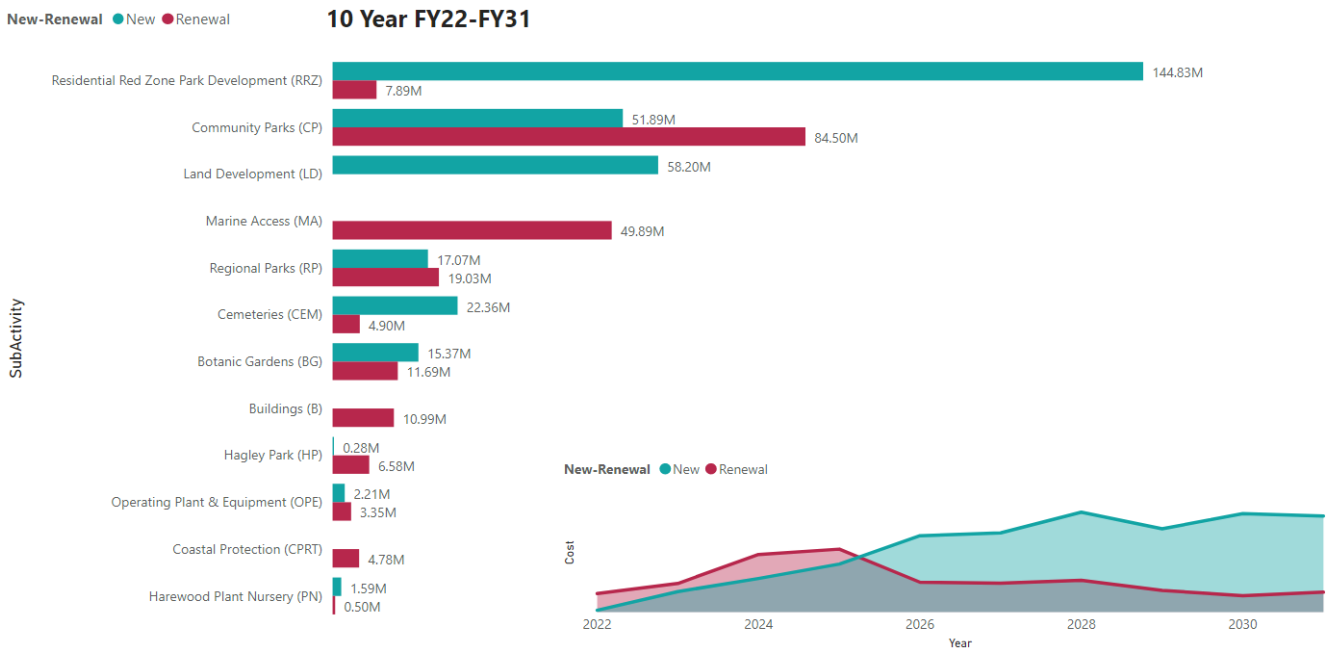


Figure 9-2: Summary of proposed 30 and 10-year Parks & Foreshore Total Capital budget (uninflated)

For the LTP our proposed budgets are "ideal" with consideration given to a reality check of affordability and capacity to deliver to become "recommended" if approved through the LTP consultation process.

Renewal Forecasts and LoS and Growth Expenditure

Renewal and Growth forecast discussions are outlined in parts 4 and 7 of this AMP.

9.3.2 Revenue forecasts

The Local Government Act 2002 requires Council to adopt a Revenue and Financing Policy that sets out how operating and capital expenditure will be funded from available funding sources. It is an important policy, as it determines who pays for Council's services and how those services will be funded.

Council receive Parks and Foreshore related revenue from several operating streams and detailed in the Parks & Foreshore Activity Plan. These include:

- Rates
- Borrowing
- Cruise ship docking fees
- Leases and bookings
- Internment plot sales

The expenditure and valuations projections in this AMP are based on best available data. Data confidence is classified on a 5 level scale in accordance with the Table below using the same system as outlined in 7.2.5.

Table 9-2: Data Confidence Grading System

Confidence Grade	Description
A Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate ± 2%
B Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10%
C Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated ± 25%
D Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy ± 40%
E Unknown	None or very little data held.

The estimated confidence level for and reliability of data used in this AM Plan is shown in the Table below.

Table 9-3: Data Confidence Assessment for Data used in AMP

Data	Confidence Assessment	Comment on Reliability of Forecasts
Operations expenditure	B - Reliable	Forecasting is undertaken by the analysis of current contracts, actual work invoices, SAP data and localised site knowledge.
Maintenance expenditure	C- Uncertain	Forecasting is undertaken by the analysis of previous years spend. As more emphasis is placed on asset condition data there is an expectation that operational maintenance spend will level off or reduce as expenditure on planned works increases.
Renewals (asset value, lives, condition, performance)	B - Reliable	Analysis of asset condition inspection data has been undertaken. Typical standardised cyclic renewal events have been ascertained, costed and applied to a number of individual assets to gain an appreciation of anticipated renewals expenditure over a 30 year period for modelled renewable assets.
Upgrade/New expenditures (LoS, demand, resilience projects)	C- Uncertain	Projects such as asbestos removal, earthquake prone building strengthening and historically deferred renewal works are partially scoped and priced ready for completion. There are other assets, some highlighted others not yet determined that will need allocated funding in these areas
Disposal expenditure	C- Uncertain	Due to lack of post-earthquake asset disposals there is a lack of suitable comparable costs for disposal expenditure. Such costs, if required can be readily estimated.

9.4 Valuation and Depreciation

9.4.1 Valuation Basis

Revaluations for asset classes occur on a regular basis. Land and Buildings were valued as at 30 June 2018 using market based evidence with adjustments to reflect the designation of the land. Park Improvements were valued as at 30 June 2018 using the depreciated replacement cost method. Marine Structures were valued as at 30 June 2017 using the depreciated replacement cost method.

Note: Chattels have also been included in the Renewable Improvement Assets. They consist of a minor value relative to the class. The number of Park Improvements is based on the Plant Maintenance assets. The number is based on information used from the valuation in 18/732471.

9.4.2 Depreciation / Renewal Forecast Comparison

Valuation and Depreciation Forecasts

Table 9-4: Valuation / Depreciation Forecasts 2021 – 2051

Asset Category	Quantity	Replacement Cost	Depreciated Replacement Cost	Annual Depreciation
Buildings	534	$152,647,449	$59,705,639	$3,501,736
Renewable land improvement assets	57,771	$348,725,431	$205,933,058	$1,273,109
Marine structures	91	$60,999,982	$26,386,183	$15,653,222
Total	58,396	**$562,372,862**	**$292,024,880**	**$20,428,067**

9.5 Implications of approved ten-year budget

9.5.1 What we cannot do

The Council has prioritised decisions made in adopting the 2021 LTP to obtain the optimum benefits from its available resources.

Budget constraints as a result of the post COVID-19 economic environment will limit the work that can be undertaken in this LTP period. Some operations and maintenance activities and capital projects included in this AMP will significantly be impacted that will need to be agreed with the community and alternative ways of managing expectations will need to be taken on board.

Service consequences
Operations and maintenance activities and capital projects that cannot be undertaken will maintain or create service consequences for users. These include:

- Potential for reduction in LoS i.e. challenging the provision of a sustainable network of Parks user experiences to support the development of strong, connected and resilient communities. Some Public Toilets may have to close, provision of Playgrounds, Sportsfields etc. will need to be rationalised. Maintenance to buildings will be reduced that would result in a reduction in expected asset life.

Risk Consequences
The operations and maintenance activities and capital projects that cannot be undertaken may maintain or create risk consequences for the organisation. These include:

- Potential for reduction in LoS i.e. challenging the provision of a sustainable network of Parks to support the development of strong, connected and resilient communities.
- Inability to maintain assets to a level they are fit for purpose and suitably maintained so as to provide an appropriate level of health and safety in operation.
- Loss of revenue as customers look to use non Council alternatives or are only willing to pay a lesser amount for an asset not as tidy.
- Increased financial constraint will be put onto future generations as the bow wave of deferred maintenance works continues to build year to year, generation to generation.
- Reduced corporate image as Park assets deteriorate.

10 Continuous Improvement

10.1 Overview of the Improvement Programme

The Council has made a strong commitment to the improvement of asset management practices and seeks to further improve the approach. The Council acknowledges the need to focus efforts to further advance asset management practices over the next 2-3 years to an appropriate level of capability.

The Council's overall AM improvement process is outlined in the SAMP. This section details the Parks and Foreshore activity improvement programme.

10.2 Current Asset Management Maturity

An independent asset management maturity assessment of current asset management practice in Council was undertaken in 2020.

The baseline maturity assessment was predominantly achieved through onsite interviews, with a good cross-section of participants. Future maturity level was also set based on appropriate best practice and considering the agreed business drivers. Strength and opportunities for improvement are summarised alongside the results to acknowledge the baseline achievements.

As shown in Figure 10.1 the Council's Parks assets are currently being managed at an 'intermediate' level with improvement required to meet targeted scores. The average score increased from 67% to 71% in the last two years, aiming for a target of 84%.

The asset management maturity analysis, summarised in Figure 10.1, shows performance was lowest in the following areas:

- Forecasting demand
- Measurement of asset performance
- Operational Service Delivery Mechanisms
- Management Systems
- Capital works planning

The Council has improved in the general "asset management" practices which improve areas involved with Policy, Strategy, Risk, Asset Management Plan preparation, Service Delivery and Quality Management.

The AMP is a living document closely connected to the forward planning and running of the activity. The Council has closed the gap between current and "appropriate asset management practice" for this activity in the areas of condition assessment, asset register data, information systems, AMPs and AM systems.

Little progress has been made in risk and decision making, improvement planning, quality management and operational planning – staff and budget resources are insufficient to make any significant advancements to business improvement.

Section 10.4 provides a programme of activities required to close the remaining maturity gaps and address the weaknesses identified during the development of this AMP.

Figure 10-1: 2020 Asset Management Maturity Assessment for Parks Activity

10.3 Review of Progress against Previous Plan

The last improvement plan was developed as part of the 2018 AMP update. The indicative term of the improvement programme was three years. Table 10.1 provides an update on the status of the improvement programme items as at November 2020.

In addition to the items within the improvement programme, the following improvements have been made to the activity since the last AMP:

- Realignment of mainly Parks operational service teams to provide more efficiency in delivering maintenance services of high value spaces and assets
- Completed the validation and reclassification of Foreshore (marine) assets in SAP and GIS
- Closed the gap in condition data of all classes with only buildings still to be progressed
- Improved data accuracy reviewing asset register removing duplicate and incorrect data
- Improved data accuracy by largely closing the gap of uncaptured asset data
- Implemented processes to improve and new Park creation notifications and asset data change notifications
- Overall increase in SAP and GIS data quality
- Data visualisation tools developed in Tableau-Power BI
- Development and use of renewals and programmed maintenance data models

Progress against 2018 Improvement Plan is reflected in the table below.

Table 10-1: Progress against 2018 Improvement Plan

Key Area	Improvement Action	Progress and Action
Transitioning of 2015 LTP activities to 2018 LTP sub activities in SAP	Amend Asset and Financial structure in SAP to accommodate for the new 2018 LTP activities and sub activities in SAP.	Complete
Validate, capture, reclassify Foreshore (marine) assets	Amend Asset Hierarchy and Functional Location structure in SAP to identify and accommodate for unique Parks Unit managed assets on the foreshore.	Complete
Measuring asset capacity and demand	Cemetery capacity: As per the 2013 cemetery master plan, review existing cemeteries for available adjacent land, and consider new future locations.	Complete
Strategic assets, Asset criticality development	Evaluate and document park and foreshore assets or reserves identifying them as being "Strategic Assets". In addition to an assets condition a criticality rating would be advantageous to record a rating against each asset to help prioritising renewal and repair work. Criticality criteria needs to take in account a range of considerations including asset location, commercial use, recreational value, heritage significance, purpose and operational status. Quantifying these criteria is difficult and may require development of a more formal categorizing methodology as an improvement task.	No progress, carry forward
Data accuracy	Review all asset data held on Buildings in SAP to confirm whether there are buildings which are not currently accounted for or are duplicated a number of buildings, do not have or have incorrect building type/use fields assigned in SAP. Review and/or assign all buildings a building type and use.	In progress, 90% complete
Data accuracy	Update park buildings which currently have no valuation data with the correct asset valuation data in SAP.	In progress, 50% complete, carry forward.
Earthquake damage	Summary table of damage and repair/replace actions status to parks buildings needs to be reviewed. Rebuild/strengthen/dispose decisions of buildings within next 15 years to be reviewed and documented.	No progress, carry forward
Asset information and closing the gap in condition data	Update and complete the information held against each asset. Expand on the current condition assessment programme of parks and marine assets to also update the public toilets as priority followed by other buildings condition assessment data in SAP and use this to assist with the ongoing maintenance and renewals planning.	In progress, 70% complete, carry forward.

10.4 Improvement Plan

The independent asset management maturity assessment process provides a sound basis for prioritising and monitoring improvements to current asset management practices.

Additional improvement items were identified during the maturity assessment and as part of this AMP review. These items were added to the outstanding items from the 2018 Improvement programme.

This will put in place the programme for 2021 through to 2024.

The table below details those tasks that will be targeted to be completed over the next three years. These tasks have focus specifically on those areas where the risk is most critical. To facilitate the practical implementation of the improvement programme tasks have been designed to address several issues concurrently and be programmed to ensure a logical progression towards the 3 –year target.

Table 10-2: Asset Management Improvement Tasks

Task ID	Project / Task	AM Maturity Gaps	Priority (H, M, L)	Responsibility	Resources (teams, $)
PF-01	Parks classification improvements - Review Park classification with adopted Network Plans and alignment with SAP Plant Maintenance and Finance structures	LoS, Planning, Decision Making	M	Parks Planning & Asset Management Team	Parks Costs unknown
PF-02	Register for Resource consents requiring monitoring - Create a Corporate Register for Resource consents held by Parks requiring monitoring Consent-Description-Expiry	Planning Managing Risk	M	Parks Planning Team	AMU, IT, Parks Costs unknown
PF-03	Asset criticality - Develop methodology and framework for determining asset criticality of assets to integrate criticality into the ongoing operation, maintenance, renewals and capital programme planning	LoS, Planning, Decision Making, Managing Risk	M	Parks Planning & Asset Management Team	Parks Costs unknown
PF-04	Capital programme prioritisation and improved planning - Develop Capital programme prioritisation methodology	LoS, Planning, Decision Making, Managing Risk	H	Parks Planning & Asset Management Team Parks Operations	Parks Costs unknown
PF-05	Build up age profile of Buildings - Obtain age of buildings from DEE reports and translate it to a start-up date in SAP to enable age profile reporting and lifecycle planning	LoS, Planning, Decision Making, Managing Risk	M	Parks Asset Management Team	Parks Costs unknown
PF-06	Buildings asset data and condition - Continue to accumulate asset data that is accurate and consistent stored in a system that can effectively and efficiently process and retrieve it. Update park buildings which currently have no valuation data with the correct asset valuation data in SAP.	LoS, Planning, Decision Making, Managing Risk	M	Parks Asset Management Team	Parks Costs unknown
PF-07	Parks categorisation improvements - Review Parks type categories and alignment SAP Plant Maintenance and Finance	LoS, Planning, Decision Making, Managing Risk	M	Parks Planning & Asset Management Team	Parks Costs unknown
PF-08	Parks Buildings data improvement - EQ damage and repair/replace actions status of parks buildings needs to be reviewed. Rebuild/strengthen/dispose decisions of buildings within next 15 years to be reviewed and documented	LoS, Planning, Decision Making, Managing Risk	H	Parks Asset Management Team	Parks Costs unknown

10.5 Resourcing the improvement programme

The activity requires resources and budget to deliver the improvement plan tasks. Consideration of existing workloads and other corporate priorities may require changes to the indicative completion dates shown in the improvement programme.

It is likely that across Council, a lack of resources will result in difficulty delivering all the improvement items. A prioritisation and costing exercise will be required to ensure the highest priority items are delivered first and that future delivery costs are understood, and sufficient budgets allocated within the LTP.

10.6 Monitoring and review

The improvement programme will be reported to the AMU and either included within the advancing asset management improvement programme (corporate) or within the continuous improvement programme (unit based). All improvement items will be monitored by the AMU and tracked through the Council's Asset Management Governance Board.

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Appendix: Legislation, regulations, guidelines most relevant to Parks

Legislative or Regulatory Requirements and Guidelines		
Documents	**Key Provisions**	**Requirement / Impact on LoS**
Local Government Act 2002 (LGA)	The Local Government Act provides the legal mandate for local authorities to operate in New Zealand. Specifically for open space it empowers local authorities to provide for current and future needs of the communities they represent through the following sections. Part 6 through the Long Term Planning process and the identification of the activities the Council is engaged in, provides for planning, consulting, decision making, financial management, asset management and reporting for Council owned open space Part 8 provides the powers to create bylaws to help manage these spaces, and also the ability to require development contributions (in the form of money or land) for the purchasing and development of land to address growth and capacity related reserves provision. Requires sanitary services assessments to be prepared for cemeteries and public toilets, covering protection of public health and identification of future capacity needs.	Meaningful community consultation is achieved. Community outcomes are developed. AMP's are developed for key assets. Sanitary services assessments are developed. By-laws are developed as required
Resource Management Act 1991 (RMA)	Establishes a planning framework covering land designation processes and resource consents for activities which affect the environment. Requires sustainable management of physical and natural resources; consideration of alternatives; assessment of benefits and costs; and determining best practicable options. Requires that the principles of the Treaty of Waitangi be taken into account in exercising functions and powers under the Act relating to the use, development and protection of natural and physical resources. Requires compliance with Regional and City Plans and Bylaws	All consent conditions are fulfilled and any monitoring is carried out. Compliance with District Plan rules and resource consent conditions. Response to non-compliance incidents is carried out in accordance with agreed procedures. Compliance with agreed Treaty of Waitangi and Ngāi Tahu consultative process for all project and policy initiatives. Compliance with provisions of Regional and District Plans and Bylaws Under S6 matters of national importance the Council is required to recognise and provide for (f) the protection of historic heritage from inappropriate subdivision, use and development
Reserves Act 1977	Requires reserves vested under the Act to be managed in accordance with their classification and management plan. This includes a requirement for community consultation to be carried out during the preparation of a management plan that outlines the Council's general intentions for the use, development, maintenance, protection and preservation of the reserve. Sets requirements for classification and, use of land, application of funds, management and administration. Governs the Council's ability to grant leases or licenses over particular activities or buildings within reserves.	Reserve management plans are prepared and adhered to in accordance with the Act. Where required leases are put in place and administered in accordance with the Act. Warrants Park Rangers to enact the powers of the Act including any associated bylaws.
Burial and Cremation Act 1964	This Act requires every local authority to provide a cemetery as needed for the burial of the bodies of persons dying within its district. It authorises the local authority to undertake work and expend money to provide cemeteries. Cemeteries are to be open for religious or other ceremonies thought proper by the friends of the deceased. A local authority may develop and maintain the cemetery as it thinks proper. Parts of a cemetery may be set aside for members of any religious denomination or Her Majesty's Forces etc. Guardians may be appointed for cemetery administration and upkeep. Requires establishment of bylaws by localauthorities to regulate burial practices and to control the erection of monuments. All fees collected from cemeteries are to be used in their management and improvement.	Ensure all interments and disinterments are carried out according to the requirements of the Act. Provide accurate records of interments.

Legislative or Regulatory Requirements and Guidelines		
Documents	**Key Provisions**	**Requirement / Impact on LoS**
Building Act 2004 Construction Act 1959 Construction Regulations Act 2014/181	Sets out the building standards and requirements to obtain consents for specific works such as building construction, alteration, or demolition. Code compliance certificate to be issued on completion of works for new or upgraded buildings. Requires that buildings are safe and sanitary. Requires toilets to be provided for persons with disabilities. Provides standard for provision of personal hygiene facilities in buildings.	Under S3 as owners of buildings we are responsible for ensuring that building work complies with the building code. Full compliance with building consent conditions. Code compliance obtained on completion of new or upgraded building. Current Building Warrant of Fitness.
Fire Service Act 1975	Requires approved evacuation schemes. Applies generally to public buildings used by more than 100 people or buildings used for childcare, accommodation for more than five people and other users.	Compliance to guidelines and prescriptions relevant to community buildings.
Construction Contracts Act 2002	This Act now affects the parks industry in relation to claims for work carried out on buildings and structures including maintenance and renewal works.	Compliance to guidelines and prescriptions relevant to buildings and structures.
Fencing Act 1978	Details the Council's obligations and requirements with regard to fencing of private properties bordering Council land.	Reserves and sites where there is no fencing covenant in place in favour of the Council.
Public Works Act 1981	Provides for acquisition of land for Council activities and disposal of surplus.	Defined procedures are followed in all cases.
Transit NZ Act 1989TNZ Code of Practice for Temporary Traffic Management (CoPTTM)	Provides requirements for persons working on roads, including road verges.	Defined procedures are followed in all cases.
Health Act 1956	This is the principal legislation relating to public health. Specific attention given to preventing the spread of notifiable and infectious diseases. Charges local authorities with ensuring identified health risks are managed within acceptable limits. Requires the Council to provide cemeteries and other sanitary services such as toilets for the benefit of the District. Empowers the Council to ensure the sanitation of the facilities, especially changing rooms, toilets, showers etc. Describes penalties for permitting or causing health nuisances in public facilities such as toilets that may be in a state that is offensive or likely to be injurious to health.	Fixed and temporary public changing rooms, showers, toilets to be consistently maintained in a hygienic and tidy state.
Conservation Act 1987	Promotes the conservation of New Zealand's natural and historic resources, and establishes a Department of Conservation.	Adherence to guidelines and prescriptions relevant to management of specific conservation areas.
Biosecurity Act 1993	Requires compliance with national or regional pest management strategies.	Removal of specified noxious weeds on reserves.
Wildlife Act		
Heritage New Zealand (Pouhere Taonga) Act 2014 (repeals the *Historic Places Act 1993) and Heritage New Zealand Pouhere Taonga*	The purpose of this Act is to promote the identification, protection, preservation, and conservation of the historical and cultural heritage of New Zealand. Protects sites and features which have been associated with human activity for more than 100 years.	Provides for a set of principles guiding adherence to rules and regulations managing sites affected. Requires assessment of archaeological sites prior to works being carried out. Under S42 the modification or destruction of an archaeological site requires an authority. Under S74 local authorities must have particular regard to recommendations made by Heritage New Zealand regarding an activity on an entry on the New Zealand Heritage List.
Litter Act 1979	The purpose of this Act is to make better provision for the abatement and control of litter.	Responsible management of litter in public places and reserves
Health and Safety in Employment Act 1992	Aims to prevent harm to employees and sets out the Council's responsibilities in relation to people who work within Council owned or administered property. Creates an obligation on building and property owners/managers for health and safety. Requires the identification of hazards and disclosure to persons entering the property. Requires an audit trail to demonstrate compliance.	Requires compliance with the Act with processes are in place for regular identification of hazards, their isolation or mitigation and the provision of appropriate equipment, training and systems. Persons working on a building submit a health and safety plan in advance.

Legislative or Regulatory Requirements and Guidelines		
Documents	**Key Provisions**	**Requirement / Impact on LoS**
Walking Access Act 2008	Provision of the public with certain and practical walking access to the outdoors is one of the key purposes of this Act. *Note this act repealed the New Zealand Walkways Act (1990)*	Adherence to guidelines and prescriptions relevant to planning and management of reserves.
Summit Road (Canterbury) Protection Act 2001	This Act is to provide for the preservation and protection of the scenic and natural amenity within the protected area, and to provide for the improvement of facilities for public enjoyment.	Adherence to guidelines and prescriptions relevant to management of specific protected areas.
Reserves and Other Lands Disposal and Public Bodies Empowering Act 1921-22 and 1950	This Act is to provide for the exchange, sale, reservation and other disposition of land.	Adherence to prescriptions relevant to the planning and management of reserves land.
Christchurch City (Reserves) Empowering Act 1971 and Christchurch City Reserves Amendment Act 1929 Christchurch City Council (Lancaster Park) Land Vesting Act 2008	To provide for the purposes of which certain reserves in the Christchurch are held.	Specifically addresses Hagley Park, Botanic Gardens, Harper Ave, John Robert Godley and road reserves for the purpose of lawns, ornamental gardens and buildings
ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value (2010)	Sets out the principles to guide the conservation of places of cultural heritage value in New Zealand	Adherence to guidelines and prescriptions relevant to management and conservation of heritage objects
Property Law Act 2007	Part 6 Sub Part 4	Can order the trimming or removal of trees causing legal nuisances
Electricity Act 1992	Protects the security of the supply of electricity, and the safety of the public. Hazards from trees affecting supply.	Requires safe management of trees around power lines.
Canterbury Earthquake Recovery Act 2011	Provides for the recovery of Christchurch after the Canterbury earthquakes with special powers granted	Adherence to Recovery Plans prepared under this Act and special processes.
Greater Christchurch Regeneration Act 2016	Supports regeneration of Christchurch after the Canterbury earthquakes with special powers granted	Adherence to Regeneration Plans prepared under this Act
Marine and Coastal Area (Takutai Moana) Act 2011 No3	Act of the New Zealand Parliament created to replace the Foreshore and Seabed Act 2004. It was brought in by the fifth National government and creates a sui generis property class for the marine and coastal area, in which it is vested in no one.	

National and Regional Strategies, Plans, Policies, Guidelines and Standards (sets the strategic directions for Council relevant to Parks and assets managed)		
Environment Canterbury's (ECan) Natural Resources Regional Plan (NRRP)	Sets out ECan's interpretation of the RMA 1991. Objectives, policies and rules are aimed at achieving good environmental outcomes and have implications for service standards to be delivered. Contains rules on protecting ground and surface water from contamination. Requires discharge permits to be obtained for septic tanks.	Adherence to rules and requirements relevant to the planning and management of reserves and park assets.
Canterbury Biodiversity Strategy 2008-2035	Region wide collaborative vision for maintaining and enhancing Canterbury's natural heritage. Provides policy and direction for protecting and enhancing indigenous biodiversity, and focuses on plants, animals and ecosystems that comprise local indigenous species.	Provides guidance and focus relevant to the planning and management of reserves and park assets as part of a strategy for the Canterbury Region.
Public Open Space Strategy 2010-2040	Provides the overarching policy direction for open space. Its primary focus is on public parks, roads, waterways and coastline managed by the Council.	It gives guidance on how much, where it could be located and how it is looked after.
Christchurch City Council Climate Smart Strategy 2010-2025	The Climate Smart Strategy sets the direction for community and Council responses to the impacts and opportunities presented by Climate Change.	Provides options to consider for park management.

National and Regional Strategies, Plans, Policies, Guidelines and Standards (sets the strategic directions for Council relevant to Parks and assets managed)		
Christchurch City Council District Plan	The Plan describes the significant resource management issues affecting the City and its environment, and offsets out objectives and policies to deal with these issues. This document establishes zones, rules and other methods for controlling development throughout the City, and the broad framework within which development proposals are assessed. It includes standards which determine whether or not resource consents are required for any particular activity, and matters whereby applications can be assessed. Included are the maps for managing resources and identifying planning zones of the City.	Provides direction, focus and rules that apply to the planning and management of open spaces, reserves and park assets.
Mahaanui Iwi Management Plan 2013 (IMP)	The Mahaanui Iwi Management Plan 2013 is a key regional and territorial planning document. The IMP lists a range of issues and objectives significant to tangata whenua.	This is especially with regard to land, waterways, indigenous biodiversity and cultural issues. We must take account of these issues and give consideration to them in our open space planning.
Proposal for Canterbury Regional Pest Management Strategy 2017-2037	The Strategy provides a framework for the efficient and effective management or eradication of specified harmful organisms in the Canterbury Region. It builds on the 2005-2015 Strategy and previous pest management programmes.	Informs operational activities to • minimise the actual or potential adverse or unintended effects associated with those organisms; and • maximise the effectiveness of individual actions in managing pests through a regionally coordinated approach.
Canterbury Natural Resources Regional Plan 2011(NRRP)	The plan assists ECan to carry out several of the functions set out in section 30 of the RMA. These relate to the integrated management of the region's natural and physical resources, and include, but are not limited to, the control of the use of land for various specified purposes.	Provides guidance and focus relevant to the planning and management of reserves and park assets
Greater Christchurch Urban Development Strategy 2007 (UDS)	High level strategy produced as a partnership by (Christchurch City, ECan, Selwyn and Waimakariri Districts) along with the NZ Transport Agency and Te Rūnanga o Ngāi Tahu. Implemented through ECan's Regional Policy Statement collaboratively developed strategic plan to manage future growth in the City and Districts- sets out land use distribution in greater Christchurch, particularly the areas available for urban development, the household densities for various areas and land which is to remain rural.	Provides the strategic direction, plans and tools to implement earthquake recovery and ensure future growth is managed effectively in the region.
Christchurch City Council Cemeteries Master Plan and Conservation Plans	The primary purpose of the plan is to provide a strategic vision for the development and management of the Council owned or administered cemeteries across the Christchurch District. Associated conservation plans describe the significance of specific cemeteries and identify the principles, policies and general processes required to care for these cemeteries in a way that will safeguard their cultural heritage value.	Provide a strategic vision and guidance for the development and management of the Council owned or administered cemeteries
Christchurch City Council Parks and Reserves Bylaw 22016	The purpose of this bylaw is to provide for the orderly management and control of parks and reserves vested in or under the control of the Council for the benefit and enjoyment of all users of those parks and reserves.	Provides rules and guidance relevant to the planning and management of reserves and park assets
Christchurch City Council Public Places Bylaw 2018	The purpose of the bylaw is to balance the different needs and preferences of our community in relation to public places, in order to balance private use with public use.	Provides rules and guidance relevant to the planning and management of reserves and park assets
Christchurch City Council Cemeteries Bylaw 2013	The purpose of this bylaw is to provide for the management of the Council's cemeteries by allowing certain activities and conduct to take place in cemeteries subject to compliance with any conditions the Council adopts for its cemeteries. It allows the Council to set rules for the operation and management of cemeteries it owns or administers, as laid out in the Cemeteries Handbook.	Provides rules and guidance relevant to the planning and management of cemeteries and services in the cemeteries.

National and Regional Strategies, Plans, Policies, Guidelines and Standards (sets the strategic directions for Council relevant to Parks and assets managed)		
Christchurch City Council Cemeteries Handbook 2018	Handbook to be used in conjunction with the Cemeteries Master Plan and contains conditions applying to activities and conduct in cemeteries within the Christchurch District, and for the management of cemeteries owned by, or under the administration of, the Council.	Provides information to assist the smooth running, operation and provision of services in the cemeteries.
Christchurch City Council Alcohol Restrictions in Public Places Bylaw 2018	This bylaw prohibits, or otherwise regulates or controls, the possession and consumption of alcohol in specified public places and the bringing of alcohol into specified public places.	Provides rules relevant to the use, enforcement and management of reserves.
Canterbury Regional Coastal Environment Plan 2011	The Regional Coastal Environment Plan for the Canterbury Region aims to promote the sustainable management of the natural and physical resources of the Canterbury coastal environment.	Applies to coastal parks
Navigation Safety Bylaw 2016		
NZ Coastal Policy Statement 2010	The purpose of the New Zealand Coastal Policy Statement (NZCPS) is to state policies in order to achieve the purpose of the Resource Management Act in relation to the coastal environment of New Zealand. The NZCPS 2010 took effect on 3 December 2010 when the NZCPS 1994 was revoked.	
Marine, River and Lake Facilities Bylaw 2017	The purpose of this bylaw is to facilitate the fair and safe use of, and access to, Council marine, river and lake facilities (including those around the estuary), and to protect them from damage.	This bylaw applies to Council structures or facilities that provide access to the water (such as wharves, jetties, boat ramps and slipways), and associated access points (such as ramps, steps, ladders and pontoons). It also applies to related structures or facilities (including storage areas, buildings, refuelling facilities, and associated car-parking or manoeuvring areas)
Maritime New Zealand – International Ship & Port Security Code	The International Ship and Port Facility Security Code (ISPS Code) is a comprehensive set of measures to enhance the security of ships and port facilities. Like many countries, New Zealand has adopted this code.	The Code takes the approach that ensuring the security of ships and port facilities is basically a risk management activity.
Dog Control Policy and Bylaw 2016		Signage needed in parks with dog control information
Freedom Camping Bylaw 2015		Provision of signage and facilities as required.
Christchurch City Council Policies (most applicable to the Parks activity) These provide guidance for decision making and management of related activities in or associated with parks and reserves	- Community Garden Policy - Development Contributions Policy - Local Parks Acquisition Policy - Smokefree Public Places Policy - Naming of reserves and facilities - Port Hills reserves: future management requirements - Public Amenity Signing Policy - Public toilets - Rubbish-free parks - Scarborough Park - conditions for triathlon usage - Sponsorship of trees & other planting on reserves - Adopt a park/cemetery scheme - Parks and Waterways Access Policy 2002 - Safer Parks Policy (CPTED – Crime Prevention through Environmental Design)	- Weed Spraying of Parks - Alcohol Policy (LAP) - Dog Control Policy 2008 - Heritage Conservation Policy - Free waste dumping - Artworks in Public Places Policy - Food Resilience Policy - Trading and Events in Public Places Policy 2010 - Trees and Health Policy - Banks Peninsula District Council Tree and vegetation Policy Resolutions 98/178 and 97/404 - Banks peninsula District Council Tree Planting on Reserves Policy Resolution 99/236 - EBex21 Programme - Non Glyphosate use

Industry guidelines and standards		
Documents	**Key Provisions**	**Requirement / Impact on LoS**
Christchurch City Council Infrastructure Design Standards (IDS)	Set of guidelines determining the principles behind and the minimum standards required for the creation or enhancement of infrastructure assets either owned or to be owned by the Council.	Standards relevant to works and as built asset data capture in Parks and of park assets. Compliance is mostly compulsory
Christchurch City Council Construction Standard Specifications CSS parts 1-7:2005	Sets standards for construction works	Standards relevant to works in Parks and park assets. Compliance is compulsory
NZ Standard NZS4242:1995 'Headstones and Cemetery Monument'.	Sets standards for construction and securing of cemetery monuments.	Standards relevant to cemeteries. Compliance is compulsory
NZS5828:2015 Playground Equipment and Surfacing & ASTM F1487 Standard Consumer Safety Performance Specification for Playground Equipment for Public Use	This standard outlines the requirements and test methods for swings, slides, runways, carousels, rocking equipment and playground surfacing. It also provides guidance on installation, inspection, maintenance and operational aspects.	All new playground equipment and safety surfacing to comply with standards. Compliance is voluntary
8409:1999 (NZS) Code of practice for the management of agrichemicals	Contains compliance requirements for working with agrichemicals	Compliance to standards where appropriate. Best practice. Compliance is voluntary.
SNZ HB 8630:2004 Tracks and Outdoor Visitor Structures	This standard provides specifications to ensure that tracks and outdoor visitor structures provide the right LoS to meet visitor recreation and safety needs, and will help protect the facilities and the environment from damage.	Compliance to standards where appropriate. Best practice. Best practice. Compliance is voluntary.
NZ Standard NZS 4241:1999 'public toilets'	Provides guidance on appropriate standards for design, quality, care and maintenance of public toilet facilities.	Standards relevant to Public toilets. Best practice. Compliance is voluntary.
NZ Building Code 2002	Provides guidance on appropriate standards for design, quality, care and maintenance of public toilet facilities.	Compulsory standards relevant to Community facilities, Public toilets and some structures. Compliance is compulsory.
NZ Standard NZS 1547:2000 'On-site Domestic Wastewater Management'	Contains compliance requirements for buildings not serviced by a reticulated sewerage scheme.	Full compliance with the relevant standards. Relevant to community buildings and public toilets serviced by a septic tank system.
Transit NZ Code of Practice for Temporary Traffic Management	These guidelines are a recognised standard for maintenance and construction work on legal roads.	Compliance to standards prescribed when working on / adjacent to public roads
RMA92028348 Maintenance and repair works on headstones and other structures	Contains compliance requirements for maintenance and repair works on headstones and other structures and alterations to Barbadoes, Addington and Rutherford Cemeteries.	(Resource consent to carry out works)

Cemeteries Administration and Capacity Status (April 2021)

SAP Park Number	Cemetery Name	Activity	Location	Date Established	Date Closed	Projected Remaining Life	Heritage	Area (ha)	Status	Land Owner	Admini-stration	Burial Plots Remaining	Ash Plots	RSA Sections
PRK_1159	*Addington Cemetery	PKG	City	1858	1980	N/A	*Yes - Not Gazetted*	2.03	Closed	CCC-Public Land	CCC	Closed	Closed	
PRK_3651	Akaroa Anglican Cemetery	PKC	Banks Peninsula	1857	N/A	2024		1.84	Open	CCC-Public Land	CCC	4 No Prepurchase interments only	1 No Prepurchase interments only	
PRK_3106	Akaroa Catholic Cemetery	PKC	Banks Peninsula	1863	N/A	2023		0.89	Open	Roman Catholic	CCC	6 No Prepurchase interments only		
PRK_3651	Akaroa Dissenters Cemetery	PKC	Banks Peninsula	1873	N/A	2022		0.49	Open	CCC-Public Land	CCC			
PRK	Akaroa French Cemetery	PKC	Banks Peninsula	1842	1926	N/A		0.101	Closed	Roman Catholic	CCC	Closed	Closed	
PRK_0217	Avonhead Cemetery	PKC	City	1983	N/A	Full for full burials with upright headstones		7.11	Open	CCC-Public Land	CCC	400 in the Lawn only	214 [84 near the EQM, 38 in the Lawn]	
PRK_1201	*Barbadoes Cemetery	PKG	City	1851	1931	N/A	*Yes - Not Gazetted*	3.07	Closed	CCC-Public Land	CCC	Closed	Closed	
PRK_0384	Belfast Cemetery	PKC	City	1904	N/A	Full – Orthodox Russian, second interment or pre purchased only		2.02	Open	CCC-Public Land	CCC	307 Full burials Infants 145 Baby loss 157	257	
PRK_0756	Bromley Cemetery	PKC	City	1918	N/A	Full – second interments or pre purchased only		10.44	Open	CCC-Public Land	CCC	None	None	__ m2
PRK_3699	Diamond Harbour Cemetery	PKC	Banks Peninsula	2002	N/A	2130		1.18	Open	CCC-Public Land	CCC	52 Full burials 26 Infant	53	3 green burial plots RSA 99m2
PRK_3621	Duvauchelle Cemetery	PKC	Banks Peninsula	1881	N/A	2057		1.27	Open	CCC-Public Land	CCC	35	80	
PRK_3673	Kaituna Valley Cemetery	PKC	Banks Peninsula	1940	N/A	2057		0.093	Open	CCC-Public Land	CCC	30	15	
PRK_3598	Le Bons Bay Cemetery	PKC	Banks Peninsula	1862	N/A	2200		2.55	Open	CCC-Public Land	Privately Managed	29	Many possible (Full burial plots)	
PRK_0767	Linwood Cemetery	PKC	City	1884	N/A	Full – Jewish area, second interment or pre purchased only		9.69	Open	CCC-Public Land	CCC	28-Jewish section only	17	
PRK_3668	Little River Cemetery	PKC	Banks Peninsula	1878	N/A	2200		0.81	Open	CCC-Public Land	CCC	507	86	
PRK_3515	Lyttelton Anglican Cemetery	PKC	Banks Peninsula	1851	N/A	Full – second interment or pre purchased only		1.23	Open	CCC-Public Land	CCC	None	None	

Cemeteries Administration and Capacity Status (April 2021)

SAP Park Number	Cemetery Name	Activity	Location	Date Established	Date Closed	Projected Remaining Life	Heritage	Area (ha)	Status	Land Owner	Admini-stration	Burial Plots Remaining	Ash Plots	RSA Sections
PRK_3511	Lyttelton Catholic_Public_RSA	PKC	Banks Peninsula	1873	N/A	Full – second interment or pre purchased only		0.809	Open	CCC-Public Land	CCC	None	None	615m2
PRK_0880	Memorial Park Cemetery	PKC	City	1956	N/A	2028		13.06	Open	CCC-Public Land	CCC	FULL BURIAL PLOTS: 211 INFANT PLOTS: 92	18	
PRK_3120	Mt Magdala Cemetery	PKC	City	1888	1972	N/A	*Yes - Not Gazetted*	0.28	Closed	Good Shepherd Convent Trust Board	CCC	Closed	Closed	
PRK_3593	Okains Bay Cemetery	PKC	Banks Peninsula	1869	N/A	2057		2.23	Open	Crown	Privately Managed			
PRK_3582	Pigeon Bay Cemetery	PKC	Banks Peninsula	1871	N/A	2250		0.81	Open	Public	CCC	149	Many possible (Full burial plots)	
PRK_0895	Ruru Lawn Cemetery	PKC	City	1941	N/A	2027		15.57	Open	Public	CCC	167 No Prepurchase interments only	93	2.1Ha
PRK_2102	*Rutherford (Woolston) Cemetery	PKG	City	1866	1989	N/A	*Yes - Not Gazetted*	1.18	Closed	Public	CCC	Closed	Closed	
PRK_1130	Sydenham Cemetery	PKC	City	1896	N/A	2018	*Yes - Not Gazetted*	6.62	Open	Public	CCC	25	337	
PRK_0291	Waimairi Cemetery	PKC	City	1911	N/A	Full – second interment or pre purchased only		4.77	Open	Public	CCC	None	44	
PRK_3604	Wainui Cemetery	PKC	Banks Peninsula	1890	N/A	2257		1.06	Open	Public	CCC	109	24	
PRK_2416	Yaldhurst Cemetery	PKC	City	1887	N/A	2026		4.07	Open	Public	CCC	Full burials 595 Infants 45	207	Green 121
(Source: the Council Cemeteries Master Plan, 2013 and staff inputs)														